

The study of consumer buying behavior of two wheelers: A study in Delhi and NCR region

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Abstract

The purchasing and re-purchasing decision of buyers is self-perceived and extends beyond product quality (intrinsic attributes). Higher level of customer awareness, better image from marketing activities like advertisements, sale promotions and others (extrinsic attributes) may influence consumer's perception of the product and may increase the consumer's loyalty towards the brand. The objective of the study is to find out the relationship between extrinsic and intrinsic attributes of product quality and brand loyalty of consumer. Very few literatures have been documented till now regarding two wheeler buying behavior in Central India, so the Delhi-NCR region is being selected for the study. This study was a quantitative and descriptive research. By random sampling method, data has been collected from motorcycle and scooter owners in Delhi and NCR Region. SPSS software was used to compute data assimilated from the questionnaire. This study showed that along with physical quality of the product, image of the product is equally important. A good customer relationship will keep customer happy and loyal to the company.

Introduction

In today's competitive market, consumers are demanding products with high quality, goods that save time, energy and often calories ^[1]. The marketing strategy has changed from production concept to marketing and societal concept. The purpose is to deliver satisfaction better than competitors, so as to build up a long term profitable business relationship with the customers. ^[2] The rank that customers place for product quality are as follows: (1) Reliability (2) Durability (3) easy maintenance (4) ease of use (5) a trusted brand name and (6) low price (7) innovation. ^[1] Changes in the competitive environment and increase in the customer's expectations regarding product quality and customer's satisfaction are driving motorcycle manufacturers to place a greater amount of emphasis on understanding customer's attitudes and behavior in order to maintain and grow market share and profitability. ^[3] Product quality can be analyzed under the concept of two different perspectives, objectives quality and perceived quality. ^[4] According to Teas and Agarwal 2000, extrinsic cues are lower level cues that can be changed without

changing the product (e.g. price, packaging, brand name, country of origin), while intrinsic cues are higher-level cues directly related to the product. One specific use of some extrinsic cues, such as price, brand name, store name, and country of origin, is as risk reduction information when purchasing products. As seen in Table 1, generally, the eight quality dimensions framework can be translated into the three attributes.^[5]

<u>Attribute</u>	<u>Quality dimension</u>
Product characteristic	Features, aesthetics
Benefit	Performance, conformance to specification,
Image	Reliability, durability, service ability, Perceived quality

In order to increase the brand loyalty, there is a need for product owners to work out on the volume on relevance, emotional connectivity and customer's experiences in order to hook customers on stay with the same brand. Today's loyalty programs enable companies to execute against these opportunities by helping them better understand customer motivations, and then deliver on these unique insights through mass customization- not mass communication ^[6]. Loyalty towards product brand can be derived in many ways. Aaker and Keller, 1990 believe that loyalty is closely associated with various factors, one of the main ones being the experience of use. Customers may be loyal owing to high switching barriers related to technical, economical or psychological factors which make it costly or difficult for the customer to change. In another point of view, customers may also be loyal because they are satisfied with the supplier or product brand, and thus want to continue the relationship ^[7]. Even a small drop from complete satisfaction can create an enormous drop in loyalty.^[2]

At the time of purchase, the customer decides if expectation has been met by comparing the perceived performance with the expected performance. This usually forms the basis of a decision to purchase and determines purchase satisfaction. After the purchase of the supplies, the customer becomes aware of the actual performance and user satisfaction is a result of comparing the actual performance with expected performance ^[8] of the service while satisfaction reflects customer' experiences with that service. So the objective of the study to measure the extrinsic and intrinsic attributes of product quality and brand loyalty of consumer. The intrinsic or the inner attributes refers to something that are related to the physical of the product (color, appearance etc.) whereas perceived quality or extrinsic attributes exist in the form of non-physical but related to the product (brand name, stamp of quality, product information and etc).

Material & Methods

Hypothesis: For this study the proposed hypothesis is:

H0: There is significant positive relationship between purchase decision and product related factors

H1: There is significant positive relationship between purchase decision and marketing related factors

Research design: In this research, information is being gathered from self-administered questionnaire having close ended and scales to matrix questions; hence it is a quantitative research. This study describes the characteristics of the population; hence it is a descriptive study. By random sampling method, data has been collected from motorcycle and scooter owners in Delhi and NCR Region.

In this study researcher will collect data from both primary and secondary sources. Appropriate data collection methods and tools will be used to collect relevant information. The collected data will be tabulated and analyzed for meaningful inferences.

Sampling Plan: The data will be collected through purposive sampling technique; the respondents will be the residents at Delhi/NCR, and owners' of two-wheelers. The data will be collected from family, friends, friends of friends and from their reference also. A questionnaire will also be sent to the selected respondents through e-mail. In the study data will be collected by 1000 respondents.

Variables under Study

Dependent Variable: Purchase decision / buying behavior

Independent Variable: Product related factors, Consumer related, marketing related factors

Data analysis method: For this study SPSS software is used to compute data assimilated from the questionnaire. It is a descriptive analysis. Questionnaire will be based on eight dimensions related to three attributes (Intrinsic and Extrinsic both). The questionnaires of Product Quality will be based on the eight dimensions of product quality developed by Garvin, 1984. The dimensions are divided into the characteristics of the intrinsic and extrinsic attributes. The intrinsic attributes of product quality are based on dimensions of performance, reliability, durability, serviceability, aesthetics, conformance to specification and special features. On the other hand, the extrinsic attributes are based on the single dimension of perceived quality such as the brand name and the brand image. Pre-Testing of the questionnaire was made during the pilot study. Questionnaire was pretested by pilot study.

Results: Pilot study for better understanding and interpretation of the questionnaire by the respondents, Likert scale rating was used.

Reliability Analysis: From the reliability analysis result as shown in Table 1, all factors including independent and dependent variables were found to be good reliability with all the Cronbach's Alpha results are of above 0.7. These results were compatible with a rule of thumb of 0.6 as the lower level of acceptability as suggested by Jones et. al. (1999).

Table 1: Reliability statistics

Factors	No of indicators	Cronbach's alpha
Purchase intention	8	0.815
Performance	3	0.839
Reliability	3	0.875
Durability	3	0.76
Conformance to specification	2	0.762
Perceived quality	4	0.929
Serviceability	3	0.908
Aesthetics	3	0.872
Special features	2	0.814

Factor Analysis: Based on KMO measure of sampling adequacy test in Table 2, it was found that the factor analysis data was appropriate with the value of 0.705, which falls between the ranges of being great and appropriate of factor analysis data. Bartlett's Test was utilized with the result indicating a highly significant result with $p=0.000$ ($p<0.001$) and therefore factor analysis is appropriate. From the results obtained in rotated matrix Table 3, all 8 factors can be accepted with attributes required for re-shufflement and reduction. This reduction is possible because the attributes are related. The rating given to any one attribute is partially the result of the influence of other attributes.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.705
Bartlett's Test of Sphericity	Approx. Chi-Square	11245.217
	df	253
	Sig.	0.000

Table 3: Rotated Component Matrix^a

Variables	Component							
	1	2	3	4	5	6	7	8
Price	0.921	-0.031	0.06	0.046	0.027	-0.033	0.06	0.028
Technology	0.913	0.039	0.038	0.026	0.081	0.015	-0.006	-0.051
Brand image	0.898	0.003	0.035	-0.008	-0.023	-0.013	0.014	-0.004
Mileage	0.873	-0.001	-0.021	-0.023	-0.003	0.011	0.01	0.071
Easy modification & installation	0.006	0.902	0.038	0.118	0.003	0.085	0.177	0.063
Reasonably price spare parts	-0.035	0.892	-0.001	0.116	0.023	0.068	0.108	0.07
After sale service	0.04	0.884	0.006	0.191	0.1	0.085	0.079	0.004
Less maintenance cost	0.055	0.031	0.905	0.044	0.017	0.08	0.006	0.063
Long lasting Warranty	0.019	-0.021	0.878	0.083	0.048	0.006	-0.003	0.067
Pickup	0.028	0.028	0.876	-0.017	0.013	0.075	0.058	0.083
Color	-0.025	0.214	0.026	0.868	0.035	0.12	0.044	0.075
Attractive accessories	-0.006	0.189	0.003	0.855	0.031	0.249	0.138	0.107
Unique design	0.071	0.061	0.1	0.812	0.072	0.086	0.207	0.193
Fuel economy	0.014	0.03	0.021	0.075	0.883	0.03	-0.024	0.009
Comfort	-0.002	-0.014	0.011	0.001	0.864	0.001	0.02	0.032
Self-starter	0.058	0.094	0.044	0.04	0.853	-0.003	0.031	0.006
Nut bolts are rusty resistance	-0.014	0.048	-0.049	0.129	0.001	0.877	0.101	0.111
Power	-0.002	0.036	0.024	0.108	-0.016	0.861	0.078	0.13
Plastic parts are easily broken	-0.003	0.138	0.195	0.14	0.041	0.67	-0.001	-0.003
Full fill basic needs	0.081	0.18	0.061	0.155	-0.01	0.069	0.868	0.174
Unique function of components	-0.007	0.174	0	0.179	0.036	0.108	0.868	0.07
Signal light	-0.026	0.117	0.113	0.108	-0.009	0.135	0.078	0.872
Beam light	-0.071	0.007	0.108	0.222	0.061	0.099	0.16	0.836

Regression Analysis: Table 4 shows the R-Square and Durbin-Watson test. R-Square test result of 0.809 can be accepted for the regression analysis. The Durbin-Watson test result of 0.755, an indicator that the autocorrelation is almost reaching to zero or there is a significant difference between the dependent and independent variables (no autocorrelation). Further as shows in Table5, the result shown that none of the variables are significant ($p < 0.001$) except for perceived quality ($p < 0.001$) and reliability of the brand with high Beta of 0.898 and 0.0.35. By examining the t statistic for all the independent variables it apparently shows that none of the variables has significant relationship due to weak significant level ($p > 0.05$) with the branding, indicating that the null hypothesis is true and can be accepted. On the other hand, the test indicates that only perceived quality and reliability based on the extrinsic attributes has the significant influence towards the branding. By examining the t statistic for all the independent variables apparently shows that perceived quality and reliability has significant relationship due to strong significant

level ($p < 0.05$) with the brand loyalty, indicating that the null hypothesis is inappropriate and can be rejected.

Table 4: Result of R Square and Durbin-Watson Test

Model	R Square	Durbin-Watson
1	0.809	0.755

Table 5: Result of Coefficients

Variables	Standardized Coefficients	Significance
	Beta	
Perceived quality	0.898	0.000
Serviceability	0.003	0.836
Reliability	0.035	0.025
Aesthetics	-0.008	0.612
Performance	-0.023	0.145
Durability	-0.013	0.412
Special features	0.014	0.375
Conformance	-0.004	0.808

Discussion:

With the market being price competitive and intense, the most important factor in selecting brand of motorcycle is product quality which is related to intrinsic and extrinsic attributes. However, due to difference in understanding of the customer, it is difficult to meet the customer expectation. Differences in economic, technological, social and cultural achievements underlie the differences in quality paradigm.^[9]

The statistical results of this study were in favor of the fact that extrinsic attributes of product quality are more related to brand loyalty as it affects the customer's perception of the quality. This is in consistence with results of the study done by Kotler and Armstrong, 2010^[2]. Empirical studies of the relationship between quality and marketing or financial performance measures have concentrated mostly on the profit impact of marketing strategies. The superior products would grab market share five to six times as fast as a product whose quality has declined. It has also found those quality dimensions are highly correlated with business performance^[10]. Garvin (1984) suggested that firms do not need to excel on all dimensions of quality in order to be successful, pursuing a quality niche can lead to a better performance. Although some of the studies were not in the favor of relationship itself. As stated and mentioned by Rust and Oliver (1994) who suggested that customer satisfaction or dissatisfaction—a “cognitive or affective reaction”—emerges as a response to a single or prolonged set of service encounters. They also mentioned that satisfaction is “post consumption” experience which compares perceived quality with expected quality, whereas service quality refers to a global evaluation of a firm's service

delivery system.^[11] Parasuraman et al., 1985^[17] and Iacobucci et al., (1995)^[18] discovered that the key difference between service quality and customer satisfaction is that, quality relates to managerial delivery. From the statistical result, it was found that only product quality based on extrinsic attribute to be significantly related to the brand loyalty. This is due to the positive perceptions of product quality from extrinsic attributes will develop a brand loyalty due to the feelings and affects formed as a result of the perception of quality. As such, if a person perceives that the outcome from performing behaviour is positive, he/she will have a positive attitude toward performing that behaviour. People consider the implications of their actions before they decide to engage or not engage in a given behaviour^[19].

Conclusion:

To fulfill the demand of the customer, product quality is to be maintained. This study concludes that besides, physical quality of the product, image of the product is equally important. The customer relationship marketing programs helps to improve the image of the product which can be done through sales promotion, advertising, customer relationship management (CRM) and sponsorship marketing. Although the investment increases initially a slowly but it builds a long term customer relationship which is profitable. A good customer relationship will keep customer happy and loyal to the company.

If the product has good designing, durable, affordable, reliable and improved performance, it can survive the highly competitive market.

So, the recommendation of the study is that company should make their customer relationship team strong and product awareness should be emphasized upon by road shows, fairs etc. along with utmost stress to keep product quality high. This enhances the customer's satisfaction and in turn customers brand loyalty. Company should collaborate with reliable vendors to keep up their reputation. The Research and Development team should be active and vigilant to keep pace with the market needs.

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