Factors Influencing the Purchase of Two-Wheelers in Butwal Sub-Metropolitan City: A Consumer Perspective

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Abstract

The current research examined the determinants that impact the purchasing decisions of two-wheeler consumers in the Butwal region. The primary goal was to identify the critical independent variables that significantly influence the dependent variable of buying intentions, such as product knowledge, perceived quality, perceived value, and perceived risk. Using multiple regression and correlation analysis, the study found that purchasing intentions are significantly influenced by perceived value and quality. This established a substantial and significant correlation. Conversely, no statistically significant correlation was found between variables including product knowledge and diminished perceived risk and the purchasing decisions of consumers. To gain a competitive advantage in the market, companies operating in the Butwal two-wheeler sector should place a high priority on improving the perceptions of quality and value held by potential customers.

Keywords: Buying Propensity, Product Awareness, Acknowledged Quality, Potential Risk, Assessed Worth

I. Introduction

Consumer buying intentions considerably dictate their actual purchasing choices. Direct inquiries about prospective buying plans indicate a notable accuracy in forecasting the demand for exclusive consumer goods, as observed by (Armstrong, 1971). These surveys typically gauge the prevailing attitudes, viewpoints, and behaviors, a practice widely recognized in consumer research (Fitzsimons, 1996). It's imperative for manufacturers to effectively convey product specifics to prospective customers in order to gauge "intention to purchase," a point emphasized by (Hosein, 2002). Marketing professionals frequently utilize purchase intentions as a metric for forecasting market share or sales (Hosein, 2002). This prediction hinges on analyzing several decisive factors, a method embraced both in corporate and academic spheres as an alternative to actual buying choices. Thapa (2011) highlighted that substantial investments are directed towards consumer research to unearth pivotal factors influencing consumer buying intentions, as mass media continually shapes the consumer mindset through emotional appeal and highlighting needs and desires. In Nepal, two-wheelers have not been a staple for a long period, yet their

appeal is steadily escalating. These vehicles have become synonymous with convenience and time-efficiency, offering an easy way to bypass traffic congestion and adhere to time schedules. The rise of services like "Tootle", Patho, In drive mirroring the concept of 'Uber' but utilizing two-wheelers, exemplifies this trend, fulfilling both transportation and income-generating roles. Nepal's automotive sector predominantly comprises two-wheelers, a preference fueled by inadequate transportation infrastructure and the surge in population density on the roads. According to data from TEPC (2022), the financial years 2014/15, 2015/16, 2016/17, 2017/18, 2018/19, 2019/20, 2020/21, 2021/22 and 2022/23 saw a consistent rise in vehicle imports, illustrating a thriving Nepalese automotive market. This growth has been particularly noticeable in the two-wheeler segment, fulfilling the escalating demands in both urban and rural settings across Nepal. The youth demonstrate a marked preference for motorbikes over cars, captivated by their technological advancements, speed, durability, design aesthetics, and fuel efficiency. This demographic regards bikes as an optimal mode of transport, facilitating effortless mobility (Rehman, 2013). The Nepalese market currently hosts an array of two-wheeler brands, encompassing both newcomers and established entities. Despite a smaller variety compared to neighboring India, the industry is witnessing exponential growth, especially among the youth. A few prominent brands gracing the market include Honda, Hero, Bajaj, and several others, illustrating a vibrant and expanding two-wheeler industry in Nepal.

II. Literature Review

Smith et al. (2018) conducted a survey on consumer preferences when purchasing two-wheelers. Their study found that fuel efficiency and brand reputation were the top factors influencing the purchase decisions among urban consumers. Another study by Lee & Kim (2020) noted a growing preference for electric two-wheelers due to increasing environmental awareness. Research by Gupta & Das (2019) explored how the pricing of two-wheelers is a significant determinant in the purchasing decision, especially in developing countries where consumers are highly price-sensitive. Meanwhile, Chen et al. (2017) analyzed how macroeconomic factors, including fluctuations in oil prices, impacted the sales of two-wheelers. Williams & Clark (2021) studied the influence of technological innovations on two-wheeler purchases. Their findings suggest that advancements such as enhanced safety features and connectivity options have been decisive factors for consumers. Furthermore, Brown et al. (2020) reported a growing preference for electric and hybrid models owing to their environmental benefits. Studies have illustrated the role of government policies and regulations in influencing two-wheeler purchases. According to Martinez and Lee (2019), governmental incentives and subsidies significantly boosted the sales of electric two-wheelers. On the other hand, Norris et al. (2020) discussed how stricter emission norms are reshaping the two-wheeler industry, pushing manufacturers to innovate and consumers to adapt. Socio-cultural factors have been found to significantly influence the purchasing decisions of two-wheelers. A study by Anderson and Kumar (2018) highlighted that urbanization trends

and changing lifestyle patterns have a considerable impact on two-wheeler sales. Additionally, Thompson et al. (2021) noted that the perception of two-wheelers as a symbol of freedom and m Infrastructure developments and urban planning also dictate the trends in two-wheeler purchases. Studies by Wang and Chen (2020) discussed how the development of dedicated lanes for two-wheelers and better road infrastructures have facilitated an increase in two-wheeler sales. Furthermore, a study by Lee and Park (2019) emphasized the role of urban planning in shaping the preference for two-wheelers, especially in congested urban spaces. Ability, especially among the youth, substantially influences buying decisions.

Conceptual Framework

Independent Variable   **Dependent variable**
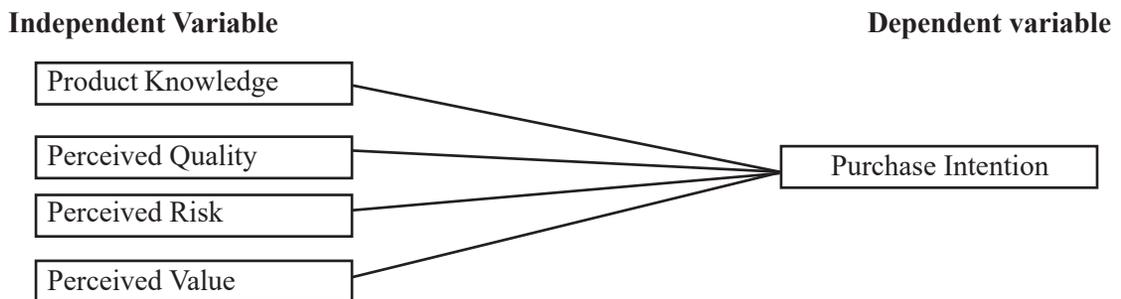
Figure 1: Conceptual Framework

III. Research Methodology

In this inquiry, a blend of descriptive and causal-comparative methodologies is employed to investigate the determinants influencing the propensity to acquire two-wheelers in Butwal, Sub-Metropolitan City. Luck & Rubin (2001) underscore that descriptive studies, grounded in robust quantitative analysis, adeptly delineate pertinent variable characteristics without necessarily establishing correlations. Furthermore, this approach, as emphasized by Malhotra (2008), adeptly delineates the traits of the focal group and facilitates precise forecasts regarding the interconnection between marketing elements. In this context, the strategy is leveraged to dissect and delineate the features that influence the purchasing choices of two-wheeler customers, while the causal-comparative layout probes the interdependencies between the identified variables. The latter design assists in pinpointing the causal links between independent and dependent entities.

The focus group of this research is the two-wheeler users residing in Butwal, Sub-Metropolitan City, with data collection being restricted to this demographic. Despite the study's constrained scope, making it infeasible to engage all potential respondents, a non-probability sampling mechanism is adopted. Data are amassed via Google Docs and physical questionnaires distributed through social platforms, with the sample magnitude being guided by the research's underlying queries and goals, as noted by Saunders (2011). Given the unknown total populace, the researcher employs Cochran's formula (1997) to determine the baseline sample size requisite for this survey,

thereby maintaining a precise and directed approach towards uncovering the nuanced dynamics influencing two-wheeler purchase intentions in the region. Initially, ascertain the requisite sample volume when dealing with an undefined demographic.

$$S = \{z^2 * M (1-P)\} / M^2$$

Where,

  Sample size for an unknown population denoted as S

  Z = Z-Score (1.96 ascertained with a 95% level of confidence)

  P = Proportion of the population (0.5, assuming 50%)

  M = 0.5 Margin of Error

$$\text{Now, } S = \frac{1.96^2 \times 0.5 \times (1 - 0.5)}{0.05^2}$$

As a result, the study requires at least 385 samples. Out of the 540 questionnaires distributed, both online and on paper, 300 responses were deemed adequate for analysis.

The objective of this research is to examine the factors that influence individuals' purchasing intentions. The established model of this study examines how a single dependent variable is impacted by multiple independent variables. Four primary categories comprise the variables examined in the study, which influence consumers' purchasing decisions regarding two-wheelers: perceived risk, evaluated value, perceived quality, and product comprehension. The contingent variable is the decision to engage in a purchase. Regression models are employed to analyse the determinants that impact the purchasing decisions of two-wheeler purchasers. As follows is the regression model for this study:

Model delineates the assessment of factors shaping the buying decisions of two-wheeler consumers.

$$PI = \beta_0 + \beta_1 PK_{it} + \beta_2 PQ_{it} + \beta_3 PV_{it} + \beta_4 PR_{it} + e_{it} \dots\dots (I)$$

Where,

PI stands for Purchase Intention

PQ	=	Perceived Quality
PK	=	Product Knowledge
PQ	=	Perceived Quality
PV	=	Perceived Value
PR	=	Perceived Risk
β_0	=	The dependent variable's intercept
e	=	error term, and the beta coefficients of the explanatory variables to be estimated are 1, 2, 3, and 4.

Hypothesis

H1: A substantial connection exists between product awareness and buying inclinations.

H2: A notable association is present between perceived quality and the intentions to buy.

H3: A significant correlation is evident between perceived risk and intentions to purchase.

H4: A prominent link exists between perceived value and purchase aspirations.

IV. Results

This segment outlines the details concerning the buying intentions of consumers, highlighting the various elements influencing the two-wheeler buyers' decisions. The following tables provide a detailed analysis of the correlations between the dependent variable, purchase intention, and the independent variables, which include product knowledge, perceived quality, perceived value, and perceived risk.

Table 1

Purchase Intention Correlation with Independent Variables

Correlation	PI	PK	PQ	PR	PV
Product Knowledge (PK)	1				
Purchase Intention (PI)	.450**	1			
Perceived Quality (PQ)	.530**	.534**	1		
Perceived Risk (PR)	.410**	.421**	.544**	1	
Value Perceived (PV)	.500**	.454**	.528**	.606**	1

**At the 2-tailed 0.01 significance level, the correlation is significant
* The correlation is significant at the two-tailed 0.05 level.

The results of a Pearson correlation analysis are displayed in the aforementioned table, which examines the relationship between the dependent variable of purchase intention and the independent variables of perceived quality, risk, value, and product knowledge. The data indicates a noteworthy positive correlation between product knowledge and purchase intent. There is an observed positive correlation of 45.0% between a 1% increase in knowledge and a subsequent increase in purchase intention. There exists a comparable positive correlation between perceived quality and the intention to make a purchase, wherein a 1% increase in perceived quality results in a 53.0% increase in the intention to make a purchase. Moreover, there exists a positive correlation between a 1% decrease in perceived risk and a substantial 41.0% increase in the intention to make a purchase. A positive correlation exists between the perception of value and the intention to make a purchase. For instance, a marginal increase of 1% in the perceived value of a product or service results in a substantial 50.0% enhancement in the intention to make a purchase.

Table 2

Summary of the Model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	. 601a	.421	.410	0.5115

The utilised model is illustrated in the table, where the adjusted R Square value is reported as 0.410. These findings indicate that the independent variables, namely perceived value, product

knowledge, perceived quality, and perceived risk, account for 41.0% of the variance observed in the dependent variable, purchase intention.

Table 3
ANOVA Test

ANOVA					
Model	**Sum of Squares**	**DF**	**Mean Square**	**F**	**Sig.**
Regression	60.456	4	15.114	37.6907	.000
Residual	118.445	295	.401		
Total	178.901	300			

Intention to Purchase: Dependent Variable

a. Constant Predictors: Perceived Value, Perceived Quality, Perceived Risk, and Product Knowledge

The statistical validity of the model used in the research is indicated by the p-value of 0.000 for significance, which is based on the data presented in the above table. Furthermore, the study finds that Product Knowledge, Perceived Quality, Perceived Value, and Perceived Risk serve as predictors, with Purchase Intention serving as the dependent variable.

Table 4
Coefficient Table

Coefficients					
Model	**Unstandardized**	**Coefficients**	**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	1.320	.160		8.25	.000
Product Knowledge	.016	.028	.030	.571	.550
Perceived Quality	.345	.075	.325	4.6	.000
Perceived Risk	.049	.038	.069	1.289	.165
Perceived Value	.310	.052	.285	5.961	.000

Dependent Variable: Purchase Intention

The aforementioned table presents the standard error, beta coefficient, t value, and significance value associated with each independent variable, namely Product Knowledge, Perceived Quality, Perceived Risk, and Perceived Value, in relation to the dependent variable, Purchase Intention. The data presented in this study demonstrates that there is no statistically significant relationship between product knowledge, perceived risk, and purchase intention. These findings suggest that there is insufficient evidence to support the notion that increasing product awareness and reducing perceived risk will lead to an increase in purchase intention. On the other hand, there exists a significant correlation between perceived quality and value and the intention

to make a purchase. This correlation supports the notion that improvements in perceived quality and value lead to an increase in purchase intention.

V. Conclusion

This study examined the purchasing intentions of two-wheeler consumers in Butwal Sub-Metropolitan City. A representative sample of 300 individuals was used to represent the diverse population of Butwal. The study, focusing on in Butwal Sub-Metropolitan City, may not fully represent the entire nation's two-wheeler market tendencies. The primary emphasis of the study was on demographic variables, specifically gender, age, educational attainment, and monthly income. In addition, the study heavily depended on quantitative analysis, employing statistical techniques such as ANOVA, regression, and correlation analyses. The data inferred a positive correlation between the independent and dependent variables, pinpointing a considerable influence of perceived quality and value on the buying intentions in the local market. However, factors like product knowledge and reduced perceived risk didn't hold a notable link to purchase intentions. In summary, a considerable proportion of male participants, primarily aged 15-29, earning between Rs.10,000 and Rs.49,999 per month, and pursuing Bachelor's degrees, were notably impacted in their selection of a two-wheeler for daily commuting by their perception of quality and value.

VI. Implication

In order to increase sales for two-wheeler brands in Butwal Sub-Metropolitan City, it is essential to improve the perception of quality and value among customers. Their marketing strategies should predominantly emphasize building and promoting the perceived quality and value of their products, particularly targeting male customers aged 15-29, pursuing bachelor's degrees and earning a monthly income between 10,000 and 49,999.

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