

# Does Technology Plays A Key Role in Selling A Car?

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**Abstract** - A car which is a luxury good in india, but still the demand for the car is increasing day by day. From past few years the automobile market has many new entries which are affecting the indian automobile market largely. This companies are more based on technologies i.e with the common features of a car it is also giving technologies which are attracting more and more customers towards it. This is the research on how the new entries effected indian car companies and few ideas which if indian companies use them, they could acquire the indian market and could give a very tough competition to the new companies. This article also includes the comparison of sales before and after the new companies' entry in the indian market. This research would help many indian companies to increase the amount of sales of there manufactured car by using the ideas which are presented in the given article. The article is more for Tata Motors as it is my favourite brand in india. If Tata Motors acquire something from this research, I would be very grateful.

**Keywords**—IR Sensor,UltrasonicSensor,Arduino,Timer.

## I. INTRODUCTION

The demand for cars in india has increased allot in past few years. According to a data there are about 30 car owners for every 1000 people in india which might increase to 35 and 40 in the span of years which is a very big thing in india. The increase in demand for car is making many brands to launch their cars in india by which the indian manufactures are affected a lot. By the lot of manufacturers entering into indian market the consumer now had a lot of option to by a car now at this stage the new launched companies are using technology as a key apart from normal features of the car which would lead to attract the consumer so, the cars are getting more demand when compared to that of the cars which were already sold in india before the international brands entry in the country.

This research will provide the details of car companies such as morris garages, kia motors and many more used the technology which was new to Indians and how they have acquired the market after their launch. This research will also show the difference in the sales of many of the car in india before and after launch of those cars.

In this article there are many technological ideas which as a car manufacture you can directly adopt by which your car might become one of the bestsellers in the upcoming year. How and why you should adopt this would be very clearly explained in the given paragraphs and this are completely new ideas for india and for world except one or two (for world). so, the application of this would give youdifferent identification of your company and your product at a time.

## II. LITERATURE REVIEW

**Manish Kumar Srivastava, A.K. Tiwari**, studies the consumer behavior for A3 segment vehicles such as Honda City and SX4 in a particular region Jaipur. Data collected from 100 respondents 50 each from Honda City and Maruti SX4. Respondents were considered from various backgrounds like Gender, Occupation, Income class. Also, customer purchase parameters considered for study are Price, Safety, Comfort, Power & Pickup, Mileage, Max Speed, Styling, After Sales Service, Brand Name and Spare Parts Cost. Based on above parameters and analysis made in this it revealed that, while purchasing A3 segment car Customer give much importance to Safety, Brand Name and seating and driving comfort. Also, word of mouth publicity and advertisements in car magazines are more effective communication medium for promotion of Cars.

**Prasanna Mohan Raj**, studied the factors influencing customers brand preference of the economy segment SUV's and MUV's. Data collection was made through direct interaction and customer intercept survey using questionnaire. Descriptive analysis was used to transform data into understand format and factor analysis was used for identification of factors influencing customer preference. In light of study findings, the preference of a given brand can be explained in terms of six factors namely Product reliability, monetary factor, trendy appeal, frequency of non-price promotions offered, trustworthiness and customer feeling or association towards brand. There is need for marketers to take these factors into consideration when crafting product innovations in the SUV segment of Automobile market.

**Nikhil Monga, Bhuvender Chaudhary, Saurabh Tripathi**], this research attempts to answer some of the questions regarding brand personality of selected cars in India by conducting the market research. This personality sketching will help in knowing what a customer (or a potential customer) thinks about a given brand of car and what are the possible factors guiding a possible purchase. Similarly, the idea of measuring the customer satisfaction will serve the same purpose of determining the customer perception. Thus, by measuring the willingness of exciting users of a car to recommend it to others will help the car manufacturers to check out the entire customer Buying Behavior.

The study shows that brand perception is something which starts building up before a car is purchased and goes on with its use and is reflected in the recommendations. The customer makes to his acquaintances for the same car. Also, it is seen that the customer might not be using the car still he holds the perceptions about it. Brand personality of a car is enforced by the sellers in the mindsets of the customers and customers reacts to it by forming their perception about the car and this reflects in the overall brand image of the car. So, brand image and brand personality complement each other and the brand perception aids the building of brand images. As per the study findings, dealers play a very important role in building up the brand perceptions of the cars.

**SaminRezvani, Goodarz Javadian Dehkordi, Muhammad Sabbir Rahman**, this paper reviews the country of origin and different variables that influence consumer purchase intention, also highlight the relationship of variables and customer purchase intention. Study demonstrate that people care about which country products come from and where they are made and consider these factors when evaluating the quality of product. Stereotypes of country and the preferences of customers, influence the purpose intention. Political system, culture and the economy of the country can be a cause of sensitivity to people.

There are many factors that have an impact on consumer purchase intention. Research and methodologies have shown that even when consumers can evaluate all the intrinsic product characteristics by expressing the product, the effect of extrinsic cues has more influence on consumer product evaluation. Country of origin is one of the extrinsic cues; in addition, there is no doubt that country of origin has considerable influence on the purchase intention process.

**K. Vidyavathi**, the study throws light on various aspects that the manufactures should concentrate on to attract the prospective buyers. The demand for the small Automobile segment is increasing because of the growing number of nuclear families as well as parking problems. Hence the

manufactures should find out the needs, wants, tastes and preferences of consumers in order to design the products. Also fuel economy and driving comfort are the most important parameters followed by availability of spares and their price.

**Balakrishnan Menon, Jagathy Raj V.P.**, study findings show that due to price difference in Gasoline and Diesel, about one third of the car owners were having diesel vehicles. The research results showed that about one seventh of car for the city drive for family usage, while using the second car for office and business usage. Foreign brand cars show clear preference in the Kerala car market. Also, it was observed that in the information gathering and consumer purchase initiation stage, TV commercials on car models and brands, search on internet website of the manufacturer and visit to dealers / distributors were the prime sources where customers gathers information on car models.

**Ramita Verma, Shubhkamana Rathore**, studied the luxury car segment of India. Researches and studies have revealed that the luxury car market is growing at a steady speed of 25% per annum with more and more numbers of luxury cars entering Indian car market. Luxury cars are preferred by HNI (High Net worth Individuals). HNI wants to differentiate themselves from crowd for various reasons. Change in attitude of the customer accounts for the sudden acceleration in the Luxury car Market in India, as the emphasis has been shifted from price consideration and affordability to design, quality and pleasure.

### III. RESEARCH

The research is about how the technology had made the difference and how using technology they have acquired the market of india when compared to that of indian companies. This will include the technological features used by new companies to acquire indian market. Now let us consider MG Hector which is similar to many cars in india when it comes to its mechanical specifications but the launch of it was a massive success, ofcourse the design and many other might be the reason but they can't get this easy success being a new company.

So, here the "Technology" had played a very major role to acquire the market. Firstly it got itself a tag of "India's first Internet Car" which already made people curious and then they started advertising that one can control the car using mobile phone and after it launched the curiosity made people look the features technologically and they had won the game there as this was technologically very amazing. The features of hector car where it has its own assistant name mg, it used ganna and gave free subscription little point but matters, it has a subwoofer with its speaker, a front and rear sensors such that it would be easy to park, air pressure sensing sensors, Weather Information By Accuweather,

Preloaded Entertainment Content By MG, Smart Drive Information, 4 Tweeters, Dual Pane Panoramic Sunroof, 6-Way Power Adjustable Driver seat, Powered Tailgate Opening/Closing With Multi Position Setting, AC Controls On The Headunit, Sunglass Holder, 2nd Row Seat Recline, Leather Driver Armrest With Storage And 12V Power Outlet, Flat Floor, Rear Seat Middle Headrest, Rear Parcel Curtain, Welcome Light on Car Unlock, All Doors Maps Pocket & Bottle Holders and many more so this features makes a huge difference for a consumer to buy a car.

When it comes to KIA Celtos it also has many features same as Hector but there are many features which has its own identity. There are many features such as sound mood lighting, air purifier and perfume, head up display, UOV connected car tech. Being it has the same engine and performance features but when it comes to comfort feature the Hector and Seltos has the plus point which lead customer to choose this car by which they are acquiring the market.

#### IV. SOLUTION

Now we had a great mechanism car by an Indian car maker and being an automobile industry we are perfect with the features but still the sales are not so good and we can't even copy the feature of these cars so there are few features which I am going to introduce here which are completely new to India but there are some features which are even new to the world so if our Indian companies use them, they could become best both in engine, performance and comfort features.

**1. Siri:** So, Siri is the world-famous voice assistant it has its own image so why not we collaborate with Siri and use it as voice assistant in a car would make the car to get into limelight. If Siri is installed in a car it could become a reason to buy the car for those who are majorly concerned to it and if some one is not concerned and compares the main features such as economy, price and the car in which we install Siri has some less features when compared to other comparative car this might be ignored for Siri.

So this could make a change. Next, the advertisement for this car also becomes easy. Adding Siri might work but while adding Siri if we add the features i.e. if the controlling ability of Siri to car also gets increased then it gives a very big point such as if it can control the adjustment of seats, gives the diagnosis information, sets the location on voice, gives the weather prediction and many more so this could give a visibility for the people to buy a car. What if we give a face to Siri then it could be a great thing to install in the car?

**2. solar-electric car:** Now a days in the Indian market there are many brands which are building their electric version of their car so why not we do something different that is in an electric car what we need majorly is the rechargeable battery using which the motor could work, now the problem sometimes we get with electric cars is we had to give at least half an hour to get it charged i.e. from stations from home it might take eight hours so what we can do is if there are 1000 batteries allotted in a car why can't we allot 100 batteries to solar by which in emergency we could use that now for example a car with full charge can go up to 450 km but we have to travel 500 then this idea could work because while starting we use the solar and then transmit it to electric i.e. there should be a feature which should allow us to do the transmission easily between solar and electric so, now in the travel of 500 km we travelled first with solar now the cells are empty now we are travelling with electric so solar is turned off that is recharge mode so while traveling the next 400 km it will get fully recharged so here we get 100 km profit and it will also save a lot of electricity and the absorption of heat by the car could make the car less hot by which some times we use AC low so this could lead us to few more km. Now this feature could also make the car to come into limelight even in future.

**3. Games :** there are many companies outside India have games in the cars which we can play using the car steering i.e. the car steering acts like a joystick which for kids is a very plus point but it is a plus point for the drivers who had to stay in the cars for long time such as cab owners so this could be a minor but great addition in a car. Sometimes this little thing in a car gives major attraction because it shows how keen and deliverable the car has manufactured.

**4. Sound system :** sound system in a car plays a very big role either it is in city or small town every one needs a good sound system here again we can play a card of goodwill why not acquire the sound system i.e. speakers from a company which is very famous for its speakers for example Marshall and Bose are two very famous sound companies which are used by airplanes. So, this is also a game changer in terms of advertisement.

**5. Interior design:** as every car maker considers the exterior design as a very big factor but again ignores the interior design of a car makes the car worst in terms of sales which for example there are many Maruti Suzuki cars which from outside we get a lot of comments as it is looking like Mini Cooper looking like Mr. Bean car at the same time we get the comments when they look at interior as it's just an idiot box, total debacle. So, the interior is also important as of the design of the car. Now the interior includes the space, seating in the car, the decor, the space for legs, the space for luggage, etc. These are the very common things but as a technology what we can do is in the interior we could transfer some of the places such as in the front with plastic to that of velvet which feels good and

looks good as well. The interior should also include new and adaptive features such as heating coil which will be help full to heat something which might work as “induction” which would be great attraction. The other feature would be automated doors i.e by single touch the door should open might also be a great thing to install. Why not we try the fingerprint sensor for opening and starting of a car i.e for a daily car user there is no need of key but when others want to drive the car they should have the key this would be great solution for those who forget key and for those who easily loose there key they might save about 5000-10000.

**6. Lighting:** lighting in the car doesn't sound good but it really matters because there are many big companies who actually invest in there lighting system in a car. The lighting should not only about the head light, back light and indicators but we shall improve the internal lighting such as door lights, the color lightings inside the car i.e if the car has left with one door open red lights and they could also put under seat lighting which gives a feeling to ride a car. The lighting on the roof from inside also gives a great look to a car.

## V. CONCLUSION

To conclude on this research, I being a mechanical engineer want to conclude that an automobile company should known for its performance and mechanism but if the technology is playing a key role then we also should get upgraded but not by coping but by the help of new technologies. New technology is easy to find with teenagers as they dream to have many things in car so you could go for online survey, college programs on idea sharing, direct value offerings. This would make company grow because we are with the new and fresh ideas and not by coping.

This is to conclude that being an technology is playing key role but we should not compromise with the performance and engine because this might increase the sales in beginning but later it would go very down lets consider an example for it, MG Hector which as mentioned above had made great sales in beginning but few days ago there were many cases of its engine releasing smoke and car getting off in the middle way so this make the company goodwill to zero because at the end of the day we are an automobile industry.

## VI. MY OPINION

The feature which I have mentioned above should be used with the great engine performance features which would definitely make the car a great car and with all this the design is also a great thing to consider because if it is mobile, speaker, car, tv, house, the exterior design matters allot.

## REFERENCE

- [1]. Vikram shende, Analysis of research in consumer behavior of Automobile Passenger Car Customer-Senior Manager – Programme Management, Foton Motors Manufacturing India Pvt. Ltd. Pune, India.
- [2]. Manish Kumar Srivastava, A.K Tiwari, A Study of Behavior of Maruti SX4 and Honda City Customers in Jaipur, Pacific Business Review-Quarterly Referred Journal.
- [3]. M.Prasanna Mohan Raj, Jishnu Sasikumar, S. Sriram, A Study of Customers Brand Preference in SUVs and MUVs: Effect on Marketing Mix Variables, International Referred Research Journal Vol.- IV, Issue-1, pp. 48-58, Jan 2013.
- [4]. Nikhil Monga, Bhuvender Chaudhary, Car Market and Buying behavior - A study on Consumer Perception, IJRMEC Vol.2, Issue-2, pp. 44-63, Feb 2012.
- [5]. SaminRezvani, GoodarzJavadianDehkordi, Muhammad Sabbir Rahman, A Conceptual study on the country of origin effect on consumer purchase intention, Asian Social Science Vol. 8, No.12, 2012 pp. 205-215.
- [6]. K.Vidyavathi, Customer Life Style Influence of Consumer Behavior with Reference to Automobile Industry in Chennai, Zenith International Journal of Multi disciplinary Research Vol.2, Issue 4, pp. 37-50, Apr 2012.