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Factors Affecting Vehicle Purchase in Major Cities

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Abstract

Nowadays, personal vehicles have become synonymous with the modern city market. The development and splendor of the city can also portray by the use of such vehicles. The purpose of this study was to analyze the factors affecting vehicle buying in major cities. This research used descriptive and causal research design. Primary data were collected. Survey research was administered and 2000 responses were collected. A PLS-SEM tool was used to test validity, reliability and path of advance modeling. This research confirmed expected features, price, dealer/showroom influence has significant influence on car buying. After sales service has no effect on car buying. Marketers should identify target group who showed interest on cars and marketing programs should be directed to them.

Keywords: Vehicle Purchase, Car buying, PLS-SEM, Features, Price

Introduction

Consumer behavior is the study of how an individual or a group buys, consumes or uses a product and disposes it (Solomon, 1995). Consumer behavior is the audit of the steps taken by consumers to fulfil their satisfaction (Solomon, 1995). In marketing, not only actual buying but also overall buying is considered as a consumer behavior which includes both pre-purchase and post-purchase behavior. Pre-procurement involves awareness of the need and search and evaluation of goods and services that can satisfy the need. Post-purchase activities include product valuation and anxiety reduction after purchase. These activities affect purchases or repurchases at various stages of marketing (Foxall, 1987).

Literature Review and Theoretical Framework

Kotler et al. (1999) describe the consumer procurement process in five phases namely identification of needs, search for information, and evaluation of alternatives, procurement work and post-procurement behavior. In Hawkins et al. (2007), various factors, such as demographic and social influences, group influences, advertising, and internal influences, have been identified as factors that influence purchasing decisions. Similarly, the types of consumer decisions, involvement in procurement, participation in

item selection etc. have also been disclosed. According to Loudon and Bitta (2004), consumer behavior plays an important role in deciding on market segmentation and marketing strategies. If consumer behavior is studied, their expectations can be understood. Therefore, consumer behavior is an applied discipline (Loudon & Bitta, 2004). Lovelock (2010) focuses on the production, delivery and delivery of quality services to provide customer satisfaction. Batra and Kazmi (2008) discuss the stages of consumer procurement, the black box theory of consumers, and the importance of consumer behavior. According to Kotler (2008), the consumer should be placed at the center of business activities. Marketing is most important parts of attracting and maintaining customers. Nair (2007) describes the role of consumers in marketing in terms of the multidimensional dimensions of consumer behavior. Many theories and frameworks have been considered. Kumra (2007) covers consumer behavior in the South Asian context. It is explained consumer relationship marketing, experience marketing, consumer interest protection, and consumer trends. Schiffman and Kanuk (2006) discuss consumer behavior and service marketing in uncertain situations. Lovelock and Writz (2003) present service marketing as a broad-based discipline, and argue that a company can only succeed if it can balance marketing, operations, and human resources. Zeithaml and Bitner (2012) have studied consumer behavior in the service sector and service standardization, service transfer and delivery, and commitment to service have been revealed.

Shimpi (2012) found expected features of the car (make-up of the car, color) and price has effect on purchasing car. Stella and Rajeswari (2012) depicted after sales services is must for car purchase. Chang and Hsiao (2011) confirmed high price influence affect less tendency to purchase a car. Ganapathi et al. (2011) concluded expected features like driving comfort, fuel economy, spare parts, pickup, model, brand image, internal space, and maintenance cost have more influential over consumer purchases over car. Price and after sales service has influence on purchasing a car. According to Subadra et al. (2010), features like driving comfort, fuel efficiency, spare parts availability, pick up, and model design are more influential in the purchase of new cars. Price and after sales affect car purchase. Dongyan and Xuan (2008) proved customer trust information from car sales staff or dealers. Customers put more emphasis on the fuel efficiency features of automobiles than other factors, according to Chidambaram et al. (2004). Reasonable price affects car purchase.

Expected features are the features of the car that the consumer is looking for when buying a car. These are color of the style, economy, pic-up, and smoothness in

gear change, riding comfort, brakes, engine beat, safety and road grip and brand reputation. Dealer/showroom includes showroom activities. Car is high ticket item so customer prefers to purchase it from authorized dealers/showroom. Companies have opened car showroom in the central location of markets. Sales staff must be knowledgeable and able to interact and resolve the customer's queries towards the car brand. Showroom should also provide after sales and other services. Showroom infrastructure must be attractive.

Price is the most important factors of marketing strategy. Price has responsibility to recover all the operational costs plus profit. Price should not be expensive, it should be reasonable. Price discounts, coupons and seasonal discount are the main strategies related to price. When customer buys a product after sales service is started. But in contrast, consumers are clever when they are not assured about after sales service, they will not buy the product. After sales service is indispensable thing for high ticket item. Customer needs quality in after sales like, available of genuine spare parts, trained mechanics to handle their product. Delivery in time is also important. Customer needs good instructions for handling the product to make the product long life working.

In other parts of the world, there are numerous studies on the behavior of car purchases. However, there is lacking of studies done on car buying in the major city probably. So, this research is designed to measure the factors of car buying in major city.

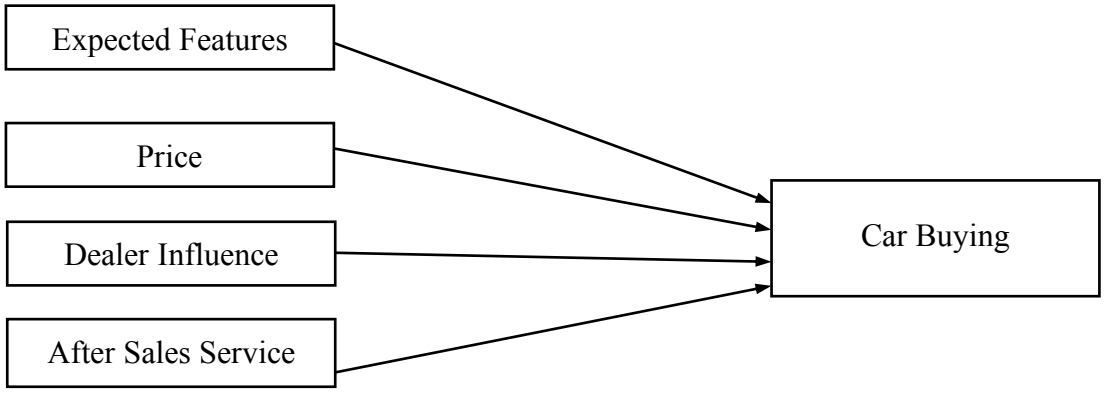
This study aims to address the following issues.

- To examine the influence of expected features on vehicle buying.
- To measure the effect of price on vehicle buying.
- To assess the effect of dealer/showroom influence on vehicle buying.
- To analyze the effect of aftersales service on vehicle buying.

This research has some limitations. The study focused only on car purchases, not other vehicles, in Kathmandu city. Kathmandu city is centrally located; so future research needs to be done to expand the results beyond Kathmandu city. The study was based on data from the self-administered questionnaire filled by the selected car owners. Primary data collection and analysis have been carried out. This research did not include sales and other secondary data.

Research framework is shown in Figure1.

Figure1: Theoretical Framework



Development of Hypotheses

H1: Expected features have significant influence on vehicle buying.

H2: Price has significant influence on vehicle buying.

H3: Dealer/Showroom influence has significant influence on vehicle buying.

H4: After sales service have significant influence on vehicle buying.

Methods

This research used descriptive and causal research design (Malhotra & Birks, 2006). Primary data were collected. Sources of data were car owners in Kathmandu city. Population of the study comprised the people who have purchased the car from showroom within two years. Sample frame was parking lot of mall and departmental stores and car servicing center. People were approached car parking at different malls and departmental stores and service centers and responses were gathered. In some cases, car owners were not met, only car drivers were met in parking and car service centers, they were not taken as sample of the study. Convenient sampling method was used to give general world view of analysis (Henry, 1990; Kayaman & Arasli, 2007; Kobayashi, 2011). Structured questionnaires were made on anchoring 'Strongly Disagree=1' to 'Strongly Agree=5'. Survey research was done for collecting primary data (Malhotra & Birks, 2006). Approximately 70% of respondents were male, while 30% were female. About 46% of the respondents were between the ages of 40 and 50, which is nearly half of all respondents. Among the survey participants who were between ages of 30 and 40, 21% were situated at this stage of life. Forty-five professionals responded. Forty-five percent of respondents made less than three to four

lakh rupees (per year). About 60% of the respondents had master's degrees, and about 25% had bachelor's degrees.

To evaluate the proposed model, SEM tools were utilized. SEM evaluates the model's reliability and validity by reclassifying 5000 samples via bootstrapping (Hair et al., 2014). SEM analysis was performed using Smart PLS 2.0.

Results and Analysis

This study was conducted based on a detailed analysis of the influences that impact vehicle purchase decisions in the major cities. This model was evaluated in two stages (Hair et al., 2014). The first assessment was the test of the outer model and the second assessment was the test of the inner model. To achieve this, the outer model takes measurements of constructs' reliability and validity, while the inner model was focused on verifying the links between constructs (Hair et al., 2014). PLS-SEM is a well-known market research tool for estimating path coefficients. This tool is flexible in small sample numbers and also solves non-normality issues (Hair et al., 2014).

Measurement Model

Measurement model looks at the psychometric aspects of the model. This consists of everything from item loadings, Composite Reliability (CR), and Average Variance Extracted (AVE). This is described in Table 1.

Table1: Outer or Measurement Model

Constructs	Composite Reliability (CR)	Cronbach's Alpha	AVE
After Sales	.894	.791	.714
Car Buying	.863	.811	.676
Dealer Influence	.831	.751	.534
Expected Features	.852	.753	.586
Price	.954	.864	.867

In table 1, the value of Cronbach's Alpha appears to be higher than 0.7. This showed that the constructs were reliable (Hair et al., 2014). Accordingly, the CR value of each variable was greater than 0.7 and the AVE value was greater than 0.5. CR and AVE values were required to measure the validity of constructs. The value of CR must

be greater than 0.7 and the value of AVE must be greater than 0.5 (Hair et al., 2014). Now if the value of CR is more than AVE then that model is considered valid (Hair et al., 2014).

Table2: Cross-Loadings

Items	After Sales	Car Buying	Dealer Influence	Expected Features	Price
AS1	**0.925**	0.542	0.632	0.596	-0.043
AS2	**0.866**	0.376	0.418	0.334	-0.179
AS3	**0.845**	0.247	0.595	0.239	0.120
AS4	**0.744**	0.151	0.533	0.248	0.254
AS5	**0.815**	0.285	0.385	0.369	0.013
CB1	0.291	**0.809**	0.336	0.277	-0.540
CB3	0.288	**0.755**	0.393	0.143	-0.372
CB4	0.298	**0.8651**	0.474	0.426	-0.164
CB5	0.516	**0.733**	0.349	0.637	-0.086
EF1	0.365	0.209	0.263	**0.710**	0.042
EF10	0.616	0.388	0.258	**0.747**	-0.016
EF8	0.235	0.427	0.133	**0.844**	0.144
EF9	0.228	0.331	0.207	**0.734**	0.302
PP3	0.036	-0.210	0.172	0.274	**0.897**
PP4	-0.037	-0.431	0.159	0.089	**0.976**
SR2	0.361	0.425	**0.747**	0.159	0.003
SR5	0.737	0.341	**0.759**	0.261	0.114
SR6	0.296	0.327	**0.767**	0.202	0.311

Table. 2 shows that the values of the indicators were only shown high in the same constructs and those indicators were loaded in the same constructs. This means no cross- loadings and this is the proof of discriminatory validity (Hair et al., 2014).

Fornell and Larcker Criterion (1981) is also an old method of measuring discriminatory validity. The diagonal line represents the square root of the AVE of the constructs and should be greater than the inter-item correlation of the constructs on the row and column. Table 3 makes it clear.

Table 3: Fornell and Larcker Criterion

	After Sales	Car Buying	Dealer	Features	Price
After Sales	**0.841**				
Car Buying	0.435	**0.792**			
Dealer Influence	0.607	0.488	**0.758**		
Features	0.472	0.468	0.270	**0.760**	
Price	-0.014	-0.378	0.173	0.158	**0.938**

According to Table 3, the value of each row and column appears to be greater than the value of diagonal line (Bold). This means that the constructs are different. Discriminant validity is proven (Fornell & Larcker, 1981).

Structural Model

The structural model tests the hypothesis in which the value of the beta, t-value, is determined by bootstrapping of 5,000 resamples. This is explained by Figure 3.

Figure 3 highlights indicator item's and path coefficients based on t-value. The link between endogenous and exogenous constructs were assessed for a path coefficient (β) of 5 percent and a t-statistical value above 1.96. (Hair et al., 2012). Coefficient value was also considered, explaining the variation of the model (Henseler et al., 2015). Table 4 shows path coefficients.

Table 4: Path Coefficients

Path	Beta	t-value	Decision
H1: Expected Features -> Car Buying	0.463	7.126	**Accepted**
H2: Price -> Car Buying	-0.543	8.777	**Accepted**
H3: Dealer Influence -> Car Buying	0.522	5.597	**Accepted**
H4: After Sales -> Car Buying	-0.107	1.239	**Not Accepted**

Table 4 show the path relationship between constructs. It showed the relationship between expected features and car buying (β=.463, t-value=7.126), price and car buying (β=-.543, t-value=8.777), and dealer/showroom influence and car buying (β=.522, t-value=5.597) were significant, providing support for H1, H2 and H3.

But the relationship between after sales and car buying (β=-.107, t-value=1.239) is not providing support for H4.

Conclusion

This research attempted to examine the factors of car buying on major cities. Of the four hypotheses, three hypotheses were supported. Expected features, price and dealer/showroom influence had significant influence on car buying. Expected features affects car purchase which was in alignment with Shimpi (2012); Ganapathi et al. (2011); Subadra et al. (2010) and Chidambara et al. (2004). Price affected car buying. This is consistent with Chang and Hsiao (2011), Ganapathi et al. (2011), Subadra et al. (2010) and Chidambaram et al. (2004) that price has effect on car buying. Dealer influenced car buying. This is consistent with Dongyan and Xuan (2008) that dealer staff's behavior and dealer services motivate customers favorably to buy the car brand. After sales does not affect car buying. This finding is contrast with Stella and Rajeswari (2012), Ganapathi et al. (2011) and Subadra et al. (2010). For purchasing new car, customer gives more attention to features and price and least attention given to after sales service.

In the city market, there is a growing tendency for cars to be accepted as an essential commodity instead of a luxury. Clever marketers who understand the consumer's attitude are adopting various techniques to sell cars. It is wise for people to study the most sought after features of a car and offer it at a price that suits the market. As cars are expensive items, dealers / showrooms have also become a major factor. Even if the consumer does not pay attention immediately, the post-purchase services should be streamlined. This helps in customer retention. The marketing program should be positioned at identifying the class of people who are showing interest in cars.

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