

A STUDY ON CUSTOMER PERCEPTIONS REGARDING BRAND IMAGE OF CARS.

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Abstract: Brand and brand image plays a phenomenal role in automobile industry. Brand image is a powerful force that influences customer purchase decisions, customer loyalty and finally lead to the success of the car brand. A strong brand image delves into the realm of aspirations, emotions and cultural associations. It helps to connect customers on personal level. A strong brand image also fosters customer loyalty. Thus, brand image plays a very influential role in the automobile industry.

Keywords: automobile, brand, brand image, customer, loyalty, industry.

1 Introduction : A brand image is a complex mental phenomenon crafted by a consumer's emotional responses, symbolic interpretations, cognitive assessments, and overall attitude towards the brand. It is driven by a mix of feelings, symbols, and reasoning, a brand image is the multifaceted impression consumers form in their minds about the brand. Beyond the functional aspects, a brand image arises from the emotional resonance, symbolic meaning, and cognitive evaluations consumers associate with the brand. . Consumer choices for a specific brand hinge on how they perceive the image of the brand. a picture they sculpted in their mind of what the brand promises and its performance in delivering on them. The brand image is forged by both what the brand claims to be and how well it lives up to those claims.

Before purchasing their dream car , consumers weigh a brand's projected persona ie its brand image and how better its fulfilling its promises. In essence, the brand image acts as a bridge between a brand's aspirations and its reality.

1.1 Influence of brand image in automobile industry

The influence of brand image in the automobile industry is massive and multifaceted, impacting everything from initial purchase consideration to long-term loyalty. Here are some key ways brand image plays a role:

1. **Standing Out in a Crowded Market:** With countless brands entering in the market, a strong brand image helps differentiate one manufacturer from another. Manufacturers try to build brand image on attributes like performance, luxury, reliability, innovation, or environmental consciousness, attracting specific customer segments.
2. **Shaping Perceptions:** A positive brand image also helps in shaping the perceptions of the customers towards a brand. It influences how consumers perceive the car's value, quality, and even their own social identity through ownership.

3. Building Trust and Loyalty: A consistent and positive brand image helps to build trust with consumers, and thus influencing the purchase decisions of the customers. This trust can lead to increased loyalty, with customers returning for subsequent purchases and even advocating for the brand to others.

4. Premium Price Justification: A strong brand image can justify premium pricing by convincing consumers they are not just buying a car, but also an experience, a lifestyle, or an emotional connection.

5. Navigating Challenges and Crises:

- A well-established brand image can act as a buffer during times of crisis or negative publicity.
- Consumers who have built trust and emotional connections with the brand are more likely to forgive missteps and remain loyal.

Thus, brand image is a powerful asset in the automobile industry, influencing consumer choices, driving sales, and shaping the future of the market.

1.2 Review of Literature This review provides a glimpse into the extensive literature on brand image in the automobile industry.

Balmer and Gregson (2014) The study focuses on the factors that influence customer loyalty, and also highlights the impact of perceived product quality, design, and price on brand image in the automobile industry. The researchers observed that consumers who perceived their cars as having high quality were more likely to have a positive brand image and also exhibit greater brand loyalty. The good design of the car both in terms of aesthetics and functionality, significantly contributed to a positive brand image and stronger owner loyalty. The cars offering good value for their price enhanced brand image and loyalty. Thus the study emphasizes that tangible product attributes like quality, design, and price play a fundamental role in shaping consumer perceptions and building a strong brand image in the automobile industry.

Joghee & Dube (2016) focused on the brand image and its influence on the customers' purchasing decision. It is observed that the firm can improve its brand image by providing timely information regarding the product or services to the customers.

Bhattacharya and Sen (2014) explore on the various green marketing strategies that in the automobile industry. It is observed that the green marketing strategies like fuel efficiency, environmental initiatives, and sustainable practices can have a positive impact on brand image in the automotive sector.

Park et al. (2010) The study, investigates on the influence of brand image and customer satisfaction on brand loyalty in the Korean automobile market. The study found a positive relationship between all three variables i.e. brand image, customer satisfaction and brand loyalty. The study reveals that brand image which is also associated with quality of the product and

prestige, leads to higher customer satisfaction. Customer satisfaction fosters stronger brand loyal customers for the company.

1.3 Objective of the study

To analyse the preference of the buyers with regard to brand image of cars.

1.4 Research Methodology - The researcher has undertaken the following methodology in conformity with the objective of the study.

Type of Research – Descriptive research has been carried out for the study.

Area of the Study- The study is conducted in Kamrup Metro.

Sampling Design: Descriptive research method has been used to carry out the study. Research area is Kamrup (Metro) district of Assam. The population of the study is all persons of Kamrup(M) who has at least one four wheeler car of any one brand of Maruti Sujuki, Honda, Hyundai, TATA, and K.I.A. Two stage sampling method is used to collect primary data. In the first stage wards of Kamrup districts was selected randomly and in the second stage purposive sampling method has been used. In second stage respondent from selected wards was considered proportionately as the population size of each block is different from each other.

There are 61 wards in Kamrup(M) district of Assam. Out of these 61 wards 40% i.e. 24 wards are selected randomly.

Size of the Population- According to 2011 census total population of Kamrup Metro is 12,53,938.

Using Taro Yamane method for the finite Population to determine the Sample size:

$$n = \frac{N}{1 + N(e^2)}$$

Where n, signifies the Sample size,

N, signifies the Population size,

e, signifies the marginal error. It could be 0.10, 0.05 or 0.01.

The Total number of Sample considering e=0.05 that will be required is 399.407947; rounded off to 400. Thus the sample size comprises of 400 cutomers selected randomly from the selected wards and who has at least one four wheeler car of any one brand of Maruti Sujuki, Honda, Hyundai, TATA, and K.I.A

Sources of Data- Data has been collected from both primary and secondary sources. Primary data is collected with the help of structured questionnaire which is designed for persons of Kamrup(M) who has at least one four wheeler car of any one brand of Maruti Sujuki, Honda, Huyndai, Tata, Mahindra, Ford, Renault, Toyota , K.I.A. Secondary data has been collected from books,journals,websites etc.

1.5 Data Analysis and Interpretation

1.6. Demographic representation

In the process of analyzing the respondents of the study a number of demographic variables are enquired in order to understand the various characteristics of the respondents. A total of 400 respondents has been considered for analyzing the objectives of the study.

Table-1.6.a Showing Distribution of Respondents According to Gender

| Gender | Number of Respondents | Percentage |
|--------|-----------------------|------------|
| Female | 117 | 29.3 % |
| Male | 283 | 70.8% |
| Total | 400 | 100% |

Source: Primary Data

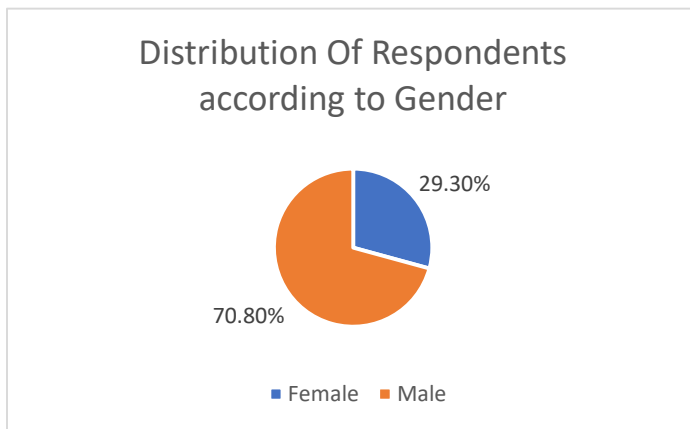


Figure 1.6.a Depicting Gender of the Respondents

Interpretation

It has been inferred from the above Table 1.6.a and from Figure 1.6.a that majority of the respondents i.e. 70.8% are male and 29.3% are female. It has been observed males are more interested in purchasing and owing a car as compared to females .

Table-1.5. b Showing Distribution of Respondents According to Age

| Age | Number of Respondents | Percentage |
|--------------|-----------------------|-------------|
| 21-30 years | 31 | 7.8% |
| 31-40 years | 163 | 40.8% |
| 41-50 years | 178 | 44.5% |
| 51 and above | 28 | 7.0% |
| Total | 400 | 100% |

Source: Primary Data

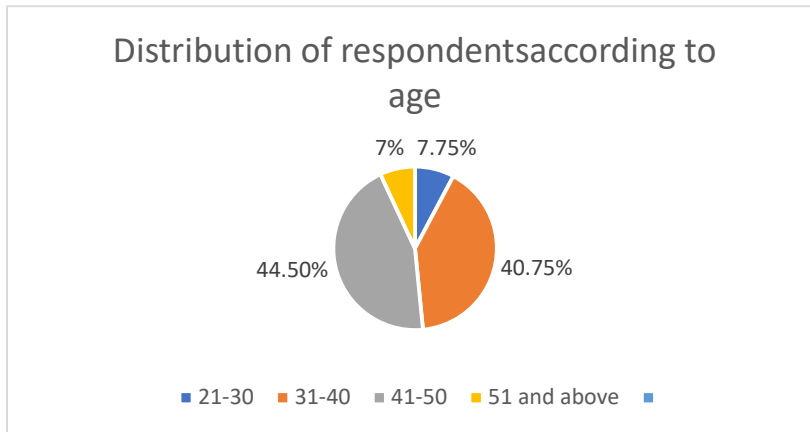


Figure 1.6.b Depicting Age of the Respondents

Interpretation

From the above Table 1.6.b and Figure 1.6.b it can be seen that maximum numbers of respondents i.e. 44.5% falls in the age group of 41-50 years, 40.85% belongs to the age group of 31-40 years, 7.8% comprises of age group 21-30 years and 7.0% comprises of the age group of 51 and above years.

Table-1.6.c: Distribution of Respondents According to Education Qualification

| Education Qualification | Number of Respondents | Percentage |
|-------------------------|-----------------------|-------------|
| Higher Secondary | 1 | .3% |
| Graduate | 263 | 65.8% |
| Post-Graduate | 128 | 32.0% |
| Others | 8 | 2.0% |
| Total | 400 | 100% |

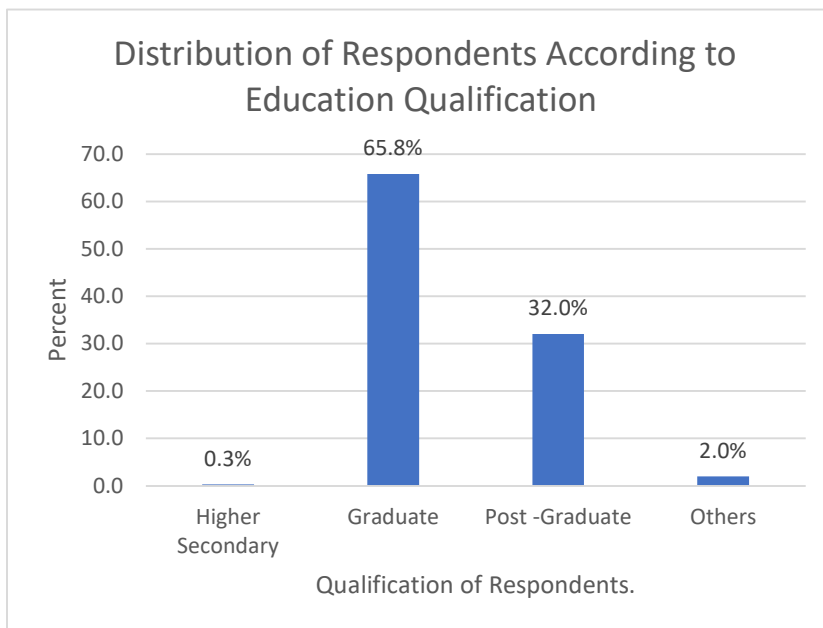


Figure 1.6.c Depicting Education Qualification of the Respondents.

Interpretation

From the above Table 1.6.c and Figure 1.6.c it has been inferred that majority of the respondents i.e. 65.8% are graduates, 32.0% are post-graduate holders, 2.0% comprises of other educational qualifications (diploma), and only a small portion i.e. 0.3% have done only higher secondary.

Table-1.6.d: Distribution of Respondents According to Occupation

| Occupation | Number of Respondents | Percentage |
|-----------------------|-----------------------|-------------|
| Govt. service | 165 | 41.3% |
| Private Job | 118 | 29.50% |
| Professional practice | 9 | 2.3% |
| Business | 82 | 20.5% |
| Others | 26 | 6.5% |
| Total | 400 | 100% |

Source : Primary Data

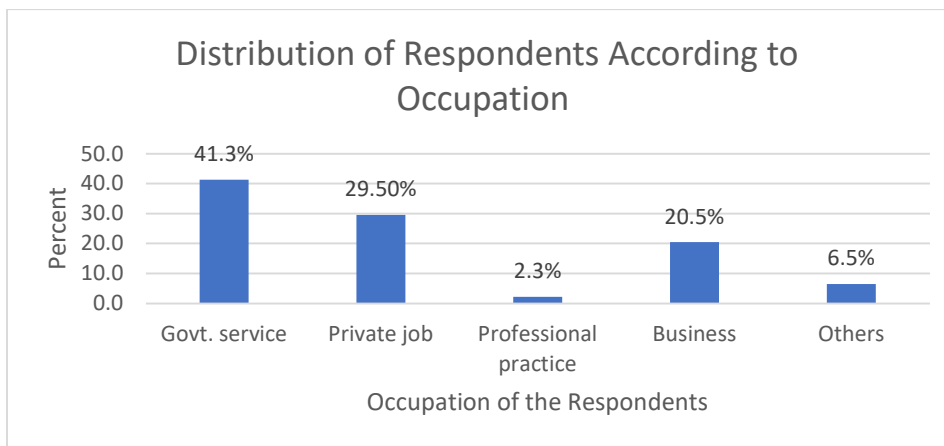


Figure 1.6.d Depicting Occupation of the Respondents.

Interpretation

From the above Table 1.6.d and Figure 1.6.d it has been inferred that majority of the respondents i.e. 41.3% are in Government Service, 29.50% are in private jobs, 20.5% are involved in business activities, 6.5% are involved in other activities (homemaker, part time jobs) and only a small portion i.e. 2.3% are involved in professional practices.

Table-1.6.e: Distribution of Respondents According to Number of Family Members

| Number of Family Members | Number of Respondents | Percentage |
|--------------------------|-----------------------|------------|
| | | |

| | | |
|-----------|-----|------|
| 3 to 5 | 284 | 71.0 |
| 5 & above | 59 | 14.8 |
| Below 3 | 57 | 14.3 |

Source : Primary Data

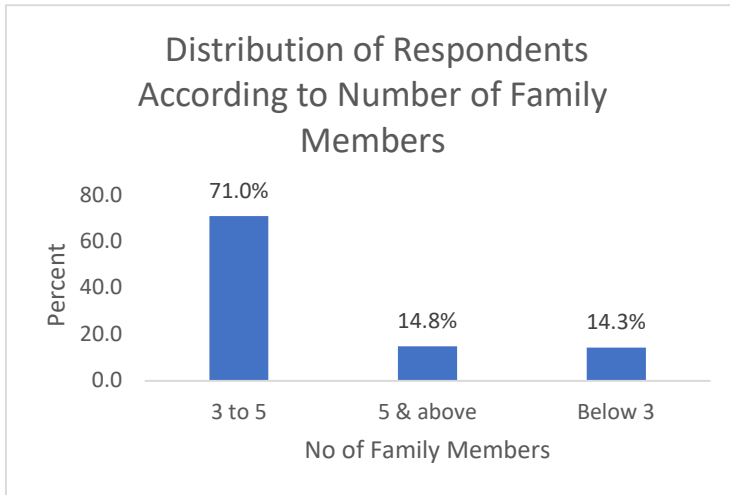


Figure 1.6.e- showing family members of the respondents.

Interpretation

From the above Table 1.6.e and Figure 1.6.e it can be interpreted that majority of the respondents i.e. 71.0% have three to five members in their family, 14.8% respondents have more than five members in their family and 14.3% respondents have less than three members in their family. It is inferred from the analysis that Kamrup Metro comprises of more nuclear families as compared to large or joint families and also very small families.

Objective of the study

To analyse the preference of the buyers with regard to brand image of cars.

In order to understand the preference of buyers with regard to brand image of cars, the following tests were conducted to analyze the relationship of brand image with different demographic factors. In addition too, tests were also conducted to analyze the relationship of brand image along with the preferred attributes for a brand by the respondents. For this purpose, brand image has been measured using five statements which were measured using 5-point Likert scale. The results are highlighted in the following sections.

In addition, it was also attempted to find out whether there is association between preferred attributes of the brand with the demographic profile of the respondents. Pearson Chi - Square test was also conducted in order to find out the association between them.

2.1 Brand Image and Gender.

It was attempted to find out whether brand image differed across gender, i.e., male or female. Independent samples t-test is regarded as the most appropriate for comparing means of two groups. Thus, the independent samples t -test was used to test the relations. The hypothesis framed was as follows:

H₀= Brand image does not differ significantly across gender.

H₁= Brand image differs significantly across gender.

Table -2.1.a: Independent samples t-test (Brand image and gender)

| Independent Samples Test | | | | | | | | | | |
|--------------------------|-----------------------------|---|-------|------------------------------|---------|-----------------|-----------------|-----------------------|---|--------|
| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | F | Sig. | T | Df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Brand Image | Equal variances assumed | 2.106 | 0.147 | -1.295 | 398 | 0.196 | -.06299 | .04863 | -0.15860 | .03261 |
| | Equal variances not assumed | | | -1.325 | 227.866 | 0.186 | -.06299 | .04753 | -0.15664 | .03065 |

From the above Table 2.1.a, it is found that the t-test value is not significant i.e., p value greater than 0.05. Thus, we cannot reject null hypothesis. Hence it can be concluded that brand image doesn't differ significantly across gender.

However, from Table 2.1.b, it can be observed that brand image is slightly higher for male (mean=3.48) as compared to females (mean=3.42). Thus, it can be observed that male customers tend to be more concern towards brand image of their car as compared to female customers.

2.2 Brand Image and Age

It was attempted to find out whether brand image mean differed across age groups, vis., “20-30 years”, “30-40 years”, “40-50 years”, and “50 years and above”. One way ANOVA is generally considered as one of the most appropriate test for comparison of means of three or more groups. Thus, ANOVA was conducted to test the relationship. The hypothesis framed was as follows:

H_0 = Brand image does not differ significantly across age groups.

H_1 = Brand image differ significantly across age groups.

The results from (Table 2.2.a) shows that null hypothesis may be rejected. Hence we conclude that significant difference exists in brand image across different age groups.

Further, in order to identify which groups significantly differed among each other in terms of their brand image, post hoc test i.e., Games-Howell test was conducted (Table 2.2.b). The results indicate that the brand image of the respondents who belong to the age group of “50 years and above” significantly differed from the groups of the respondents who belong to the age group of “20-30 years” and “40-50 years”.

It is also observed from Table 2.2. c, that brand image is higher among the respondents who belongs to the age group of “50 years and above” (mean= 3.6), followed by the respondents of the age group of “30-40 years” (mean=3.5). Thus, it is observed that at an older stage the customers are more conscious regarding brand image as compared to the customers at their younger stage.

Table- 2.2. a: ANOVA (Brand image and age)

| | Sum of Squares | Df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 2.489 | 3 | .830 | 4.336 | .005 |
| Within Groups | 75.754 | 396 | .191 | | |
| Total | 78.243 | 399 | | | |

Table -2.2. b: Post hoc test (Brand image and age)

Games-Howell

| (I) Distribution of Respondents According to Age | (J) Distribution of Respondents According to Age | Mean Difference (I- J) | Std. Error | Sig. | 95% Confidence Interval | |
|--|--|------------------------|------------|-------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| 20-30 years | 30-40 | -.17649 | .07549 | 0.105 | -.3781 | .0251 |
| | 40-50 | -.09569 | .07713 | 0.605 | -.3010 | .1096 |
| | 50 and above | -.35668* | .10778 | 0.009 | -.6424 | -.0709 |
| 30-40 years | 20-30 | .17649 | .07549 | 0.105 | -.0251 | .3781 |
| | 40-50 | .08080 | .04757 | 0.326 | -.0420 | .2036 |

| | | | | | | |
|--------------------|--------------|----------|--------|-------|--------|--------|
| | 50 and above | -.18019 | .08905 | 0.199 | -.4203 | .0599 |
| 40-50 years | 20-30 | .09569 | .07713 | 0.605 | -.1096 | .3010 |
| | 30-40 | -.08080 | .04757 | 0.326 | -.2036 | .0420 |
| | 50 and above | -.26100* | .09044 | 0.031 | -.5041 | -.0179 |
| 50 years and above | 20-30 | .35668* | .10778 | 0.009 | .0709 | .6424 |
| | 30-40 | .18019 | .08905 | 0.199 | -.0599 | .4203 |
| | 40-50 | .26100* | .09044 | 0.031 | .0179 | .5041 |

Table -2.2. c: Brand image and age

| Age | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|--------------------|-----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| 20-30 years | 31 | 3.3290 | .38140 | .06850 | 3.1891 | 3.4689 | 2.80 | 4.20 |
| 30-40 years | 163 | 3.5055 | .40510 | .03173 | 3.4429 | 3.5682 | 1.80 | 4.40 |
| 40-50 years | 178 | 3.4247 | .47283 | .03544 | 3.3548 | 3.4947 | 1.20 | 5.00 |
| 50 years and above | 28 | 3.6857 | .44030 | .08321 | 3.5150 | 3.8564 | 2.60 | 4.40 |
| Total | 400 | 3.4685 | .44283 | .02214 | 3.4250 | 3.5120 | 1.20 | 5.00 |

2.3 Brand image and qualification.

It was attempted to find out whether brand image mean differed across the educational qualification of the respondents, vis, “higher secondary”, “graduate”, “post-graduate” and “others”. The ANOVA test was conducted to test the relationship. The hypothesis framed was as follows:

H_0 = Brand image does not differ significantly among the respondents based on their educational qualification.

H_1 = Brand image differ significantly among the respondents based on their educational qualification.

The ANOVA result (Table 2.3.a) showed that null hypothesis may be rejected. Therefore it can be inferred that there is significant difference in brand image across different educational qualification of the respondents. Yet, from the mean scores (Table 2.3.b) it is observed that the respondents those who are “graduates” (mean = 3.5), and “post graduates” (mean=3.4) are more concerned regarding the image of the brand followed by the respondents who have “other qualifications” (mean=3.2).

Table -2.3.a: ANOVA (Brand image and educational qualification)

| | Sum of Squares | Df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 1.617 | 3 | .539 | 2.785 | .041 |
| Within Groups | 76.626 | 396 | .194 | | |
| Total | 78.243 | 399 | | | |

Table- 2.3.b: Brand image and educational qualification

| Educational Qualification. | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|----------------------------|-----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| Higher Secondary | 1 | 2.8000 | . | . | . | . | 2.80 | 2.80 |
| Graduate | 263 | 3.5057 | .44577 | .02749 | 3.4516 | 3.5598 | 2.40 | 5.00 |
| Post-graduate | 128 | 3.4109 | .43421 | .03838 | 3.3350 | 3.4869 | 1.20 | 4.20 |
| Others | 8 | 3.2500 | .29761 | .10522 | 3.0012 | 3.4988 | 2.80 | 3.80 |
| Total | 400 | 3.4685 | .44283 | .02214 | 3.4250 | 3.5120 | 1.20 | 5.00 |

2.4 Brand image and occupation

It was attempted to find out whether brand image mean differed among the various occupation of the respondents, i.e., “Govt Service”, “Private Job”, “Professional Practice,” “Business”, and “Others”. One way ANOVA is generally considered as one of the most appropriate test for comparison of means of three or more groups. Thus, ANOVA was conducted to test the relationship. The hypothesis framed was as follows:

H_0 = Brand image does not differ significantly among the respondents based on their occupation.

H_1 = Brand image differ significantly among the respondents based on their occupation.

The ANOVA result (Table 2.4.a) showed that null hypothesis may be accepted. Hence it is concluded that there is no significant difference in brand image across the occupation of the respondents. However from the (Table 2.4.b) it is observed from the mean scores, that the respondents who are involved in business activities (mean=3.52) are more concerned about brand image , followed by the individuals involved in professional practice,(mean=3.46),the

respondents involved in government jobs (mean= 3.45) as well in private jobs (mean=3.45) also seems to be concerned about brand image, however the respondents involved in other activities (mean=3.43) seems to be less concerned regarding brand image.

Table 2.4.a: ANOVA (Brand image and occupation)

| | Sum of Squares | Df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|------|------|
| Between Groups | .315 | 4 | .079 | .399 | .809 |
| Within Groups | 77.928 | 395 | .197 | | |
| Total | 78.243 | 399 | | | |

Table 2.4.b: Brand image and occupation

| Occupation | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|-----------------------|-----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| Govt. service | 165 | 3.4594 | .50327 | .03918 | 3.3820 | 3.5368 | 1.20 | 4.40 |
| Private job | 118 | 3.4525 | .36367 | .03348 | 3.3862 | 3.5188 | 2.80 | 4.20 |
| Professional practice | 9 | 3.4667 | .42426 | .14142 | 3.1405 | 3.7928 | 2.80 | 4.00 |
| Business | 82 | 3.5220 | .45298 | .05002 | 3.4224 | 3.6215 | 2.40 | 5.00 |
| Others | 26 | 3.4308 | .33796 | .06628 | 3.2943 | 3.5673 | 2.80 | 4.20 |
| Total | 400 | 3.4685 | .44283 | .02214 | 3.4250 | 3.5120 | 1.20 | 5.00 |

2.5 Brand Image and income

It was attempted to find out whether brand image mean differed among the income levels of the respondents, vis, “Rs15000- Rs 40000”, “Rs 40000- Rs 80000”, “Rs 80000& above.” One way ANOVA is generally considered as one of the most appropriate test for comparison of means of three or more groups. Thus, ANOVA was conducted to test the relationship. The hypothesis framed was as follows:

H_0 = Brand image does not differ significantly among the respondents based on their income levels.

H_1 = Brand image differ significantly among the respondents based on their income levels.

The ANOVA result (Table-2.5. a) showed that null hypothesis may be accepted ,i.e. there is no significant difference in brand image across different levels of income of the respondents. However from the table (Table 2.5.b) it can be inferred from the mean scores that the respondents having income level of “Rs 80,000 & above”,(mean=3.48) are more concerned regarding brand image, as compared with the respondents with income level of“Rs 15000-Rs40,000”,(mean=3.47) and among the respondents with income level of “ Rs40000-80000”, (mean=3.45).Thus it can be concluded that the customers having high level of income are more concerned regarding the image of the brand.

Table 2.5.a: ANOVA (Brand image and income)

| | Sum of Squares | Df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|------|------|
| Between Groups | .061 | 2 | .031 | .156 | .856 |
| Within Groups | 78.182 | 397 | .197 | | |
| Total | 78.243 | 399 | | | |

Table 2.5. b: Brand image and income

| Income | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---------------------|-----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| Rs 15000 - Rs 40000 | 109 | 3.4734 | .36480 | .03494 | 3.4041 | 3.5427 | 2.80 | 4.20 |
| Rs 40000 - Rs 80000 | 177 | 3.4554 | .49347 | .03709 | 3.3822 | 3.5286 | 1.20 | 5.00 |
| Rs 80000 & above | 114 | 3.4842 | .43060 | .04033 | 3.4043 | 3.5641 | 2.20 | 4.40 |
| Total | 400 | 3.4685 | .44283 | .02214 | 3.4250 | 3.5120 | 1.20 | 5.00 |

2.6 Brand Image and brand owned

It was attempted to find out whether brand image mean differed among the various brands of cars owned by the respondents, i.e.,” Maruti Suzuki”, “Hyundai”, “Honda”, “Tata”, “ Ford”, “Toyota”, “Mahindra”, “Renault” & “Kia”. One way ANOVA is generally considered as one of the most appropriate test for comparison of means of three or more groups. Thus, ANOVA was conducted to test the relationship. The hypothesis framed was as follows:

H_0 = Brand image does not differ significantly among the respondents based on the brands of car owned.

H_1 = Brand image differ significantly among the respondents based on the brands of car owned.

The ANOVA results showed (Table 2.6.a) that the null hypothesis may be rejected. Hence it is concluded that there is significant difference in brand image across different brands of cars owned by respondents. Further, in order to identify which brands significantly differed among other brands in terms of their brand image, post hoc test, Games-Howell test was conducted (Table-2.6.b). The results indicate that significant difference in brand image could be observed for the brand “Honda” with four brands i.e., Maruti Suzuki, Hyundai, Tata, and Toyota, significant difference in brand image could also be observed for the brand “Mahindra” with four brands i.e., “Maruti Suzuki”, “Hyundai”, “Tata”, and “Toyota”. However, from the table (Table- 2.6.c) it can be observed from the mean scores that the brand image is more good for the brand Tata (mean =3.67) as well Toyota (mean=3.60), followed by Maruti Suzuki (mean=3.52) and Hyundai (mean=3.51). The brand Kia which is new in the market also seems to have a good brand image, (mean=3.4).

Table 2.6.a: ANOVA (Brand image and brand owned)

| | Sum of Squares | Df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 7.594 | 8 | .949 | 5.254 | .000 |
| Within Groups | 70.649 | 391 | .181 | | |
| Total | 78.243 | 399 | | | |

Table 2.6.b: Brand image and brand owned

Games-Howell

| (I) Brand of car owned by Respondents | (J) Brand of car owned by Respondents | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---------------------------------------|---------------------------------------|-----------------------|------------|-------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| Maruti Suzuki | Hyundai | .01593 | .06064 | 1.000 | -.1742 | .2061 |

| | | | | | | |
|---------|---------------|----------|--------|---------|---------|--------|
| | Honda | .32408* | .07750 | .002 | .0787 | .5695 |
| | Tata | -.14533 | .07572 | .603 | -.3879 | .0972 |
| | Ford | .13776 | .07681 | .686 | -.1065 | .3820 |
| | Toyota | -.07771 | .09281 | .995 | -.3765 | .2211 |
| | Mahindra | .30300* | .08457 | .028 | .0210 | .5850 |
| | Renault | .29467 | .14823 | .593 | -.3611 | .9505 |
| | Kia | .04800 | .21117 | 1.000 | -1.0280 | 1.1240 |
| Hyundai | Maruti Suzuki | -.01593 | .06064 | 1.000 | -.2061 | .1742 |
| | Honda | .30815* | .07276 | .002 | .0769 | .5394 |
| | Tata | -.16126 | .07086 | .374 | -.3899 | .0674 |
| | Ford | .12183 | .07203 | .750 | -.1083 | .3520 |
| | Toyota | -.09365 | .08889 | .978 | -.3816 | .1943 |
| | Mahindra | .28707* | .08026 | .033 | .0153 | .5588 |
| | Renault | .27874 | .14581 | .632 | -.3821 | .9396 |
| Kia | .03207 | .20948 | 1.000 | -1.0529 | 1.1171 | |
| Honda | Maruti Suzuki | -.32408* | .07750 | .002 | -.5695 | -.0787 |
| | Hyundai | -.30815* | .07276 | .002 | -.5394 | -.0769 |
| | Tata | -.46941* | .08573 | .000 | -.7433 | -.1955 |
| | Ford | -.18632 | .08670 | .448 | -.4620 | .0893 |
| | Toyota | -.40179* | .10115 | .005 | -.7256 | -.0780 |
| | Mahindra | -.02108 | .09365 | 1.000 | -.3280 | .2859 |
| | Renault | -.02941 | .15359 | 1.000 | -.6783 | .6194 |
| Kia | -.27608 | .21497 | .900 | -1.3345 | .7823 | |
| Tata | Maruti Suzuki | .14533 | .07572 | .603 | -.0972 | .3879 |
| | Hyundai | .16126 | .07086 | .374 | -.0674 | .3899 |
| | Honda | .46941* | .08573 | .000 | .1955 | .7433 |
| | Ford | .28309* | .08511 | .036 | .0104 | .5558 |
| | Toyota | .06762 | .09979 | .999 | -.2534 | .3886 |
| | Mahindra | .44833* | .09218 | .001 | .1438 | .7529 |
| | Renault | .44000 | .15270 | .238 | -.2102 | 1.0902 |
| Kia | .19333 | .21433 | .982 | -.8680 | 1.2547 | |
| Ford | Maruti Suzuki | -.13776 | .07681 | .686 | -.3820 | .1065 |
| | Hyundai | -.12183 | .07203 | .750 | -.3520 | .1083 |
| | Honda | .18632 | .08670 | .448 | -.0893 | .4620 |
| | Tata | -.28309* | .08511 | .036 | -.5558 | -.0104 |
| | Toyota | -.21547 | .10062 | .455 | -.5382 | .1072 |
| | Mahindra | .16524 | .09308 | .697 | -.1407 | .4712 |
| | Renault | .15691 | .15324 | .970 | -.4924 | .8062 |
| Kia | -.08976 | .21472 | 1.000 | -1.1493 | .9698 | |

| | | | | | | |
|----------|---------------|----------|--------|-------|---------|--------|
| Toyota | Maruti Suzuki | .07771 | .09281 | .995 | -.2211 | .3765 |
| | Hyundai | .09365 | .08889 | .978 | -.1943 | .3816 |
| | Honda | .40179* | .10115 | .005 | .0780 | .7256 |
| | Tata | -.06762 | .09979 | .999 | -.3886 | .2534 |
| | Ford | .21547 | .10062 | .455 | -.1072 | .5382 |
| | Mahindra | .38071* | .10667 | .022 | .0334 | .7280 |
| | Renault | .37238 | .16185 | .427 | -.2745 | 1.0192 |
| | Kia | .12571 | .22095 | .999 | -.9116 | 1.1630 |
| Mahindra | Maruti Suzuki | -.30300* | .08457 | .028 | -.5850 | -.0210 |
| | Hyundai | -.28707* | .08026 | .033 | -.5588 | -.0153 |
| | Honda | .02108 | .09365 | 1.000 | -.2859 | .3280 |
| | Tata | -.44833* | .09218 | .001 | -.7529 | -.1438 |
| | Ford | -.16524 | .09308 | .697 | -.4712 | .1407 |
| | Toyota | -.38071* | .10667 | .022 | -.7280 | -.0334 |
| | Renault | -.00833 | .15728 | 1.000 | -.6575 | .6409 |
| | Kia | -.25500 | .21762 | .933 | -1.3042 | .7942 |
| Renault | Maruti Suzuki | -.29467 | .14823 | .593 | -.9505 | .3611 |
| | Hyundai | -.27874 | .14581 | .632 | -.9396 | .3821 |
| | Honda | .02941 | .15359 | 1.000 | -.6194 | .6783 |
| | Tata | -.44000 | .15270 | .238 | -1.0902 | .2102 |
| | Ford | -.15691 | .15324 | .970 | -.8062 | .4924 |
| | Toyota | -.37238 | .16185 | .427 | -1.0192 | .2745 |
| | Mahindra | .00833 | .15728 | 1.000 | -.6409 | .6575 |
| | Kia | -.24667 | .24935 | .976 | -1.2895 | .7961 |
| Kia | Maruti Suzuki | -.04800 | .21117 | 1.000 | -1.1240 | 1.0280 |
| | Hyundai | -.03207 | .20948 | 1.000 | -1.1171 | 1.0529 |
| | Honda | .27608 | .21497 | .900 | -.7823 | 1.3345 |
| | Tata | -.19333 | .21433 | .982 | -1.2547 | .8680 |
| | Ford | .08976 | .21472 | 1.000 | -.9698 | 1.1493 |
| | Toyota | -.12571 | .22095 | .999 | -1.1630 | .9116 |
| | Mahindra | .25500 | .21762 | .933 | -.7942 | 1.3042 |
| | Renault | .24667 | .24935 | .976 | -.7961 | 1.2895 |

*

Table 2.6. c: Brand image and brand owned

| Brand | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|-------|---|------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| | | | | | | | | |

| | | | | | | | | |
|---------------|-----|--------|--------|--------|--------|--------|------|------|
| Maruti Suzuki | 100 | 3.5280 | .46841 | .04684 | 3.4351 | 3.6209 | 1.20 | 4.40 |
| Hyundai | 116 | 3.5121 | .41476 | .03851 | 3.4358 | 3.5883 | 2.40 | 5.00 |
| Honda | 51 | 3.2039 | .44089 | .06174 | 3.0799 | 3.3279 | 2.20 | 4.20 |
| Tata | 30 | 3.6733 | .32582 | .05949 | 3.5517 | 3.7950 | 3.00 | 4.20 |
| Ford | 41 | 3.3902 | .38975 | .06087 | 3.2672 | 3.5133 | 2.80 | 4.20 |
| Toyota | 35 | 3.6057 | .47400 | .08012 | 3.4429 | 3.7685 | 2.80 | 4.40 |
| Mahindra | 16 | 3.2250 | .28166 | .07042 | 3.0749 | 3.3751 | 2.60 | 3.60 |
| Renault | 6 | 3.2333 | .34448 | .14063 | 2.8718 | 3.5948 | 2.80 | 3.60 |
| Kia | 5 | 3.4800 | .46043 | .20591 | 2.9083 | 4.0517 | 2.80 | 4.00 |
| Total | 400 | 3.4685 | .44283 | .02214 | 3.4250 | 3.5120 | 1.20 | 5.00 |

2.7 Brand Image and Preferred attributes

It was attempted to find out whether brand image differed among the preferred attributes of the brand i.e., “technology and quality”, “price and better mileage”, “comfort and size of the car”, and “good facilities and good design”. One-way ANOVA was conducted to test the relationship. The hypothesis framed was as follows:

$H_0 =$. Brand image does not differ significantly among the respondents based on the preferred attributes of the brand.

$H_1 =$ Brand image differ significantly among the respondents based on the preferred attributes of the brand.

The ANOVA results showed (table 2.7.a) that the null hypothesis may be rejected, i.e. there is significant difference in brand image across the preferred attributes of the brand by the respondents. Furthermore, to identify the groups where significant differences exist, post-hoc tests were conducted. The Games Howell test revealed that significant differences in brand image exist between those who preferred “price and better mileage” and “technology and quality”, and those who preferred “good facilities and good design”. However from the (Table- 2.7.c) it can be observed from the mean scores that among the respondents who preferred “price and better mileage” stated slightly higher brand image (mean=3.62) compared to those who preferred “comfort and size of the car” (mean=3.47), “advance technology and quality” (mean=3.42). It is also observed that the respondents who preferred “good facilities and good design” (mean=3.36) have lower brand image of their car.

Table 2.7.a: ANOVA (Brand image and preferred attributes of brand)

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 4.888 | 3 | 1.629 | 8.796 | .000 |
| Within Groups | 73.355 | 396 | .185 | | |
| Total | 78.243 | 399 | | | |

Table 2.7. b: Brand image and preferred attributes of the brand

Games Howell

| (I): Preference of the respondents for the particular brand. | (J) Preference of the respondents for the particular brand. | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|--|---|-----------------------|------------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| Technology and Quality | Price and Better Mileage | -.19398* | .07353 | .047 | -.3862 | -.0017 |
| | Comfort and Size of the car | -.04920 | .09385 | .953 | -.2947 | .1963 |
| | Good facilities and Good Design | .06179 | .07083 | .819 | -.1238 | .2474 |
| Price and Better Mileage | Technology, and Quality | .19398* | .07353 | .047 | .0017 | .3862 |
| | Comfort and Size of the car | .14477 | .07857 | .262 | -.0620 | .3516 |
| | Good facilities and Good Design | .25577* | .04880 | .000 | .1296 | .3819 |
| Comfort and Size of the car | Technology and Quality | .04920 | .09385 | .953 | -.1963 | .2947 |
| | Price and Better Mileage | -.14477 | .07857 | .262 | -.3516 | .0620 |
| | Good facilities and Good Design | .11099 | .07604 | .468 | -.0898 | .3118 |
| Good facilities and Good Design | Technology and Quality | -.06179 | .07083 | .819 | -.2474 | .1238 |
| | Price and Better Mileage | -.25577* | .04880 | .000 | -.3819 | -.1296 |
| | Comfort and Size of the car | -.11099 | .07604 | .468 | -.3118 | .0898 |

Table 2.7. c: Brand image and preferred attributes of the brand.

| Preferred Attributes | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---------------------------------|-----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| Technology and Quality | 57 | 3.4281 | .47875 | .06341 | 3.3010 | 3.5551 | 1.20 | 4.20 |
| Price and Better Mileage | 127 | 3.6220 | .41954 | .03723 | 3.5484 | 3.6957 | 2.40 | 5.00 |
| Comfort and Size of the car | 44 | 3.4773 | .45895 | .06919 | 3.3377 | 3.6168 | 2.60 | 4.40 |
| Good facilities and Good Design | 172 | 3.3663 | .41383 | .03155 | 3.3040 | 3.4286 | 1.80 | 4.40 |
| Total | 400 | 3.4685 | .44283 | .02214 | 3.4250 | 3.5120 | 1.20 | 5.00 |

3 Findings : Based on the analysis and interpretation of the data, the findings from demographic profile of the respondents as well as objective wise findings of the study can be drawn as follows:

3.1.a Findings based on demographic profile of the respondents

- It is found that majority of the respondents owing a car are male. Gender wise male are more in owing a car while female are less in owing a car in Kamrup Metro.
- It is revealed that maximum number of respondents who owned a car in Kamrup Metro falls in the age group of 41-50 years and only a small portion of respondents falls in the age group of 51 and above years. Therefore it can be said that the middle age group which is also the working stage group purchases and owned a car more as compared to the old age group.
- Majority of the respondents have college level education as their basic qualification. Therefore it can be said that buyers are mostly educated and literate.
- It is found that majority of the respondents who are owing a car are job holders and most of them are in Government service. Therefore it can be said that majority of the people who are into jobs are more in need of car for office commutation.
- It is revealed that majority of the family of the respondents comprises of 3 to 5 members. Thus it can be said that Kamrup Metro generally comprises of nuclear families having 3 to 5 members.

3.1.b Findings based on of the objective of the study

To analyse the preference of the buyers with regard to brand image of cars.

- It is revealed from the study that male customers tend to be more concern regarding the brand image of the car. While female customers are not much concern regarding brand image while selecting a car.
- It is also found that customers of older stage group are more concerned regarding the image of the brand. The customers of younger stage are found to be less concerned regarding the image of the brand.
- It is revealed that customers with good level of education i.e. mostly graduates and post graduates are more concerned about brand image of car.
- It is found that the customers having income level of Rs 80,000 & above are more concerned regarding image of the brand. While customers with income level of Rs 15000- Rs 40000 & Rs 40000-80000 are less concerned regarded brand image. Thus it can be inferred that customers having low and moderate income are less concerned regarding brand image , whereas the customers having high level of income are more concerned regarding brand image.
- It is revealed from the study that the brands such as Tata, followed by Toyota, Maruti Suzuki and Hyundai seems to have good brand image in Kamrup Metro. The brand Kia which is newly introduced in Kamrup Metro also seems to have a good brand image.

4. Suggestions

- It is observed that brand image heavily influences the purchase decision of the customers, thus building and maintaining a strong brand image is a constituency process, thus manufactures should specifically understand the different customer choices and need to invest heavily for building and maintaining a strong brand image.
- Brand image is a complex phenomenon in the automobile industry, in order to understand the brand image, the customers should understand the brand's core value and mission. The dealers should also provide information of the brand in detail such as origin of the brand, its sustainability , performance of the brand in both domestic as well as foreign market

5. Conclusions: Brand image is one of the power asset in the automobile industry. A strong brand image influences customer perceptions towards the brand, helps to build loyal customers and also drive sustained success in the highly competitive market. Thus to have and build a strong brand image is of utmost importance for the companies to survive in the fierce competitive automobile industry.

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