CHAPTER – 6
SUMMARY OF RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction
This chapter explores the results, conclusions and recommendations of a research study to
determine if the brand of four wheeler consumers select is related to a variety of demographic
and evaluative buying criteria considered in the process. The results of the analysis and
research suggest that certain demographic variables of consumers are related to the relative
importance of certain information sources and the use same information sources are also
related to the brand of a four wheeler purchased.

Presented first within this chapter are the research questions and supporting hypotheses
followed by the summarized conclusions based on the results of the study. Recommendations
for future research by the researcher will complete the presentation of this chapter.

6.1 Major findings from the study
Is there a relationship between the demographics of a four wheeler user and the brand of four
wheeler purchased

To support this objective the existence of relationship between a series of demographic
variables and brand the following results were obtained.

1. The brand of four wheeler purchased is independent of the age of the four wheeler
   owner. Insufficient evidence existed to conclude that the brand of four wheeler
   purchased by a consumer is related to the consumer's age. An early expectation in
   this study was that a relationship may have existed with at least few of the brands,
   attracting a younger crowd.

2. The brand of four wheeler purchased is independent of the education level of the four
   wheeler owner. Using the Chi-Square test of Independence, it can be concluded from
   the study that insufficient evidence existed to conclude that the brand of four wheeler
   purchased by a consumer is related to the educational qualification

3. The brand of four wheeler purchased is independent of the education level of the four
   wheeler owner. Using the Chi-Square test of Independence, it can be concluded from
the study that insufficient evidence existed to conclude that the brand of four wheeler purchased by a consumer is related to the educational qualification

4. The brand of four wheeler purchased is dependent on the gender of the four wheeler owner. Sufficient evidence existed to conclude that the brand of four wheeler purchased by a consumer is related to the consumer’s gender.

5. The brand of four wheeler purchased is dependent of the technical competence of the four wheeler owner. Sufficient evidence existed to conclude that the brand of four wheeler purchased by a consumer is related to the consumer’s level of technical competence.

6. Among the five demographic factors considered, only four proved statistically significant leading to the conclusion that gender and technology competence can be a predictor of four wheeler brand. Age, income and education cannot predict with any statistical significance the four wheeler brand a consumer is likely to purchase. Realistically the results here are within reason. While a silver bullet would have been to find more demographic variables related to particular brands to pin point the right audience and laser focus on them with the right message, the results indicate no such silver bullet exists.

7. The sources of information viz., Dealer store visits and Friends/Family Members/ Neighbors/ Relatives acted as the most important influencing factors. The least importance was observed for Blogs and Radio Advertisements.

8. The use of the following information sources is dependent on the gender of the customers

   i. Friends/Family Members/ Neighbors/ Relatives (female members give higher importance as compared to their male counterpart)

   ii. Magazine/Website Reviews Articles and

   iii. Blogs

9. The use of the following information sources is dependent on consumers income level;

   i. Family Members/ Neighbours/ Relatives
ii. Magazine/Website Reviews Articles

iii. Radio Advertisements

iv. Newspaper

10. The use of the following information sources is dependent on consumers age

i. Dealer Store

ii. Magazine/Website Reviews Articles

iii. Radio Advertisements

iv. Newspapers

v. Blogs and

vi. Technology or Automobile Expert

11. The use of the following information sources is dependent on consumers education level

i. Direct Mail/ Catalog/ E-mail from manufacturer

ii. Manufacturer or Retailer Websites

iii. Friends/Family Members/ Neighbors/ Relatives

iv. Magazine/Website Reviews Articles

v. TV Advertisements
vi. Radio Advertisements

vii. Newspapers and

viii. Blogs

12. The use of the following information sources is dependent on consumer’s technology competence level

i. Direct Mail/ Catalog/ E-mail from manufacturer

ii. Manufacturer or Retailer Websites

iii. Dealer Store Visits

iv. Magazine/Website Reviews Articles Magazine/Website Reviews Articles

v. Newspapers

vi. Technology or Automobile Expert

vii. Blogs

13. The hypothesis stating that —Recommendations from relatives, friends, and family members, acts as the most important source of information during the purchase decision— was accepted.

14. The following intangible attributes of a brand were considered in the study:

i. Reliability

ii. Brand Image

iii. Brand Ambassador and other Associations
iv. Past experience with brand

v. Overall Purchase experience

15. All the mean values were above 3 (important) based on which we may generalize that all the intangible factors are considered to a high extent by the selected customers. However, the most important intangible factors were Brand Image and Past Experience.

16. The intangible factor viz., Reliability was perceived differently across the gender i.e. between by the male and the female customers.

17. The intangible factor viz., brand image and overall purchase experience was perceived differently across the customer's income level.

18. The intangible factor viz., brand image and overall purchase experience was perceived differently across the customer's age group.

19. The following intangible factors;

   i. Reliability

   ii. Brand Image

   iii. Brand Ambassador/ Association

   iv. Past experience with brand

   v. Overall Purchase experiences were perceived differently across the customer's education level.

20. The following intangible factors;

   i. Reliability
ii. Brand Association

iii. Past experience with the brand

iv. Overall Purchase experiences were perceived differently across the customer’s education level.

21. Brand purchase decision is dependent on the following information sources
   i. Dealer store visits
   
   ii. Friends, family members, neighbors
   
   iii. TV advertising
   
   iv. Radio advertising
   
   v. Newspapers

22. Brand purchase decision is dependent on the following intangible brand factors
   i. Reliability
   
   ii. Brand image
   
   iii. Past experience
   
   iv. Purchase experience

23. Brand purchase decision is dependent on the following tangible product factors
   
   i. Cost price
ii. Fuel mileage

iii. Maintenance costs

iv. Performance and capacity

v. Seat shape width and cushion

vi. Seating geometry

vii. Accessories

viii. Luggage space

ix. Loan schemes

24. The hypothesis stating that “The tangible service quality factors considered while selecting a four wheeler brand varies across the brands” is partially accepted.

6.2 Recommendations

Specific information sources yield specific results with a specific set of consumers. Simply put, consumers seek out information in a variety of ways and a relationship exists with how the consumer does that and who the consumer is. Different consumers purchase different four wheelers for different reasons.

The level of technical competence of the consumer, education level of the consumer, age level of the consumers plays a key role in the determination of what sources are sought, as does gender and income level to a certain degree. This knowledge enables for creation of a rudimentary profile to properly launch the appropriate message to the right audience. In being able to answer just a few of these research objectives regarding the relationships between demographics and information sources and attributes, the efficiency of the marketing machine with these four wheeler vendors will increase.
For example, understanding that the audience who seeks out information on Manufacturer or Retail websites is non-technical, the kind of detail that resides there can be developed for that audience - less technical, more educational and informative thereby alleviating some of the assumed anxiety of the novice.

As vendors search to deliver the right information to the right audience in the right medium, research will continue to be done to answer these questions.

In the study based on the evaluation of the relationship between the demographic profile and the different information sources it is found that there requirements and the expectations of the consumers vary based on their demographic profile. The male customers gave more importance to the following factors viz., Performance, price, fuel mileage, balance and road handling, petrol tank capacity whereas the female customers expected Easy Maintenance, Safety aspects, Accessories, color, adequate space for luggage while selecting their brand. Similarly it is observed for the other demographic variables

The above information may be used by the company while devising their marketing strategies. The company based on the target segment they want to cater can accordingly make use of the findings in terms of understanding the segments requirement. If for example a four wheeler company wants to target a low income group customer segment than the basic product features it is required to offer would be Fuel mileage, Easy maintenance, cost price, Safety, rebates and discounts. After sales service as compared to that of a company who wants to target a technically highly competent customer segment that would be offering Performance, price, fuel mileage, balance and road handling, After Sales service.

Several more relationships exist between the four wheeler brand and the value of information sources and attributes perceived by consumers. Hyundai and Maruti users value a variety of sources and relate the availability and value of that source as contributing to their purchase decision. The data revealed across the brands the most significant relationships existed with Dealer store visits, Friends, Family members, neighbors, TV advertising, Radio advertising and Newspapers. What this data reveals to the vendor is the appreciation of the brand and the methods by which the brand’s consumers seek and capture information as well as value attributes related to the product and brand itself. Some brands are more successful than others, which is not surprising. Maruti, as a brand attracts a highly loyal user base,
showing that the value placed on the source of information and the product/brand features are related to the purchase decision.

A profile is forming to help vendors develop that right message for the right audience at the right time with the right vehicle.

**Recommendations for Four wheeler Vendors**

As stated, a profile is forming. Knowing the relationships that exist better enables the development of that profile. Several recommendations are presented here for four wheeler vendors to more efficiently target to whom vendors are sending the message and how vendors are delivering it.

**Message Audience and Information Sources**

The recipients of the marketing message can best be described as multi-dimensional. While the consumers themselves can be broken down into five categories: age, education level, income level, gender and technical competence, the use in segmentation with these categories occurs in three ways: (a) by information source (b) by the most important evaluative buying criterion (tangible and intangible) and (c) by brand.

Getting the right message to the right audience is the number one critical success factor in the development of any marketing strategy. Knowing how the audience internalizes messages and what kind of messages they need to be is invaluable. This study was able to reveal details on six information sources specific to the appropriate demographic; some sources are more granular than others. Direct Mail for instance, should be aimed at the technical audience while dealer visits should be arranged for the non-technical, novice. Young females who are novices in relation to technical competence seek out recommendations from their friends as an information source. Because the study did not probe further on this question inconclusive evidence exists to make any recommendations on pursuit of this profile. However, results did show that magazine reviews are also geared toward the technical crowd. Leave the —speeds and feeds and technical track content to a minimum on the mass-produced and accessible websites while turning up that dial for any direct mail campaigns and magazine reviews of the product. Older females value the reliability of the four wheeler high. Push that reliability message in venues that are more prone to females, such as female targeted magazines and
television shows. Also observed is that the overall purchase experience is valued very high the companies are required to come with posh retail outlets, have trained manpower, good processes for purchase, grievance handling cells and complaint management system adding to the overall service quality of purchase.

Keeping also in mind that this same demographic of females at the novice technical level seek out recommendations as information sources leads to another opportunity for exposure. The more mass produced and blanketed the overall purchase experience message is to the population the more likely vendors will hit on one of those four targets. Past experience with a vendor and brand is also an opportunity. Highly educated, technical experts value this experience as important, and to exploit it would be beneficial. While a total customer experience is sought after by all four wheeler vendors, doing what is possible to nurture the Installed Base with loyalty programs and strong conflict resolution and escalation processes will better position a vendor for long-term business from their customers.

What is the most important thing that drives a consumer to purchase one four wheeler over another? The most important evaluative buying criterion that was exposed in this study as each one relates to the set of demographics was eye opening.

The youngest set of respondents, ages 18-24 with the least amount of education were most interested in buying what was the best in terms of the power and performance. Brand appeared to be of no issue. Middle age (35-44) consumers with some college focus on price. More than likely these are families on a budget with little to no attention on the latest technological advances. This demographic is broad and difficult to bind. However the oldest group, 45 and older, focus on product quality. Targeting that audience is slightly more realistic, by honing in on vehicles of communication geared toward the older population, like hobby magazines, airports and newspapers.

6.3 Brand and Information Sources

Are certain brands more effective in their communication of their message than others? Is it based on the message itself or the choice of communication vehicle? This researcher would argue that it is a combination of both. Looking at the three brands that showed some
statistically significant relationships in this arena, recommendations on using the right information sources by brand follow.

**HONDA**

The most highly educated consumers appreciate Tata's brand. Tata's users in total find Tata's website to be the most important source of information to help contribute to the purchasing decision of a four wheeler. Direct mail and retail store visits are the least important. Continue focus on the direct channel by enhancing websites for the novice and areas of the website that include reviews and recommendations for the technical experts. Make the purchasing process painless for the youngest and least educated

**MARUTI**

Hyundai presented the highest number of relationships with its users. The loyalty is apparent. To continue to maintain that installed base follow the recommendations presented earlier regarding past experience and nurture that base while hunting for new ones. MARUTI users do not value direct mail or websites. They appreciate magazine reviews as well as the performance of the MARUTI four wheeler and the past experience with the brand. Focus the energy on customer retention and brand loyalty.

**HYUNDAI**

For Hyundai, the four most important information sources that surfaced were Technology expert advice and reference from friends. These appealed to the Hyundai's base the most. To continue in this front, move forward with approach, targeting the message slightly more based on the demographic: push price for middle age, quality for older, and performance for youngest. Focus on brand image for those college crowds and make the message resonate with them that Hyundai is hip and cool. Technical audiences appreciate direct mail. Tighten up that message as well. Take a less technical view on the websites to appeal to the novice crowd.


6.4 Conclusions

Economic growth
Indian economy was defying gravity when the global economy was falling and is racing ahead as the global economy recovers. Most estimates put Indian economic growth in the region of 8 to 10 per cent per annum in the coming years. And this augurs well for the Indian four-wheeler industry. In the previous decade when Indian economy used to grow in the region of 5-6 per cent there used to be a thumb-rule of the industry growing at twice the GDP rate. Even if that thumb-rule is significantly watered down, given the higher base and the higher growth rates, one may safely estimate the four-wheeler industry to grow at least in line with the GDP growth, if not significantly ahead of that.

Increasing disposable income
The robust economic growth translates into a higher disposable income of the households. This has been further supplemented by liberal pay commission rewards, farm-loan waivers and government development spending. This indeed is what has been driving the demand as households prioritize their increasing incomes to be spent on basic requirements of food, clothing, housing, connectivity and mobility. The four-wheeler is increasingly seen as a basic necessity and not just as a status symbol to own. It is seen not merely as means of commuting but indeed as an enabler of livelihood.

India, one of the 'oldest' civilizations of the world, is also one of the "youngest" Over 50 per cent of Indian population currently is less than 25 years old. Going forward, as youth continue to dominate the Indian population, they will providea large market for four-wheelers not merely to power their dreams but also increasingly to assert their individuality and status.

There are four interesting inter-related trends that are playing out demographically. On the one hand, there is increasing migration to urban areas and on the other hand, rural development has been accelerating. Families are becoming nuclear and increased distances between family units, both of which stimulate the four-wheeler demand. Equally the increased government spending in rural areas through various infrastructure and employment schemes has led to increasing rural prosperity which in turn has been translating into higher four-wheeler demand.
**Road infrastructure**
While the ambitious road development programme has been seeing its ups and down, there is no denying the fact that the road infrastructure in the country has been steadily improving and enhancing the accessibility of far-flung hamlets and villages. Four-wheeler is a natural first choice for an efficient use on cemented roads. As government's priority and ambition on the road network expansion continuous, more and more four-wheelers are going to populate these roads.

As one looks at the growth and plants of metro rail, BRT buses and other forms of public transport in large urban areas, there is continued inadequacy of public transport in smaller towns and rural areas. The latter certainly leaves a gap that the households will fill in with their choice of four-wheelers. However, the former may also not obviate the choice of four-wheelers. The four-wheeler may still be seen as a convenient mode of personal transport for the last mile connectivity in the absence of feeder services to metro stations and BRT bus stops.

**New consumer segments**
Three key notable trends in recent consumption patterns have been growth of premium motorcycle segment, rejuvenation of scooters and emergence of women as four-wheeler riders. The premium segment (greater than 150cc) has been steadily growing and in fiscal 2010-11 it will be surpassing entry segment for the first time in history. The segment today accounts for 19 per cent of all motorcycles sold and will therefore drive both the value up gradation in the coming years. Scooters, after having been virtually eliminated by stylish, fuel efficient motorcycles are staging a comeback. On the one hand, it is led by the utility value of the scooters in terms of bigger leg-room and storage space. On the other, it is also getting attraction because of increasing adoption by the trading community with increased business activity in smaller towns and rural areas. As the third key trend, women are finding new feet in the emerging Indian economy as more opportunities open up for them. As their numbers increase in the Indian workforce and as they explore newer challenges, they are finding the value of four-wheeler not just as a mere convenience but also as a huge empowerment. This presents the biggest growth opportunity for four-wheelers especially scooters, as the women represent not only an equally large target group (half the population) but also a hitherto largely-unaddressed segment.
The attractiveness of Indian markets has not only spurred several Indian business houses into action, but has also attracted almost every major international player. Customer is increasingly spoilt for choice and the ever-burgeoning product range is also driving down the effective price table within segments. The improving fuel efficiency, quality and durability of the new bikes make them an attractive value proposition for entry and features, technologies, international trends and brands are fuelling the desire and also engendering customization shops and boutique outlets.

Global opportunities
As Indian companies reach the scale and sophistication, they are increasingly discovering their competitiveness and potential in international markets. Exports of four-wheelers from India have been steadily growing ahead of domestic growth. The large markets of South-east Asia Africa and Latin America among others provide huge opportunities for multiplying the current volumes and turnovers.

Rising inflation
At a macro-economic level, while India has been rejoicing in its growth data, it has also been struggling to contain general inflation. The food and fuel prices have been steadily rising, creating uncertainty about current and future incomes on top of social pyramid harder as it comes on top of already unequally-divided gains of economic prosperity. This can severely limit the growth potential of the industry as it rules out active participation from large sections of the society.

As global economy recovers and speculation comes back into financial markets, the prices of essential commodities such as steel, aluminum, rubber and nickel, which form a bulk of raw material for the four-wheeler industry, have been on a steady rise. This has been forcing the manufacturers to raise prices to maintain the growth of the industry as the law of demand will visibly catch up and the industry may be forced to pull back its investments in R&D and product improvement as struggles with squeezed margins.

Capacity constraints
The four-wheeler industry has been virtually taken aback by four years of nearly 25 per cent annual growth. The industry and its vendor have not been able to ramp up capacity ahead of this demand. This has led to longer waiting periods, poor availability and customer dissatisfaction. Accurate prediction of future demand will be critical to preventing the problems of either under-capacity or over-capacity in future.

Retail financing had been a lubricant of the four-wheeler industry with the financing contribution reaching over 60 per cent in the run-up to the global financing and economic crisis that hit three years back. The crisis saw the contribution plummeting to 20 per cent level. The lower EMI’s, instead of an upfront big pay-out are critical to deeper penetration of the market. The industry and the financing institutions will have to work together to rebuild mutual confidence.

Safety considerations
India has become the road accident capital of the world with over 130,000 deaths reported annually on Indian roads. The parents are increasingly concerned about letting their young kids ride four-wheelers in the midst of chaotic and unruly traffic. The industry will need to partner government in promoting road etiquette and enhancing safety on the roads.

Environmental concerns
Sustainability finally is becoming a real objective for governments and public bodies around the globe. The four-wheeler industry will have to lead the way in demonstrating sensitivity to environment and responsible behavior. This will not only be in the traditional areas of improving fuel efficiency, reducing emission volumes, following environment-friendly manufacturing and servicing practices but also emerging areas like shifting to alternative fuels, meeting more stringent regulatory requirements and recycling of the used four-wheelers.

Overall the industry seems to be poised for exciting times as the opportunities seem to outweigh the challenges that penetration of four-wheelers in India continues to be low at
around 25 per cent. Indeed the penetration in rural areas is much lower at less than 10 per cent.

This presents a huge untapped opportunity. To come back to the metaphor of the bouncing ball, the researcher expects the industry to continue its respectable flight and continue to grow handsomely. This may translate to a CAGR of around 9 to 12 per cent in the foreseeable future. In the immediate future, in the fiscal 2011-12, there is a distinct possibility of the industry growing in the region of 15 per cent and hitting an important milestone of over 15 million in annual size. If that happens, four-wheeler industry can be expected to play a stellar role in achieving the objectives of National Automotive Mission Plan 2016.

### 6.5 Recommendations for Future Research

This study focused on five four wheeler brands and a vast set of demographic profiles. Future studies delving deeper into one set of consumer demographics would yield critical information to the marketing field to better understand the customer base. Further research to answer the question if a relationship exists between the purchasing method and brand of four wheeler purchased would also contribute useful information into the go-to-market strategy for these vendors. The more customer insight that can be gained through research into the profile of a consumer and whether or not that profile can predict the purchase of one brand over another the better the ability of the vendor's to customize and tailor a message and experience for a user.