



RESEARCH ARTICLE

How does brand equity influence the intent of e-bike users? Evidence from Chennai city

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Abstract

E-bikes, a rapidly developing hybrid technology, threaten the notion of leisurely, non-motorized riding. This empirical study aims to determine the connection between brand equity, brand value, and electric bike purchase intention in Chennai. The descriptive research strategy was employed to collect the data from 151 respondents via questionnaire using judgment sampling, and hypotheses were tested using multiple regression. The consequences showed that the coefficient for brand loyalty was 0.643, and a one-unit increase in brand loyalty resulted in a 0.643% increase in purchase intent. The study's results help managers better understand how to create a post-brand equity marketing strategy for long-term success in the market. An improved understanding of brand equity's effects would help the auto industry gain consumer loyalty and enable long-term partnerships.

Keywords: Perceived quality, Brand value, Consumer intention, Brand association, Loyalty, Brand awareness.

Introduction

The electric bicycle is a relatively new mode of transportation that provides numerous economic and environmental recompenses (Simsekoglu and Klockner C., 2019). In addition, expanding electric mobility instead of fuel-powered vehicles reduces road transportation's environmental impact and energy consumption. As a result, among Asian countries' important transportation policy goals is a shift toward electromobility (Ling, Z. *et al.*, 2015). Electric vehicles, particularly plug-in electric bikes, deliver clear environmental and economic benefits, thus, electric vehicle use is increasing in India. However, market acceptance of electric bikes in India remains low due to widespread barriers such as a lack of charging infrastructure and technical constraints (Alamelu, R., Anushan, C. S., and Selvabaskar, S. G., 2015). To expand e-bike use, it is crucial to understand which brand equity factors influence consumers' intention to buy an e-bike. Brand refers to the name, sign, symbol, or other identifiers

that set apart the goods and services of one maker from those of others in the market. The brand's practical and psychological benefits to consumers affect their happiness and buying propensity (Hanaysha, J., & Hilman, H., 2015). Brand equity is a central concept in branding, serving as a magnet for new customers, a constant reminder to existing ones, and a glue for the emotional attachment of existing ones to a company's products and services (Alam, S. S., Senik, Z. C., Omar, N. A., & Ali, M. H., 2018). Brand equity research has become more popular recently. Its strategic role in assisting businesses to achieve sustainable competitive advantage and make better decisions is one of the main aspects contributing to its popularity. Previously, a set of insights was used to assess brand equity. Most researchers have focused on four key areas: brand loyalty, perceived quality, awareness, and brand association. The literature review, however, shows that brand value is an essential part of brand equity, which was postulated by (Aaker D. A. 1996), but only a few studies contributed to its measurement. Specifically, empirical studies that have utilized brand value as an attribute of brand equity are scarce. This study evaluates which aspects of brand equity relate to consumers' intent to purchase, helping automakers build brands and develop brand values that earn consumers' loyalty.

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How to cite this article: Appu, A. (2023). How does brand equity influence the intent of e-bike users? Evidence from Chennai city. *The Scientific Temper*, 14(3): 997-1001.

Doi: 10.58414/SCIENTIFICTEMPER.2023.14.3.67

Source of support: Nil

Conflict of interest: None.

Literature Review

Zakaria S *et al.* (2023) have investigated the factors influencing brand loyalty among Malaysian customers toward two national car brands. The data were gained via a questionnaire

from 409 selected respondents from all Perodua and proton dealers in Kelantan. Personal discussions were used to collect the survey, and hypothesized relationships were tested using statistical techniques such as the independent t-test and the correlation coefficient. The results show that car owners are moderately satisfied with their current price, quality, brand equity, and loyalty towards the cars. All control variables, such as brand quality, price, gratification, and equity, are strongly linked to brand commitment to the national brand. Perodua owners were more loyal than proton owners. To get consumers' attention, a company should have good products, affordable pricing, and more equity.

Petraviciute Kristina *et al.* (2021) investigated the relationship between brand attachment, deluxe label perceived value dimensions, and purchasing intent. There were 508 Lithuanian respondents to the quantitative online survey. The empirical study shows that the perceived value of a luxury brand increases the brand connection and buying intent. Premium brands influence customers' buying preferences because they have a positive emotional connection to them. Consumer ego had no statistically relevant influence on the apparent value of leisure, service, or purchase intentions. Luxury car marketers could benefit from highlighting brand value's social and symbolic significance in their communications with brand-attached Lithuanian consumers.

Farhat K. *et al.* (2020) focus on assessing the brand image, experience, attributes, and influence as brand engagement antecedents. This research aims to promote customer relationship management and user brand equity suppositions pertaining to brand engagement behavior. Customers of automobiles responded with 426 public. Public the outcomes exhibited that brand affects primarily served as a mediator between these antecedents and brand engagement and that brand personality, experience, attributes, and brand all significantly influence the brand engagement behavior being explained. It is the first study to specifically look at brand affect as a mediator linking brand personality, experience, and qualities to brand engagement in an integrative framework.

Phan *et al.* (2019) empirically tested how brand equity affects Ho Chi Minh City car buyers' purchase intentions. The authors study the issues using scales and data for Cronbach alpha reliability validation, EFA and CFA discovery factors, and AMOS software with SEM linear modeling to verify regression models. The study suggests that brand awareness, self-expression value, value perception, and brand philosophy affect customer loyalty and car purchase intent. All four factors have statistically significant positive correlations with loyalty and purchase intent. It appears that brand loyalty among automobile purchasers affects their intentions. The study includes brand psychology, a new factor developed by Vietnamese experts. This is the first Vietnamese study to quantify crowd psychology's impact

on consumer interests and habits. Vietnamese consumers prefer familiar brands and new cars with nice models and colors that match Vietnamese psychology.

Statement of the Problem

Automobile industries play a significant role in the development and expansion of a country's economy in today's world. Hero Motor Corporation, Bajaj Auto Limited, and TVS Motor Company dominated the two-wheeler industry for decades. The new industrial automobile industry has grown rapidly. These brands dominate their segments with over 50% market share. Early category invention, model variations, and brand/product-related customer connect and engagement help them retain customers. The new economy has allowed many foreign automakers to directly or jointly invest in India. With the arrival of many two-wheeler manufacturers, consumers' trust in the brand and loyalty to e-bikes are questionable. This study examines E-bike buyers' brand equity and value on purchase intention.

Objective of the Study

- To examine the consumer's demographic information and preferences for the factors influencing their decision to purchase an electric bike.
- To investigate the relationship between E-bike brand equity elements and user purchase intent.
- To investigate the most influential brand equity contributors and their effect on E-bike purchase intent.

Research Methodology

This descriptive research explored the relationship between effective brand attributes, brand values, and electronic bike buyers' purchase intentions in Chennai. Using judgment sampling, a structured Questionnaire instrument was used to measure brand equity attributes, brand values, and purchase intent among 151 respondents. Furthermore, the respondents were asked to evaluate their agreement with 30 items on the study's construct on a Likert scale, with 5 being the most vital agreement and 1 being the most substantial disagreement. The degree of agreement using the Cronbach alpha test (α) between the multiple estimates of each element (Brand Awareness = 0.889), (Brand Association = 0.919), (Perceived quality = 0.916), (Brand loyalty = 0.881), (Brand Value = 0.987) and (Purchase intention = 0.895) The overall result of 0.946 was solid associated to the appropriate alpha threshold of 0.7. The descriptive and inferential analysis was evaluated with SPSS version 29, and finally, Multiple regression was used to estimate and construct structural relationships.

Data Analysis and Results

The survey exhibits the results of the gender classification of consumers in the study area. Out of 151 consumers, (90.1%) are male, and (9.9%) of the consumer's female category as

presented in Table 1. With respect to the family type of the users, a substantial majority of the users are nuclear families, 70.8% than joint family. Finally, it was determined that the status of earning capacity is the most critical measure of social status that replicates the partition of power, chance, and esteem connected with situations in the Income level, and the result revealed that 74.8% of the consumers belong to 4 to 7 lakhs income category.

Friedman Test

H₀₁: There is no significant difference among mean rank towards the motivating factors influencing to buy electric bikes.

The result of the Friedman test indicated that the prob value is 0.05. The null hypothesis is therefore rejected, as shown in Table 2, at a one percent significance level. Consequently, it was concluded that there is a considerable difference among mean rank towards the motivating factors influencing to buy electric bikes. Based on the mean score, it was found that value-added services (3.40) are the most preferred by the respondents, followed by other services.

Table 1: User Demographic profile in the sample area

Sample characteristics (n = 151)		
Classifications	Options	Percentage
Gender	Male	(90.1)
	Female	(9.9)
Family types	Nuclear Family	(70.8)
	Joint Family	(29.8)
	Below 3 Lakhs	(19.2)
Annual Income	4 to 7 Lakhs	(74.8)
	8 to 11 Lakhs	(2.6)
	Above 11 lakhs	(3.3)

Table 2: Mean ranks of motivating factors

Motivating factors	Mean rank
P value	0.000
Style	(2.79)
Price	(2.81)
Mileage	(2.83)
Resale Value	(3.16)
Value added services	(3.40)
Chi-Square value	25.959

Table 3: Relationship between the study constructs

Factors	1	2	3	4	5	6
1. Brand Awareness	1					
2. Brand Association	0.86**	1				
3. Perceived Quality	0.82**	0.79**	1			
4. Brand Loyalty	0.44**	0.36**	0.55**	1		
5. Brand Value	0.47**	0.42**	0.55**	0.87**	1	
6. Purchase Intention	0.39**	0.29**	0.53**	0.90**	0.84**	1

Correlation Analysis

H₀₂: There is no relationship between electric bike brand equity and intent to purchase.

The coefficient of correlation between purchase intention and brand loyalty is 0.906, which indicates an 82.08 solid and positive relationship between them, as presented in Table 3 at 1% significance level. The null hypothesis is rejected because Prob is less than 0.05. Thus, electric bike brand equity factors do not affect consumer purchase intention.

Multiple Regression Analysis

To explore the most dominating elements contributing to brand equity and its impact on the purchase intent of E-bikes as indicated in Table 4.

The results determined that brand awareness partially affects purchase intention (X1 = 0.007), holding other variables constant. Purchase intention increases by 0.007 for every unit increase in brand awareness, and this coefficient value is significant at the 1% level. In addition, Brand value partially affects purchase intention, as shown by X5's coefficient of 0.286, holding other variables constant. Purchase intention increases by 0.286 for every unit increase in brand value, and this coefficient value is significant at 1%. Level. Hence, it is concluded that brand loyalty is the most dominating factor influencing consumers to purchase electric bikes, as indicated in Table 5. The multiple regression equation is

$$Y = 1.483 + 0.007 X_1 - 0.205 X_2 + 0.174 X_3 + 0.643 X_4 + 0.286 X_5$$

Table 4: MRA summary

Dependent Variable	Purchase Intention (Y)
Independent Variables	Brand Awareness (X1) Brand Association (X2) Perceived Quality (X3) Brand Loyalty (X4) Brand Value (X5)
Multiple R-value	0.920
R Square value	0.846
F value	159.265
P value	0.000

Table 5: Variable in multiple regression analysis

Variables	Unstandardized (Beta)	Standardized (Beta)	t value	P value	SE of B
Constant	1.483	-	1.691	.093	.877
Brand Awareness	.007	.007	.098	.922	.071
Brand Association	-.205	-.204	-2.960	.004	.069
Perceived Quality	.174	.190	2.909	.004	.060
Brand Loyalty	.643	.661	9.310	.000	.069
Brand Value	.286	.239	3.401	.001	.084

Discussion and Implications

This finding provided a framework for discussing brand equity and consumer purchase intentions. Empirical research revealed that brand loyalty increases E-bike purchases. This study also found high brand loyalty, and customers are satisfied with their cars. Customer loyalty should improve with a long-term strategy. All manufacturers need brand loyalty. An organization should make fair, high-quality products with reasonable prices to retain customers.

Brand equity, customer satisfaction, and high-quality service and products can help an online retailer stand out by increasing customer loyalty. Customer loyalty exists when existing customers continue to buy, recommend, and use a company's products or services. Building a strong brand is essential for any company that relies on repeat customers. Our research shows that brand value influences consumers' intentions to buy. Customers pay more for luxury labels because they know their purchases will last and be of the highest quality. This suggests that a brand's success in evoking feelings of leadership and power significantly impacts consumers' purchase propensity.

This study will support strong brand knowledge brand image to boost brand recognition in the Chennai electric bike market. This research will keep high levels of brand identification, brand image, and brand loyalty. Customers who stick with a company over time help the economy grow and the company's bottom line by purchasing more products. Brand loyalty and intent to buy were the only dimensions tested among electronic bike purchasers in Chennai. The scope of the study will broaden to include more sites and larger samples. In the future, we plan to study what role brand engagement plays in influencing the purchase of electric bikes in Chennai. Age and brand loyalty in the Chennai electric bike industry to increase brand loyalty. Since repeat customers buy the same brand, reduced customer loss boosts economic growth and brand loyalty, increasing sales. The study only examined Chennai electronic bike buyers' brand equity and purchase intentions. The research will expand to new locations and sample sizes. Future research investigates brand engagement factors affecting Chennai electric bike purchases.

Conclusion

This study increases brand loyalty by strengthening the ties between brand association, awareness, value, and loyalty in the Chennai electric bike market. Retaining existing customers is crucial to a company's success because it fosters sort loyalty, generating repeat business and increased revenue. The study only looked at how brand equity influences the purchase intentions of Chennai electronic bike buyers. The study will be expanded to include additional locations and sample sizes. The next step in this research is to look into the brand engagement factors that influence Chennai consumers' purchases of electric bikes.

Acknowledgments

I sincerely thank the experts in the two-wheelers industry with academic, policy, and workforce knowledge for helping us adapt the survey to the context and thank MEASI Institute of Management for providing valuable support to carry out the survey data analysis using SPSS 29. In addition, I'd like to express my gratitude to both respondents' genders for answering the questions on time.

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