Factors Affecting Smartphone Purchase Decisions of Consumers

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ABSTRACT
This study aimed to pinpoint the factors influencing consumers' decisions to buy Smartphones in Kathmandu. The study examined how social factors, product attributes, and brand image affect consumers' decisions to buy Smartphones. The study focuses on the consumer’s preferred method of choosing a Smartphone and which element influences that choice most. In the Kathmandu Valley, the demand for Smartphones is rising quickly. This study made use of primary data. The information was gathered from 394 buyers of cell phones in Kathmandu using a structured questionnaire and a convenient sampling technique. The elements influencing customer purchasing decisions for smartphones were found by using descriptive analysis, correlation analysis, and multiple regression analysis, which allowed for a good conclusion-drawing process. To investigate the Influence on purchasing decisions for Smartphones, product features, social factors, and brand image are used as independent variables. According to a correlation study, the dependent variable, consumer purchase decision in the purchase of a Smartphone, has a substantial association with all independent variables. The outcome of the regression analysis discovered that brand image, product attributes, and social factors significantly influence consumer purchasing behavior. The findings of the study are implacable for both the managerial level and the academic level. However, the study's findings can offer a researcher some theoretical direction. The results of this study may provide guidelines for formulating marketing strategies regarding Smartphones.

1. INTRODUCTION
The process of consumer decision-making is evolving and becoming more difficult. Consumer attitudes, beliefs, and behavior all affect purchase intention. Customers can access and assess a specific product by starting with past purchases. Price, as well as perceived quality and value, may influence the likelihood of a purchase. Additionally, customers are
influenced by both internal and external incentives during the purchasing process (Gogoi, 2013). Researchers recommend six processes before making a purchasing decision, including awareness, knowledge, interest, preference, persuasion, and purchase (Kotler & Armstrong, 2010).

Engel et al. (1975) created the most well-known consumer decision-making model. The five steps of this model's breakdown of the customer purchasing decision-making process are problem identification, information search, alternative evaluation, buy decision, and post-purchase behavior. It could be viewed as an instance of impulsive shopping. Customers who shop with a partial plan simply choose the product category and specification in advance; they make their brand and type selections at the store. Before visiting the store, selecting the brand and item constitutes a fully planned buy.

Ideas and unanticipated events can influence the purchase intention of buyers (Kotler, 2003). Individual attitudes include adherence to social norms and preferences for particular persons, and unpredictable events relate to when customers change their plans to purchase due to an unanticipated event, such as when the price is higher than expected (Dodds et al., 1991). Zeithaml (1988) used the phrases "possible to buy," "intended to buy," and "considered to buy" to calculate the likelihood of making a purchase.

The buying decision is a consumer's action that reflects how they see a product, what thoughts they have about it first, and what they would feel or do if they were to buy the same item under the same brand. On that specific product, both bad and good effects may be possible. The customer has a great propensity to respond in light of their prior behavior. In this situation, the person is more likely to disclose their habit than their intention when responding to the goal (Warsaw & Davis, 1985). Intention to purchase is crucial to customer behavior despite problems (Kotler & Armstrong, 2010). Therefore, the study aimed to examine actors influencing customer purchase decisions for Smartphones in Kathmandu.

This study uses brand image, social factors, and product features as independent variables to measure consumers' purchase decisions. This model has not been used to measure the purchase decision regarding the Smartphone in the Nepalese context. Therefore, it is necessary to research to develop a new model for measuring purchase decisions in the Nepalese context. Therefore, the study's objective was to identify the influence of brand image, attributes of a product, and social aspects on Smartphone purchase decisions.

Identifying consumer behavior is a more complicated task because consumer behavior is more complex; therefore, none of the individuals or institutions can easily understand consumer behavior. However, marketers must try to understand consumers' purchase decisions on Smartphones. This study helps understand consumers' purchase decisions in buying Smartphones to some extent and supports understanding the theoretical concept regarding consumer behavior. Furthermore, it assists the marketing manager in developing marketing strategies regarding Smartphones in Nepal.

2. LITERATURE REVIEW

Brand Image

Nguyen (2020) did a study to evaluate the influence of brand image personalities and lifestyle on buying decisions of Smartphone consumers in Hochiminh City. They found that brand image, lifestyle, and personalities significantly influence consumer buying decisions in Smartphone buying. Yusuf (2021) studied factors that influence brand image and product innovation on the purchase decision of customers of Oppo Smartphone Products in South Tangerang City. Researchers found that brand image and product innovation have a significant influence on purchasing decisions in the buying of Smartphones.

Smartphone purchase intentions are positively and directly impacted by brand image, which also positively affects brand attitude and product involvement (Dolich, 1969). A
company's brand image influences consumer purchasing decisions, affecting consumer buying behavior and brand equity (Biel, 1992). Further, he described that people are more inclined to purchase a product with a strong brand image, positively influencing consumer purchasing behavior. Thus, purchase intention and brand image have an excellent association.

The brand image of a product is the mental representation of that product that each individual has; a brand image is anything associated with a brand in memory (Aaker, 1991). According to Kotler (1988), associations or beliefs about a specific brand are also considered components of brand image. Although it claims to be physical, a brand lacks observable, material, or beneficial qualities (Kim, 1990). When customers enthusiastically endorse and form special bonds with a brand, this fosters a favorable perception of the brand (Keller, 2003). We view the brand's reputation as crucial because it influences the consumer's decision to buy the product (Dolich, 1969). According to Johnson and Puto (1987), brand equity is strongly influenced by brand image, which significantly impacts consumers' subsequent purchasing behavior.

According to Rizwan et al. (2012), there is a strong correlation between purchase intention and brand image. The brand's reputation benefits consumers' preferences to acquire fake goods. According to Shah et al. (2012), the independent variable core brand image and the dependent variable purchase intention have a good association. Tariq et al. (2013) conducted a study of a similar nature and noted that there is a significant correlation between purchase intention and brand image. Another survey by Wu (2007), which demonstrated that every aspect of the brand image increases the consumer's buying intention, further supported this research finding. Brand images are essential assets that aid in correlating the quality and eliciting specific knowledge structures associated with the brand (Srinivasan & Till, 2002). Previous research, such as those by Lay et al. (2013) and Wollenberg and Thuong (2014), have acknowledged the significance of brand image in influencing customers' behavior toward cell phones (2014).

\[ H1: \text{Brand image has a significant favorable influence on consumer purchase decisions in Smartphone buying.} \]

**Product Features**

Fauzi and Ali (2021) researched the factors affecting purchase and repurchase decisions. They found that the price and product quality positively and significantly affected purchasing decisions. The presence of elements like phone size, screen resolution, portability, and a solid user interface is sufficient evidence that any brand of Smartphone can attract the attention of the younger population. Bluetooth and an internet connection are the key components influencing mobile phone purchases; a good Smartphone is required. The feature is a product property that helps satisfy customers' needs and wants through use, ownership, and utilization. Software and hardware make up a product's features. Described as hardware, a device may be handled directly (Lay-Yee et al., 2013).

The body, size, and weight of a Smartphone constitute its hardware. Hardware also includes color and design because these affect how the smartphone looks on the outside. In contrast, "Software" refers to all forms of documentation, procedures, and computer programs. The operating system, memory storage, or applications that power a Smartphone are all considered to be its software. Sujata et al. (2016) studied consumer preference at five parameters. The picture technology, hardware, fundamental, brand, and financial elements were considered for the investigation. According to the studies in the papers, physical characteristics, operating system versions, and technology, all have a big impact on young students' decisions to purchase Smartphones.

Guleria and Parmar (2015) did a study on a study of consumer choice for cell phones and was to pinpoint the variables that influence people's preferences for various elements of
Smartphone usage. The study's conclusions indicate that consumer preference was significantly impacted by processing speed and ease of use, with technological requirements and applications coming in second. Researchers Uddin et al. (2014) studied the factors influencing customers' choices to purchase mobile phones. The result of the study shows that a variety of factors ultimately influence a customer's decision to buy a mobile phone. One of the most important things that customers consider while making their purchases is the phone's physical characteristics, such as the camera, Bluetooth, color, weight, and other functions. The study aimed to identify the variables influencing those intentions by identifying five unique criteria that affect the intention to purchase a Smartphone: pricing, compatibility, security, social influence, and consumer advances.

Mokhlis and Yadi (2012) researched the factors consumers consider when choosing a mobile phone. They found that the attributes of Smartphones greatly influence the purchase decision of customers. The physical properties of the phone, such as its camera, Bluetooth, color, weight, and other features, are among the key aspects that buyers consider when making their purchase. Rahim et al. (2016) examined college students' plans to buy Smartphones. The study investigated many variables that affect Malaysian university students' intentions to purchase Smartphones. It examined the connections between Smartphone purchase intention, brand image, social influence, and product sacrifice. Ayodele et al. (2016) did a study to identify the variables influencing young adults in Nigeria's Anambra State Smartphone purchase behavior. According to research findings, young folks' purchasing decisions are more influenced by the aesthetic value and Smartphone functions. According to Russell (2012), software makes up 33% of the elements that affect a person's decision to buy a Smartphone, while hardware makes up only 17.6%. It demonstrates that when purchasing a Smartphone, the software is significantly more important than the hardware.

H2: Product features significantly impact consumer purchase decisions in Smartphone buying.

Social Factors

Santosa (2021) studied factors affecting cultural actors, social factors, and personal factors in purchase decisions. Researchers found that cultural factors have a significant positive impact on purchasing decisions. But personal factors and social factors do not have a significant influence on the purchase decision. Wong (2019) did a study to identify factors affecting purchase intention on Smartphones in Hong Kong. They found a significant relationship between brand name and purchase intention, social influence, and purchase intention. Still, it is found that the price does not significantly influence purchase intention.

Reference groups are people or organizations that one can turn to for counsel or a different point of view. These are essential sources that influence how consumers choose brands. Due to their distinctive skills, knowledge, and dispositions, friends and family make excellent examples of reference groups. The consumer's family, small social groups, and social roles and status are all social factors that influence their behavior as consumers (Kotler & Armstrong, 2010). Consumers usually allow their social circle or other individuals to influence their choices. Consumers may listen to and trust diverse social groups based on various factors, such as those more knowledgeable in a given subject. Friends, classmates, families, and spouses may influence their Smartphone purchases. According to a study, family members, in particular, can sway a consumer's purchase selections regarding high-involvement products (Farzana, 2012). According to a different poll, 35.6 % of 1814 Malaysian respondents claimed that community patterns influenced their decision to purchase a Smartphone (Osman, 2012). Additionally (Ding et al., 2011) found a direct link between social influence and students' use of Smartphones. According to the results, celebrities were more influential than parents (de Run et al., 2010). Social influence is important and impacts how
much students rely on their Smartphones (Suki & Suki, 2013). Users can now expand their social networks online using platforms like Facebook, Twitter, and Instagram. Along with information regarding Smartphones, they may also get customer reviews and feedback from people who have used the gadgets in the past or present. Numerous studies (Anam, 2014; Ibrahim et al., 2014; Lim et al., 2012) have shown that social influence substantially influences customer purchases.

Social variables affect consumer behavior (Armstrong & Kotler, 2007). They would seek advice from folks who had already purchased and utilized Smartphones and first-hand accounts from these individuals. They might tend to pick it up from many people, especially those close to them, such as friends, peers, relatives, and spouses. 35.6 % of respondents preferred to purchase smartphones, according to community trends and earlier research by Osman et al. (2012) conducted in Malaysia. Based on their features and choice of purchases, customers commonly ask their friends and family for recommendations and opinions regarding Smartphones. The reference groups, family members, and their functions are referred to as social factors, according to Perreau (2014).

Consumers could compare their behaviors, way of life, or habits to those of the reference group. Clients often have many smaller reference groups made up of their purchase decision in the suggestions of family members, close friends, neighbors, coworkers, or others. Potential customers can join these inspiring groups and help influence the future there (Kotler & Armstrong, 2010). Family members may influence a consumer's purchase selections. In the setting of their family, a person grows in terms of their beliefs, personality, and sense of self. According to Thomson et al. (2007), family members constitute the first reference group's basic organizational unit and substantially impact customer behavior. People can also take part in a huge range of groups. Additionally, a person's reference groups may affect their attitude or behavior. According to Chaipornmetta (2010) and Sakpichaisakul (2012), different brands and products have distinct effects on reference groups.

H3: Social factors significantly impact consumer purchase decisions in Smartphone buying.

Brand image, product attributes, and societal factors are considered independent variables in this study, and how they influence customer purchasing decisions is the dependent variable. The following conceptual framework has been established to carry out the study systematically based on the review of the literature currently accessible in purchasing decisions.

3. RESEARCH METHODS

The research methodology described the type of research design being used, the population and sample, the sampling procedure, the source of the data, the data collection procedures, and the analytical tools that were used to analyze the data and develop the relationship between the purchase decision and the influencing factors. This study employed a deductive approach based on an objectivist ontological framework and a positivist epistemology. In addition, this study used a descriptive and causal research design.

In the Kathmandu Valley, this study examined how people chose which Smartphone to buy based on brand impression, product qualities, and social factors. Residents of the Kathmandu Valley who are Nepalese make up the study's sample frame. The appropriate sample size of respondents was achieved using an efficient sampling procedure. The primary source was used to gather the study's data. Information on the retention factors was gathered from primary sources. The information required to carry out the desired inquiry was gathered using the structured questionnaire. A questionnaire with a five-point Likert scale was used to collect the main data. The sample for the research consisted of 394 individuals.
Descriptive statistics have been used to identify the positions of the variables. Correlation analysis has examined the connection between independent factors and purchasing decisions. The regression analysis has been used to investigate the impact of independent factors on customer purchase decisions.

**Instrument Development**

Structured questionnaires have been used regarding the brand image, product features, social factors, and purchase decision by indicating 1 for strongly disagree, 2 for disagree, 3 for somewhat disagree, 4 for somewhat agree, 5 for agree, and 6 for strongly agree.

**Data Reliability**

In order to test the reliability, Cronbach's alpha was conducted. Hair et al. (2006) suggested that the value of Cronbach's alpha must be greater than 0.7. Table 1 indicates the test's results of Cronbach's alpha, and all the values of Cronbach's alpha are greater than 0.7. Therefore, this indicates that all 14 items were reliable and valid to measure reliability.

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>Cronbach's alpha</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Image</td>
<td>0.76</td>
<td>4</td>
</tr>
<tr>
<td>Product Features</td>
<td>0.81</td>
<td>3</td>
</tr>
<tr>
<td>Social factors</td>
<td>0.79</td>
<td>3</td>
</tr>
<tr>
<td>Purchase decision</td>
<td>0.83</td>
<td>4</td>
</tr>
</tbody>
</table>

**4. RESULTS**

In this section, collected data are presented and analyzed. Descriptive statistics, correlation analysis, and regression analysis were conducted. Table 2 describes the variables and the relationship between dependent and independent variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>BI</th>
<th>PF</th>
<th>SF</th>
<th>PD</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI</td>
<td>3.51</td>
<td>.68</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td>4.23</td>
<td>.82</td>
<td>.400“</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>SF</td>
<td>3.84</td>
<td>.79</td>
<td>.527“</td>
<td>.375“</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD</td>
<td>4.20</td>
<td>.89</td>
<td>.573“</td>
<td>.434“</td>
<td>.575“</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)**

*. Correlation is significant at the 0.05 level (2-tailed)

The behavior intention scale was used to grade each variable, with a score of 1 denoting strongly agrees, a midway score of 3 denoting uncertainty (neutral), and a score of 5 denoting strongly disagree. Descriptive statistics in Table 2 shows what influences consumers' decisions to buy Smartphone in Nepal. The analysis's findings revealed that the average scores for customer purchasing decisions, brand image, product features, and social factors are 4.20, 3.51, 4.23, and 3.84, respectively. The mean score values are all higher than neutral point 3. It shows that the responses all lean toward agreement and strongly agree with the decisions made about purchasing Smartphones.

The recorded standard deviations are consistent and smaller than 1, ranging from 0.683 to 0.894. It demonstrates that the data's variability to be used is more significant for further use. As a result, it can be said that customers concur with the claims that social considerations, product attributes, and brand image greatly impact consumers' decisions to buy Smartphones in Nepalese markets.
The correlation matrix between the variables under consideration is shown in Table 2. It demonstrates a favorable link between brand image and consumer purchase decisions for Smartphones ($r = 0.573, p<0.05$), as well as between product features and consumer decisions ($r = 0.434, p<0.05$) and social factors and purchase decisions ($r=0.557, p<0.05$) towards the Smartphone. As well as, the recorded standard deviations, which are consistent and smaller than 1, range from 0.683 to 0.894. It demonstrates how crucial the data collection's unpredictability is for the study's objectives. As a result, it can be said that customers concur with the claims that social considerations, product attributes, and brand image greatly impact consumers' decisions to buy Smartphones in Nepalese markets.

Table 3
Multiple Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>$\beta$</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constants</td>
<td>1.74</td>
<td>.323</td>
<td>5.391</td>
<td>.000</td>
</tr>
<tr>
<td>BI</td>
<td>.219</td>
<td>.074</td>
<td>1.605</td>
<td>.001</td>
</tr>
<tr>
<td>PF</td>
<td>.235</td>
<td>.082</td>
<td>2.85</td>
<td>.005</td>
</tr>
<tr>
<td>SF</td>
<td>.273</td>
<td>.076</td>
<td>3.615</td>
<td>.000</td>
</tr>
</tbody>
</table>

$R^2 = 0.582$  \[ F(3,390) = 92.151, p < 0.05 \]

$R^2$ is a measure of the variations that independent variables can explain and demonstrates the model's ability to forecast the future. The predictor variables were brand perception, product attributes, and social influences on purchasing behavior. It means that the brand image, product attributes, and social factors are independent variables that account for 58.2 percent of the variance in Smartphone purchase decisions, with the other independent variables accounting for the remaining 41.8 percent of the variance. The model fits data on the independent effect of independent variables on Smartphone purchase decisions since $F (3, 390) = 92.151, p < 0.05$.

The multiple regression analysis is described in Table 3. It shows that brand image significantly influences Nepalese consumers' decisions to buy Smartphones ($\beta_1 = 0.219, p<0.05$). So, this finding supports the hypothesis (H1). Similarly, product attributes significantly influence consumer purchasing decisions for cell phones in Kathmandu ($\beta_2 = 0.235, p<0.05$). So, this finding supports the hypothesis (H2). At the 5% significance level, social factors ($\beta_3 = 0.273, p <0.05$) also significantly influence consumer purchasing decisions regarding purchasing a Smartphone in Kathmandu. Because of this study's result, hypothesis (H3) is accepted.

4. DISCUSSIONS

This study identified the ways in which social factors, brand image, and product features, as well as consumer behavior in Nepal, are influenced. It has been established that the brand reputation of cell phones significantly influences purchase decisions. It means that consumers consider the brand's reputation in buying smartphones. This result supports the hypothesis (H1) because it is consistent with past studies by Dolich (1969) and Rizwana et al. (2012), indicating that brand image influences consumer choice. In a similar line, it has been found that product attributes greatly impact people's choices to purchase Smartphones in Nepal. This result supports the hypothesis (H2) and is supported by other studies by Guleria (2015) and Sujata et al. (2016), which discovered that features of the product have a significant effect on consumer behavior.

Findings show that social influences greatly impact people's decisions to buy Smartphones. These results confirm the previous findings of Farzana (2012) and Ding et al. (2011) that there is a considerable influence of reference groups, such as friends, family members, etc., on the purchase decision of Smartphones, which supports the hypothesis (H3).
5. CONCLUSION

According to the research findings of the correlation analysis, there is a substantial association between the purchase choice and independent variables such as brand image, product attributes, and social aspects. The outcome of the regression study showed that the image of the brand, product attributes, and brand image all significantly influence customer purchasing decisions for cell phones in the Kathmandu Valley. Therefore, it is determined that the Smartphone's brand image, features, and reference groups like friends and family members also affect consumers' decisions to acquire Smartphones in the Nepalese market. Therefore, this is the universal truth and theory that the brand's image, product features, and social factors significantly influence the purchasing behavior of consumers.

6. IMPLICATIONS

This study is implacable for both the managerial and the academic levels. However, the study's findings can offer a researcher some theoretical direction. The results of this study may offer fresh theoretical perspectives on the variables influencing Smartphone purchase decisions. The research's conclusions demonstrated that the product's brand image, product features, and social aspects substantially impact consumers' decisions to acquire Smartphones. The consequences of these results for the Smartphone sector will be helpful to marketers as well. The study's findings can be used by marketing managers as a practical marketing tool for planning and developing their marketing strategies.

As a result, marketers may have a concept for creating marketing mixes and may develop a marketing plan to increase sales in a cutthroat industry. This research paper will assist businesses in improving their understanding of the elements that affect consumer choice when purchasing cell phones. The study's clear finding aids in understanding the variables that affect consumers' decisions to acquire Smartphone in the Nepalese market. The study's findings may apply to the market and help better understand why consumers acquire Smartphones. It might be beneficial in helping Smartphone manufacturers boost the market's demand in Nepal. Customers now have more options when selecting the brands of Smartphones, they like. As a result, these companies must continue to innovate and use various marketing strategies to expand the number of cell phones they sell. It is advised that Smartphone manufacturers take into account social considerations, product attributes, and brand image to improve customer purchase decisions. Future researchers will use these research findings to learn more about consumer purchasing behavior, how to encourage consumer purchasing behavior, and how to enhance sales by comprehending the elements impacting consumer purchasing behavior. This research could serve as the basis for further investigation into the buying decision.

REFERENCES


