

DOMINANT MEAN PERCENTAGE SCORE FACTORS OF THE CONSUMER PURCHASE BEHAVIOUR OF PASSENGER CARS

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ABSTRACT

Globalization and liberalization, with the entry of many prominent foreign manufacturers, changed the automobile scenario in India, since early 1990's. World Leaders in automobile manufacturing such as Ford, General Motors, Honda, Toyota, Suzuki, Hyundai, Renault, Mitsubishi, Benz, BMW, Volkswagen and Nissan set up their manufacturing units in India in joint venture with their Indian counterpart companies, by making use of the Foreign Direct Investment policy of the Government of India, These manufacturers started capturing the hearts of Indian car customers with their choice of technological and innovative product features, with quality and reliability. With the multiplicity of choices available to the Indian passenger car buyers, it drastically changed the way the car purchase scenario in India and particularly in the State of Kerala. This transformed the automobile scene from a sellers' market to buyers' market. Car customers started developing their own personal preferences and purchasing patterns, which were hitherto unknown in the Indian automobile segment. The main purpose of this paper is to come up with the identification of possible parameters and a framework development, that influence the consumer purchase behaviour patterns of passenger car owners in the State of Kerala, so that further research could be done, based on the framework and the identified parameters.

Keywords: *Consumer Behaviour Patterns, Customer Loyalty, Security Features, External Influence, Family Influence, Customer Relationship*

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1. INTRODUCTION

In India, till early eighties, consumers had very limited options for passenger cars. The Automobile Industry has been in the booming phase for the past 10 years, on the strength of the Indian Government's liberalized economy policy and freedom from the License Raj. The Government of India allowed Foreign Joint Venture in the industry since early 1990, which saw many automobile giants entering the Indian market with their models, readily available, without much waiting time for the delivery. Sudden interest of major global players has made Indian auto industry very competitive, as India provides twin benefit of ready market and low cost manufacturing base for them. With the explosion of the automobile industry, due to its globalization and liberalization, car manufacturers introduced much innovative and technological advancement in their models. Customers have started thinking to change over to the new models of cars, with related ease than before, to suit their changing life styles.

Automobile Industry in India is growing in a very high rate with more than 1 million passenger vehicle sales per annum and overall 10-15% growth annually. Now more and more foreign manufacturers are coming to India and existing companies are coming up with new models. India's automotive industry is now \$34 billion worth and expected to grow \$145 billion in another 10 years. Indian Automobile industry is the tenth largest in the world with an annual production of approximately 2 million units. In passenger vehicle segment, still Maruti Suzuki is the leader with around 50%, market share followed by Hyundai Motors with 19% and Tata Motors with 16%. Other players in this segment are Honda Siel Cars and Ford India Pvt. Ltd, Toyota, General Motors etc. Accordingly to Society of Indian Manufacturers (SIAM), sales of passenger vehicles segment grew by 31.34 percent in 2010. In 2011, analysts predict that the sales momentum to continue and may achieve a growth rate of 20-25 percent in the passenger vehicle segment alone.

2. LITERATURE REVIEW

The researcher evaluated various secondary studies conducted on the consumer behaviour of passenger cars by other researchers in the relevant area, in different countries, India and specifically in the State of Kerala. Sagar at al. (2004) discussed, as to how the Indian car industry has advanced technologically, driven by a confluence of factors such as intense competition, demanding consumer preferences, government policies (especially tightening emission standards), and the global strategies of the various players. They elaborate that cars manufactured in India are based on designs, incorporating advanced technologies, that are often comparable with those available globally and Indian car exports are also growing.

Mukherjee and Sastry (1996) discuss that penetration of passenger cars in rural and semi-urban areas is extremely low and could provide fresh markets. They opinion that new entrants will have to deal with uncertainty of demand, different and evolving customer needs, a relatively poor supplier base, a market crowded with competition and industry wide capacity shortages. They see the prospect of India emerging as a significant manufacturing base for exports. They conclude that in the highly price sensitive market, reduction of prices because of lower duties and taxes and progressive indigenization, and rising middle class incomes are likely to further increase industry growth rates.

As per Kotwal (2009), face off buyers now prefer to have cars with the space, comfort and luxury of a mid size saloon or sedan. With the growing affluence and technological advancement, there develops a certain maturity in taste, as evidenced by the growing popularity of the Indian Hatchback market. The “third box” or the boot space does not seem to have the same importance, which it once had. Many customers buy cars with the space and comfort, less the boot, as it is easy to negotiate in our ever-increasing congested cities. That is where the premium hatchback commands a respect in its segment. Though they are costing more money, customers buy them for their practicality and comfort they offer, without sacrificing the feel-good factor.

Kumar (2009) reported that the passenger car market is coming out of the economic slow-down phenomenon being witnessed all over the World. He further reported that manufacturers have adopted a strategy to introduce new and modified edition of the existing models in the market in the coming months, to smarten the market, which gives a positive signal to the car industry in general. Due to various measures implemented by the Reserve Bank of India to support the economy and boost up the demand, Indian banks have reduced the interest rate for car loans, which gives a hope for the industry. While the new generation banks in the private sector concentrate their car financing activities in the cities, Public Sector Banks are turning the heat on, in the small and medium towns and rural area, where they have more coverage and influence, as reported by Ajit (2009).

2.1 Role of Internet Marketing in Consumer Decision Process

As Internet is rapidly growing and providing the platform for e-commerce marketing, many customers use Internet partly or even fully, for all the buying process stages. Just about one in seventeen people may have access to internet in India, but every third car buyer in the country’s top cities start their search on the world-wide web. As per Sharma (2010), four out of every ten new car buyers and three in every ten used car buyers, use internet to do initial research, before making the purchase. Liu and Xuan (2008) discuss the various opportunities

for car manufacturers and dealers to utilize the internet marketing medium in the five stages of e-marketing buying process - Problem Recognition, Information Search, Evaluation of Alternatives, Product Choice, Final Outcome / Post Purchase.

The researcher now examines the various theories of consumer behavior, so that it will provide a framework to focus our studies on the behavioral patterns of passenger car industry. Most research in marketing still inhabits the world of cognitive consumers and responsive managers, semi-autonomous buyers and philosophical marketers. The present challenge for marketing researchers is to generate critical interpretations. Behaviour is determined, in whole or part, by internal processing of information, or action of mental traits.

2.2 Consumer Politeness and Complaining Behaviour

Research suggests that in many cases, companies make good-faith efforts to address the complaints from their disgruntled customers. Many managers, in certain cases, are often prepared to exceed consumer expectations beyond-the-contract or above their proscribed job specification, aimed at striving to address consumer complaints, as notified by Resnik and Harmon (1983)

2.3 Family Influence in Consumer Behavior

White (2004) discussed the factors that affect car-buyers' choices and comments that people expect to haggle with dealers over price and to receive substantial rebates or incentives as well as low-interest payment plans. He pointed out that with an increase in multi-car households, car dealers and advertisers needed to target the right audience, taking into account the pester power of children and the importance of life stage. Despite the fact that women are the primary buyers of most new cars, he admits that the motor trade has traditionally been contemptuous of women's role in the car-buying process.

2.4 Virtual Brand Community Effect

The importance of virtual brand communities is growing day by day as a result of consumers increasingly using online tools to contact fellow consumers in order to get information on which to base their decisions. For this reason, it attains importance to explore, some of the effects of participation in a virtual brand community on consumer behaviour. Luis et al. (2007) proposed the positive effects of participation in a virtual community on both consumer trust and loyalty to the product, brand or organization around which the community is developed. The survey reveals that participation in the activities carried out in a virtual community may foster consumer trust and loyalty to the mutual interest of the community (the free software in this case). In addition, the study also found a positive and significant

effect of consumer trust on loyalty. In this respect, this study has shown that managers may foster consumer trust and loyalty by developing virtual brand communities and promoting consumers' participation in them.

2.5 Relationship, Service Package and Price

Research studies by Garbarino and Johnson (1999) have emphasized the significance and relative prioritization of relationship marketing. Many companies have increasingly been prioritizing their attention and focus to the establishment, development and maintenance of close and lasting relationships with their customers, in order to create a differentiating value addition to their products and / or lowering the product costs to engage in a penetration pricing mechanism. Even in the car industry, which is predominantly driven by the product characterization, classification and orientation, establishing a long-term relationship is being considered to be essential marketing strategy at all distribution levels. Thus, customer knowledge and relationship building, through constantly addressing their needs, are considered to be vitally important selling ingredients to contribute to a car dealer's competitive advantage, as ascertained by Chojkacki (2000).

Sharma and Patterson (1999) stated that car dealers were implementing a strategy to position themselves, more effectively in the market place than before, by means of continuous improvement of quality maintenance through services delivery packages, as car dealers are increasingly being confronted by demanding and technologically knowledgeable consumers, shortened product model lifecycles, intensified competition and fragmented market segments.

2.6 Customer Satisfaction and Loyalty

Customer satisfaction is often used as a predictive measurement of future consumer purchases as hypothesized by Newman and Werbel (1973). Satisfied customers are more likely to resort to repeating purchases in the time of actual instance, as reported by Zeithaml, Berry and Parasuraman (1996) in their studies. Moreover, highly satisfied customers will convey their success stories of satisfaction and directly recommend that others try the source of satisfaction, as stated in the studies conducted by Reynolds and Arnold (2000). Fitzell (1998) suggested that such satisfied customers shall become less receptive to the competitor's offerings. A quick observation of customer loyalty is demonstrated by repeated purchase as in the studies by Ball, et al. (2004). In practical terms, firms want repeated purchases mainly because such behavior in consumers can apparently show the customer preference for a brand or product, as stated by Bowen and Shoemaker (1998).

Some customers have their satisfaction – loyalty linked to the product alone. Keller (1993) evaluated customers, who purchase specific category of products for the first time, were found to focus on the product benefits, and not on the brand. As per Keller, the emphasis in this case, is in the tangible attributes of the product, which are visible and accountable to the buyer. Customers looking for low-price car, to meet their budget, may necessarily focus on the characteristics of the car, regardless of brand.

2.7 Brand and Retail Loyalty

Customer satisfaction can be considered the central determinant in all phases of the contact chain. Multi-dimensional recording of customer loyalty reveals clear differences in the interactions, first, with brand loyalty and, second, with dealer loyalty. In contrast to the opinion widely held in practice, customers in the automotive sector definitely do not perceive the brand and the dealer as one unit. Since similar studies in different countries come to almost the same conclusions, it can be argued that the results are valid in several cultural settings. The results obtained by Huber and Herrmann (2001) are so fundamental that they can be translated into implications even by internationally operating companies.

Brands are important in the consumer market. They are the interface between consumers and the company, and consumers may develop loyalty to brands. This study by Lau and Lee (1999) proposes that trust in a brand is important and is a key factor in the development of brand loyalty. Factors hypothesized to influence trust in a brand include a number of brand characteristics, company characteristics and consumer-brand characteristics. The findings reveal that brand characteristics are relatively more important in their effects on a consumer's trust in a brand. The results also show that trust in a brand is positively related to brand loyalty. Marketers should, therefore, take careful consideration of brand factors in the development of trust in a brand.

In these days, car owners desire to upgrade their models and brands to avail of the new features and environmental changes and comforts of competing brands. On that account, whether to remain loyal to their existing brand / product or to switch over to a new brand / product is a million dollar question that bother many car owners. There lie the fortunes of many automobile manufacturers and retailers. In this confusing scenario, some of the car buyers switch from one brand to another at trade-in time, whereas some other car owners display consistent choice of sticking to their brand / product from purchase to purchase, as hypothesized by Sambanandam and Lord (1995). When it comes to the product evaluation stage, quality products, positive showroom acoustics, ambience, positive showroom experience and a consistent and formidable after-sales-service, are all essential and central to

the loyalty formula, and manufacturers have been concentrating on these considerable efforts in these directions, as illustrated by Illingworth (1991).

As the customer satisfaction level increases, in due course of the time, as more interaction takes place between the customer and the retailer, it results in a better customer relationship between the dealer and the customer. An increased level of customer satisfaction leads to customer delight. At this point of time, customer delight slowly culminates into customer loyalty towards the brand and the satisfied customer at this level will have no difficulty in recommending the brand to his friends, relatives and peers at office. This will definitely influence the customer's post purchase behaviour. On the other side, if the post purchase scenario does not lead to higher satisfaction level, customer may not be willing to recommend the brand to other; Moreover, dissatisfied customers tend to spread negative news on the brand to his associates. This behavioral aspect influences his future upgrade of the car model, whenever the customer decides to go for a replacement of his car brand / model, in future course of time.

Ewing (2000) investigated brand loyalty by examining actual past behaviour and its impact on future behavioral intentions, as well as willingness to recommend the brand to another customer known to him. Findings indicated that purchase expectation / intention remain a valid research metric. It would appear that the brand / consumer interface offers greater predictive ability than the retailer / consumer interface. Willingness to recommend a brand to another consumer does not seem to be influenced by past behavior, but the higher the respondent's expectation to purchase the brand, the higher will be their willingness to recommend the brand.

Menon (Feb 2012) and Jacob & Khan (2010).reported in their studies that there was considerable proportion of modern women car buyers, which has increased three fold in the recent years. Companies have started to dig deep into the Indian women's psyche and attention for details. Marketers may need to look at the needs of women customers, who are increasingly growing in the segment. There is also a substantial influence of women in the car purchase decision of the family. The trend has replicated in the State of Kerala as well, where we can see many women driving the car in the city and towns. Menon (Feb 2012) also observed that car makers have woken up to the new reality of internet providing a key role in their marketing and communication strategies. Internet has witnessed increased brand building efforts by car companies over the past few years.

3. RATIONALE AND SIGNIFICANCE OF THE STUDY

The automobile market is getting saturated with many models of passenger cars, competing against each other, in sharp contrast to the monopolistic industry behavior, which was prevalent till late 80's. It requires tremendous amount of marketing efforts to keep and grow their market share in this scenario, by adopting quite innovative features and value added services, which are very attractive to the customers. Companies are adopting new methods to see, if small families using the two wheelers, can be converted into the car buyers.

Kerala market is considered to be different from other states, due to its high consumerism. Manufacturers and marketers treat Kerala as a test market, as the people of the State display high consumerist tendencies in their purchase behaviour. Consumerism in the state is also attributed to high literacy and booming economic conditions, in the middle class, due to the inflow of foreign money predominantly from gulf, US and European countries. Each of the Kerala households is predominantly having at least one member working abroad. With the boom of IT Industry in late 90's, the expatriates are extended to US, Europe, Australia, and other Asian and countries. The economic boom, characterized by the higher purchasing power of the people of the state, coupled with the multitude of comfort and security features offered by various car models, prompted car consumers to be more selective in choosing their preferred passenger cars. There are new players and models entering the automobile sector, introducing new narrowed segments in the passenger cars. In this context, it was thought that this study is very relevant to measure the emerging customer preferences and tendencies in the passenger car industry, which can be very useful to the car manufacturers and marketers to better understand, strategize and orient their marketing programs accordingly.

4. PROBLEM DEFINITION FOR THE STUDY

With the proliferation of the many passenger car makes and models in India, which are mostly offering similar value proposition in the passenger car segment, the car segment has largely been differentiated. The problem of the study is intended to explore and unearth the differentiating parameters in such a homogenous and synchronized passenger car market, thus influencing the consumer purchase behavior of passenger cars in the State of Kerala.

5. OBJECTIVES

The major objective was to build up a Consumer Purchase Behaviour Model, with major parameters influencing the behavioural patterns of the passenger car owners. More specifically, the objectives were to study the influence in terms of:

- Information Gathering and Consumer Purchase Initiation – from peers, internet websites, advertisements, visit to the dealer.
- Personal Preferences of Car Features – based on personal needs, convenience factors, comfort factors
- Influence Factors based on the Car Manufacturer / Dealer – Dealer and show room experience, status symbol, after-sales service, Dealer offers
- Influence Factors based on car model – advanced technology, mileage, market value of the brand & model, price, interior and exterior design, security and safety features, driving comfort and entertainment features.
- External Influence - Family, parents, friends, colleagues, market goodwill and car loan availability
- Satisfaction Level – Mileage, brand, model, re-sale value, technology, safety, security, riding comfort, performance and style

6. RESEARCH METHODOLOGY

The research methodology adopted in this research study comprises of the following stages:

- Literature Review, that is the secondary research
- An exploratory stage that is the Primary Research, consisting of Depth interviews with Car Dealers of new and second-sale cars, Car Financing Agencies and car owners in the city of Cochin. Questionnaires were devised to drive the in-depth interview with car dealers of various manufacturers, second-hand car dealers, car financing agencies, and car owners in the city of Cochin, Kerala, India.
- For depth interviews, sample selection of dealers of 10 major car brands such as Maruti Suzuki, Tata Motors, Ford, Toyota, General Motors, Skoda, Hyundai, Honda, Renault, Mitsubishi, Hindustan Motors, Tata Motors, and Fiat India were chosen from the City of Cochin. A few of the second-sale dealers were chosen from the City of Cochin, again randomly, to get their views on preferences of buyers of second-sale cars. Similarly agents of most of the car financing agencies were chosen randomly from the city of Cochin. Twenty five Car owners were chosen randomly from the city neighborhood, to elicit their preferences on the car purchase and related features.

6.1 Theoretical Model for the Current Study

Based on the information collated through literature study, in-depth interviews and the subsequent final version of questionnaire formalized, the researcher conceptualized a model

of consumer purchase behaviour, with major factors influencing the purchase of passenger cars, shown in Figure 1.1.

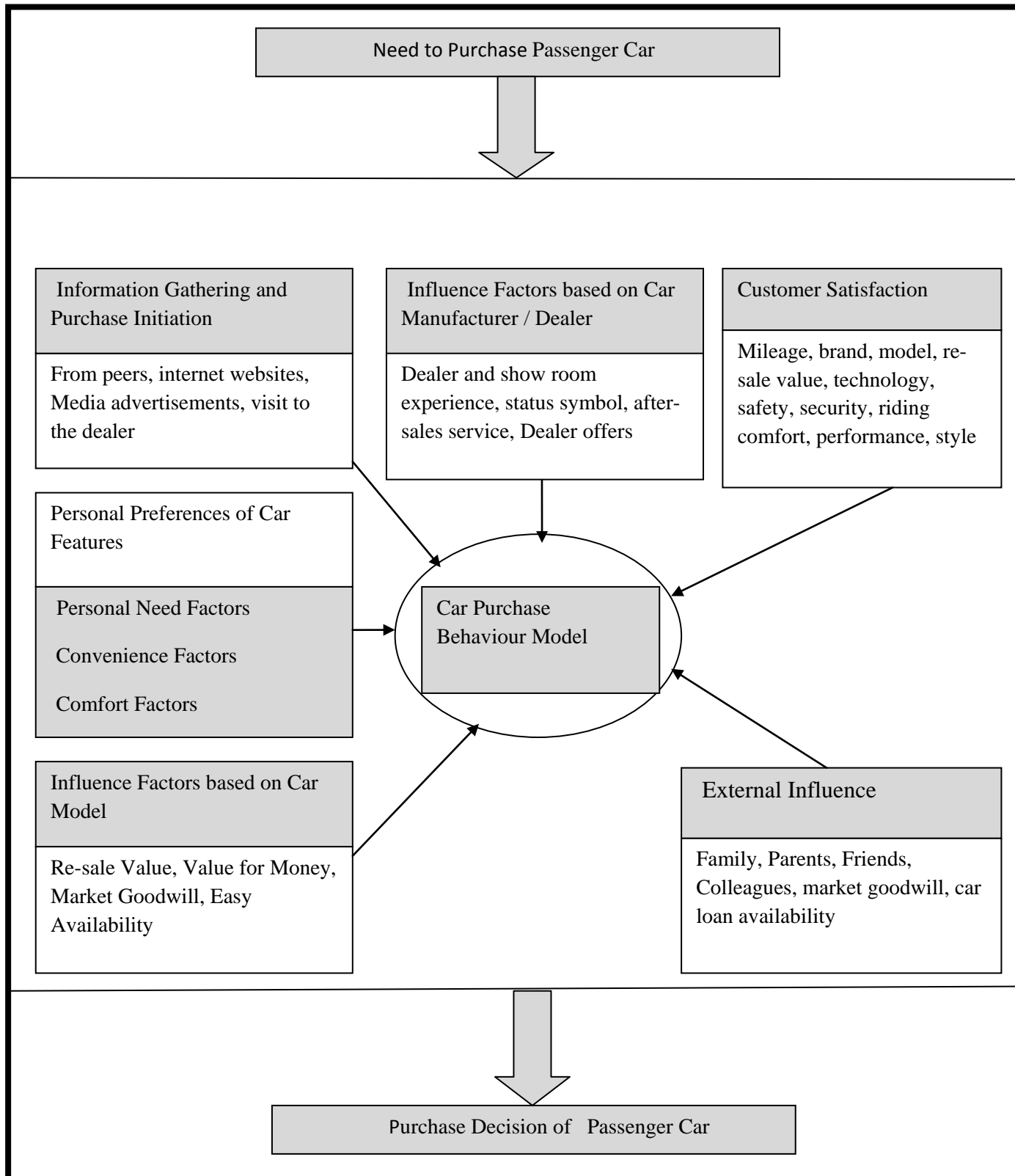


Figure 1.1 – Car Purchase Behaviour Model, consisting of Input - Need to Purchase Car, Process - Eight influencing factors, and Output – Purchase Decision of Passenger Car

- A quantitative survey of a proportional stratified sample of consumers in the federal State of Kerala.
- The study was targeted to the passenger car owners in the State of Kerala, as a population. All the brands of car users in the segments of Small Car, Hatch Back, Sedan, Higher Sedan and Multi Purpose Vehicle (MPV) consisted of the population size. Both the new cars and used cars were covered as the population. Both rural and urban areas of the State were considered. The population was synchronous, as the car market in the State was highly developed and the dealers had been following well-defined operational procedures mandated by their manufacturers to conduct the sales, delivery and service in their premises.
- The sampling strategy implemented for the research study was two-stage and stratified sampling method. Out of the 14 districts of the State, 5 districts were shortlisted. It was seen that the number of cars sold in these districts were the highest, based on the data obtained from Motor Vehicles Department of the State. In the second stage, it was decided to follow the systematic sampling method to select the sampling units, by choosing very every 5th house in the same locality, having a passenger car or every 5th apartment in the same multi-storied building. A sample size of 750 was targeted by the Researcher. It was also decided to draw 150 units from each district, totaling a sample size of 750 units across the State. The final questionnaire was administered to 750 respondents, who were car owners from the rural and urban areas of the five districts of the State. Survey was conducted by in-person structured interview method, using a pre-determined questionnaire, which is shown in Annexure - I.

6.2 Usage of Statistical Tools and Application

The data collected from the respondents was examined, verified, edited wherever necessary, for completeness, accuracy and reliability. Thereafter, data was further analyzed using statistical package SPSS version 17.0.

The data collected through the well structured questionnaire, was classified and tabulated for analysis, in compliance with the framework laid down and clearly defined, in accordance with the objectives framed at the time of the research methodology. Researcher used the Descriptive Statistics, using statistical measures such as mean, standard deviation, mean %

score $\left(= \frac{\text{Mean score of the variable} \times 100}{\text{Maximum possible score}} \right)$ of each of major variables and their factors to

identify the dominance and importance of factors for each of the eight major variables, which

influence the purchase behavior of the cars. The researcher also ranked the factors of the major variables, based on the value of the mean % scores, to identify dominant factors of the major variables, through the data collected through the chosen sample.

A five point scale was used to measure the sub items of each of the 8 major variables, mentioned above. The questionnaire respondents were asked to specify their choices for each of the sub items of these major variables, using a five-point Likert's scaling technique (strongly agree, agree, neutral, disagree, and strongly disagree). The score 1 was represented for the option "strongly disagree", while the score 5 on the scale, represented the category "strongly agree", for all the positive questions. A reverse scoring pattern was used for all those negative questions, using a five-point scale (5 representing strongly disagree and 1 representing strongly agree). Cronbach's reliability test was used to test the degree of dependability, consistency or stability of the scale adopted.

One sample Z-test was used to establish dominance of various factors, influencing the purchase behaviour of cars, to test the hypotheses listed.

7. DATA ANALYSIS, RESULTS AND INTERPRETATION

In tune with the research objectives, this chapter has been structured into major sections, dealing with the data analysis of the various major parameters, which influence the purchase behavior of the passenger car customers, in terms of:

- (1) Information Gathering and Consumer Purchase initiation (IGCP)
- (2) Preference based on Personal needs (PPP)
- (3) Personal Preference based on convenience factors (PPC)
- (4) Personal Preference based on Comfort factors (PPCF)
- (5) Influence factor based on car Manufacturers / Dealer (IFD)
- (6) Influence factor based on car model (IFM)
- (7) External Influence (EI)
- (8) Satisfaction level (SL)

7.1 Information Gathering and Consumer Purchase initiation (IGCP)

This is the beginning of the purchase process of passenger cars, wherein customers start identifying the need for a passenger car and start the information collection of various car manufacturers and models. This main variable was explored using a set of 8 sub variables (IGCP 1 to IGCP 8) in the question number 7, in the Questionnaire on Consumer Purchase Behaviour of Passenger Cars, which is shown in Annexure – I. Based on the mean % score obtained, it was observed that information received from the friends (IGCP2) scored the first

rank; opinion from family members (IGCP4) the second rank and Information received from the office colleague (IGCP3) scored the third rank

7.2 Preference based on Personal Needs (PPP)

Personal Preference based on Personal needs (PPP) is the second major variable identified for study and data analysis. Once a need is identified and a few initial information gathering process steps are done, the car customers start to short list their manufacturers and models, based on certain preferences. Preference based on personal needs (PPP) is one of them. This main variable was explored using a set of 9 sub factors (PPP1 to PPP9), in question number 8(a) in the Questionnaire on Consumer Purchase Behaviour of Passenger Cars, which is shown in Annexure – I. Based on the mean percentage scores obtained, family wanted a car for functions, social gathering (PPP6) scored the first rank, need to travel long distance on trips (PPP7) the second rank and need to upgrade from two-wheeler to four-wheeler (PPP1) occupied the third rank.

7.3 Personal Preference based on Convenience Factors (PPC)

Personal Preference based on Convenience needs (PPC) is the third major variable identified for the study and data analysis. When the car customers start to short list their manufacturers and models, based on certain criteria, preference based on convenience needs (PPC) is yet another major variable, contributing to the influence of the purchase behaviour. This PPC variable was explored, using a set of 8 sub factors (PPC1 to PPC8) in the question number 8(b) in the Questionnaire on Consumer Purchase Behaviour of Passenger Cars, which is shown in Annexure – I. Based on the mean percentage scores obtained, engine performance (PPC8) scored the first rank, safety & security (PPC7) the second rank and good after-sales service (PPC5) the third rank.

7.4 Personal Preference based on Comfort Factors (PPCF)

Personal Preference based on Comfort needs (PPCF) is the fourth major variable identified for the study and data analysis. When the car customers start to short list their manufacturers and models, based on certain criteria, preference based on comfort factor (PPCF) is yet another major variable, contributing to the influence of the purchase behaviour. This PPCF variable is identified by in the Questionnaire on Passenger Car Customers. This main variable was explored using a set of 6 sub factors (PPCF1 to PPCF6) in the question number 8(c) in the Questionnaire on Consumer Purchase Behaviour of Passenger Cars, which is shown in Annexure – I. Based on the mean percentage scores obtained, style & looks of the car (PPCF1) scored the first rank, comfort in driving (PPCF4) the second rank and value for money (PPCF6) the third rank.

7.5 Influence factor based on Car Dealer (IFD)

Influencing Factor based on car Dealer (IFD) is the fifth major variable identified for the study and data analysis. When the customers finally decide choose from the available short listed alternatives, Influencing Factor based on car Dealer (IFD) is a major substantial variable, contributing to the influence of the purchase behaviour. In many cases, it is found that the car manufacturer / dealer of the specific brand plays a major part in the customers deciding their car band choice based on it. This IFD variable is This main variable was explored using a set of 7 sub factors (IFD1 to IFD7) identified by Question number 16(a) in the Questionnaire on Consumer Purchase Behaviour of Passenger Cars, which is shown in Annexure – I. Based on the mean percentage score, tabulated in the above table 4.64, importance attached to the car brand (IFD5) scored the first rank, dealer and show room experience (IFD1) the second rank and after-sales service package (IFD7) the third rank

7.6 Influence factor based on Car Model (IFM)

Influencing Factor based on car Model (IFM) is the sixth major variable identified for the study and data analysis. When the car customers finally choose from the available alternatives from the short list, Influencing Factor based on car Model (IFM) is yet another substantial variable, contributing to the closing influencing phenomenon of the purchase behaviour. In many cases, it is found that the car model of the specific brand plays a major part in the customers deciding their car choice based on it. This IFM variable was explored using a set of 11 sub factors (IFM1 to IFM11) identified by Question number 16(b) in the Questionnaire on Consumer Purchase Behaviour of Passenger Cars, which is shown in Annexure – I. Based on the mean percentage score, tabulated in the above table, driving comfort of your specific car (IFM10) scored the first rank, advanced technology of your model (IFM1) the second rank and interior design (IFM6) the third rank.

7.7 External Influence (EI)

Influencing Factor based on car Model (EI) is the seventh major variable identified for the study and data analysis. When the car customers finally choose from the available alternatives from the short list, External Influence (EI) is a major variable, contributing to the influence of the purchase behaviour. In many cases, it is found that the car model of the specific brand plays a major part in the customers deciding their car choice based on it. This EI variable was explored using a set of 9 sub factors (EI1 to EI9), identified by Question number 17 in the Questionnaire on Consumer Purchase Behaviour of Passenger Cars, which is shown in Annexure – I. Based on the mean percentage score obtained, family (wife, son /

daughter) (EI1) scored the first rank, relatives (EI3) scored the 2nd rank and friends (EI4) the third rank (EI8).

7.8 Satisfaction Level (SL)

Customer Satisfaction Level (SL) is the seventh major variable identified for the study and data analysis. Customer satisfaction plays, as a strong contributing factor to spread word-of-mouth publicity to other customers. It will also influence customers on their future purchase behaviour. This SL variable was explored using a set of 15 sub factors (SL1 to SL15), identified by Question number 18 in the Questionnaire on Consumer Purchase Behaviour of Passenger Cars, which is shown in Annexure – I. Based on the mean percentage score, tabulated in the above table 4.102, Fuel efficiency (SL1) scored the first rank, value for money (SL2) the second rank, power of the car (SL3) the third rank.

8. VALIDATION AND ACCEPTABILITY OF THE MODEL

8.1 Reliability Analysis

It was seen that all the values of the Cronbach Alpha for the 8 major variables under study as shown in Section 7, are all above the value of 0.70. The values showed that refined scale is reliable and consistent, as the calculated values of the Cronbach Alpha is well above the recommended value of 0.70, demonstrating a high reliability of the data collected.

The following figure 1.2 shows the diagrammatic representation of the entire validated model with eight major influencing variables.

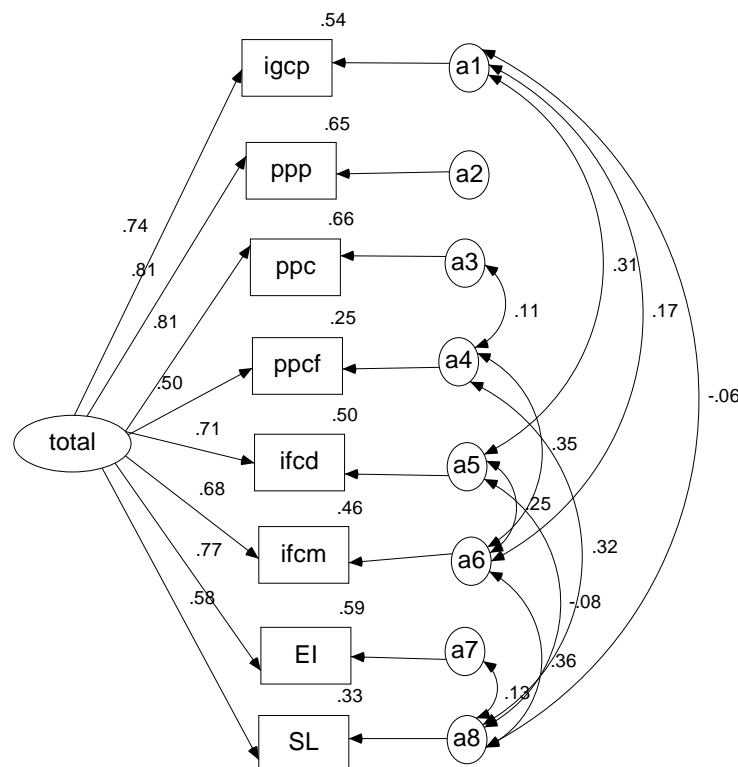


Fig. 1.2 – Figure showing the Purchase Intention Model, Variables, their correlations and regression coefficients

In the Fig 1.3, the figures 0.47, 0.81, 0.81 etc are the regression coefficients, showing their contributing share in the influence on the Total Purchase Intention (PI) variable by the sub factors IGGP, PPP, PPC and so on. Again the figures 0.54, 0.65, 0.66 etc are the correlation coefficients between the Total (IP) and IGCP, PPP, PPC and so on.

The model of Purchase Intention (PI) can be expressed in the form of the following equation:

$$PI = 0.735 IGGP + 0.808 PPP + 0.810 PPC + 0.496 PPCF + 0.705 IFCD + 0.681 IFCM + 0.771 EI + 0.578 SL$$

9. TESTING OF HYPOTHESES

Hypothesis No (1): Information received from friends has got a high dominating influence, while gathering information before the purchase phase of passenger cars

Table 9.1 - Z-test (one sided tailed test to the right) for Hypothesis 01 Testing

	Mean	Std. Deviation	Mean % Score	Z
	3.7417	.69761	74.83	9.121

In this case, the mean percentage score is 74.83, which indicates that the information received from friends has a high positive influence on the purchasing decision. Further to test whether this value is significant or not (i.e. Mean % Score is above 70 or not), we conducted the one sample Z test and the result is exhibited in the above table. Test is found to be significant as the calculated value is greater than the tabled value of 1.645, at 5% significance level.

(H_0 : Null Hypothesis: Mean = 70 against H_1 : Alternate Hypothesis: Mean > 70)

Hence the stated hypothesis is accepted

Hypothesis No (2): Information received from dealer / staff plays a high dominating factor, while gathering information before the purchase phase of passenger cars.

Table 9.2 - Z-test (one sided tailed test to the right) for Hypothesis 02 Testing

	Mean	Std. Deviation	Mean % Score	Z
	3.5036	.83219	70.07	.114

In this case, the mean percentage score is 70.07, which indicates that Information received from dealer /staff has no positive influence on the purchasing decision. Further to test whether this value is significant or not (i.e. Mean % Score is above 70 or not), we conducted the one sample Z test and the result is exhibited in the above table. Test is found to be not significant as the calculated Z value is less than the tabled value of 1.645, at 5% significance level.

(H_0 : Mean = 70 against H_1 : Mean > 70)

Hence the stated hypothesis is rejected

Hypothesis No (3): Family's need to own a car for usage in social gathering / functions, plays a dominating factor of personal preferences based on personal needs, while short listing the car choices.

Table 9.3 - Z-test (one sided tailed test to the right) for Hypothesis 03 testing

	Mean	Std. Deviation	Mean % Score	Z
	3.8095	.78907	76.19	10.326

In this case, the mean percentage score is 76.19, which indicates that family need to own a car for using in social gathering / functions, has a high positive influence on the purchasing decision. Further to test whether this value is significant or not (i.e. Mean % Score is above 70 or not), we conducted the one sample Z test and the result is exhibited in the above table. Test is found to be significant as the calculated Z value is greater than the tabled value of 1.645, at 5% significance level.

(H_0 : Mean = 70 against H_1 : Mean > 70)

Hence the stated hypothesis is accepted

Hypothesis No (4): Personal need to travel long distance on trips, plays a high influence of personal preferences based on personal needs, while short listing the car choices.

Table 9.4 - Z-test (one sided tailed test to the right) for Hypothesis 04 testing

	Mean	Std. Deviation	Mean % Score	Z
	3.7951	.81788	75.90	9.498

In this case, the mean percentage score is 75.90, which indicates that family need to own a car for using in social gathering / functions, has a high positive influence on the purchasing decision. Further to test whether this value is significant or not (i.e. Mean % Score is above 70 or not), we conducted the one sample Z test and the result is exhibited in the above table. Test is found to be significant as the calculated Z value is greater than the tabled value of 1.645, at 5% significance level.

(H_0 : Mean = 70 against H_1 : Mean > 70)

Hence the stated hypothesis is accepted

Hypothesis No (5): Easy availability of the car model has a positive influence on the personal preferences based on convenience factors, while short listing the car purchase choices.

Table 9.5 - Z-test (one sided tailed test to the right) for Hypothesis 05 testing

	Mean	Std. Deviation	Mean % Score	Z
	3.6479	.79019	72.958	4.927

In this case, the mean percentage score is 72.958, which indicates that the easy availability of the car model of the car model has a positive influence on the purchasing decision. Further to test whether this value is significant or not (i.e. Mean % Score is above 70 or not), we conducted the one sample Z test and the result is exhibited in the above table. Test is found to be significant as the calculated value is greater than the tabled value of 1.645, at 5% significance level.

(H_0 : Mean = 70 against H_1 : Mean > 70)

Hence the stated hypothesis is accepted

Hypothesis No (6): There is a positive influence of compact car, on the personal preferences based on convenience factors, while finalizing the car purchase choices.

Table 9.6 - Z-test (one sided tailed test to the right) for Hypothesis 06 testing

	Mean	Std. Deviation	Mean % Score	Z
	3.6854	.86304	73.71	5.656

In this case, the mean percentage score is 73.71, which indicates that the compact car model has a positive influence on the purchasing decision. Further to test whether this value is significant or not (i.e. Mean % Score is above 70 or not), we conducted the one sample Z test and the result is exhibited in the above table. Test is found to be significant as the calculated Z value is greater than the tabled value of 1.645, at 5% significance level.

(H_0 : Mean = 70 against H_1 : Mean > 70)

Hence the stated hypothesis is accepted

10. SUMMARY OF FINDINGS

- About one third of the car owners were having diesel vehicles. This showed a preference towards diesel passenger cars. The research results showed that about one seventh of car owners owned a second car in the family, which indicated an increasing trend for buying another passenger car for the city drive for family usage, while using the first car for office and business usage.
- Foreign manufacturers occupied over a simple majority market share the cars purchased by the car owners, showing a clear preference of foreign brands in the Kerala car market.
- It was found that there was a significant difference between the five car segments, while customers evaluated their customer satisfaction level for their passenger cars.

- It was observed that in the information gathering and consumer purchase initiation stage, information received from the friends, opinion from family members and Information received from the office colleague were the prime sources where customers gathered information on car models and brands.
- When it came to short listing from the alternative brands and models, personal preference based on personal needs was one of the criterion used by car passengers. In this criterion, car passenger prime requirement needs in the top slots were - family wanted a car for functions, social gathering, need to travel long distance on trips and need to upgrade from two-wheeler to four-wheeler.
- Personal preference based on convenience factors was yet another criterion to short list brands and models. Engine performance, safety & security and good after-sales service topped the consumer requirements list. Good after-sales service was an additional requirement for small and medium car segments, whereas safety and security requirements topped the need category of higher sedan car segment.
- In the category of personal preferences based on comfort factor requirement of the car owners, style & looks of the car, comfort in driving and value for money topped the requirement list.
- In the category of identifying the cars based on the manufacturer criterion, importance attached to the car brand, dealer and show room experience and after-sales service package topped the category list.
- When it came to the question of why the customers choose their favorite brands, based on influencing factor of specific car models, driving comfort of the specific car, advanced technology of the model and interior design were the deciding criteria chosen by the car customers.
- External Influence was a dominating influential factor, in car customers choosing their selected car models. family (wife, son / daughter), relatives and friends, topped the list of criteria for selection.
- On the question of customer satisfaction on their chosen models, car customers chose the factors such as Fuel efficiency, value for money and power of the car were the top reasons for their satisfaction.
- When it came to specific hypothesized statements on the chosen models, price of the car, advanced technology, market re-sale value of the brand and model, security features,

safety features and driving comfort were the consolidating factors, which contributed to the ultimate selection of their chosen models.

11. SUMMARY OF MAJOR RECOMMENDATIONS

- The increasing number of women car owners, using the car for their office, personal and family work, thus becoming an influential group, calls for the attention of car manufacturers and marketers to focus their strategic efforts in this direction.
- There were sizeable numbers of car customers, with clear preferences for diesel cars, due to the ever increasing cost of petrol in the last few years. Manufacturers might need to tackle this increasing need for diesel car customers and their preferences. It is evidently acknowledging this fact that the focus of manufacturers to bring out diesel version of their car models.
- Since there is perceptible and significant difference between the five car segments, marketers might need to address segment wise behavioral patterns and preferences to meet up with their requirements.
- Since, information received from the friends, opinion from family members and Information received from the office colleague were the prime sources in information gathering and consumer purchase initiation process, marketers might want to focus on these factors to catch the attention of the intending future customers.
- When it came to personal preferences based on personal needs, the top slot needs were - family wanted a car for functions, social gathering, need to travel long distance on trips and need to upgrade from two-wheeler to four-wheeler. These requirements call for segment wise marketing, as the needs varied from segment to segment.
- When it came to short listing cars on personal preferences based on convenience factors, engine performance, safety & security and good after-sales service topped the consumer requirements list. Good after-sales service was an additional requirement for small and medium car segments, whereas safety and security requirements topped the need category of higher sedan car segment. Easy availability of car models in the market was also a deciding requirement factor. Customers were tempted to switch over to competing brands and models, if their chosen model is readily available in the market. This calls for tremendous amount of market awareness, intelligence and strengthen the availability of popular models in the market, based on these specific requirement needs.
- In the category of personal preferences on comfort factors, style & looks of the car, comfort in driving and value for money topped the requirement list. Car segment wise

analysis also brought out these specific comfort requirements across all the brands. Manufacturers might look into these aspects to their car design, so to attract car passengers, prone to decide the models based on these criteria.

- Based on the manufacturer criterion for selection, importance attached to the car brand, dealer and show room experience and after-sales service package topped the category list. Car manufacturers and dealers might look into these specific aspects of social and status symbol requirements, based on the manufacturer brand, to boost up their demand. It was also known that the foreign cars provided a better perception on these requirements category. Thus, the joint ventures with known car makers in the world (specifically Japanese and US make cars) were the favorites) might prove to be an additional image booster to the Indian car manufacturers.
- When it came to the question of why the customers choose their favorite brands, based on influencing factor of specific car models, driving comfort of the specific car, advanced technology of the model and interior design were the deciding criterion chosen by the car customers. The car manufacturers might need to concentrate on these parametric factors, which played a dominant role in short listing the models and brands.
- External Influence was a dominating influential factor, in car customers choosing their selected car models. family (wife, son / daughter), relatives and friends topped the list of criteria for selection. Marketing techniques to influence these deciding factors might be useful to the dealers and manufacturers.
- On the question of customer satisfaction on their chosen models, car customers chose the factors such as Fuel efficiency, value for money and power of the car as the top reasons for their satisfaction. Manufacturers might need to focus on these factors to ensure higher customer satisfaction for their models.

12. LIMITATIONS OF THE STUDY

The study was restricted to the passenger car owners of the State. Due to the wide spread of the city, the questionnaire was administered to the urban and rural areas of the five districts of the State. The sample size of 750 was also chosen, considering the cost involved in covering more units in each selected district. The survey was also limited to five car segments – Small Car, Hatch Back, Sedan, Higher Sedan and Multi Purpose Vehicle (MPV).

13. SCOPE FOR FURTHER RESEARCH

There is further scope to cover other car segments, like Sports Utility Vehicle (SUV), Executive Sedan, Luxury Segments etc. Also study could be extended to other districts of the

State. There is also scope for conducting the study in other States of India, as that would open up more findings.

14. CONCLUSION

As in other industries, the scenario in domestic Indian Automobile Industry is quite different from the Global Automobile Industry. The industry actually developed in two clear stages - the Maruti era (1983 onwards) and the post-liberalization era (1992 onwards). Compared to the global automobile sector, where substantial research has been done, very little empirical research has been conducted on the Indian automobile industry. Moreover, no organized study has been conducted in the area of passenger car industry, with specific reference to the State of Kerala. Kerala State is well known for its consumerism, due to the higher purchasing power, very high literacy rate and inflow of foreign money into the State, from the huge number of people of the State working in US, Europe, Australia, and other Asian and Gulf countries. With many car manufacturers launching their product in the Kerala state, the study will definitely benefit the stakeholders of car manufacturers, dealers, financing agencies, to formalize and strategize their policies towards an effective marketing strategy. The parameters developed in this paper and the model which has been conceptualized was tested through an extensive research and quantitative analysis, to establish its acceptability.

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