

## Motivations behind the Purchasing Decision of a Smart Phone

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### Abstract

*In this 21<sup>st</sup> century, mobile phone manufacturers have experienced a tremendous change in customer choice preferences and purchasing behavior, which has led scholars to explore a new horizon of research. This paper tries to discover the choice standards of customer in the mobile phone market. The purpose of this study is to discover the underlying factors that affect the customers buying decision. Research data were collected by a reasoned sampling method covering various socio-economic and cultural groups. Structured questionnaires were developed based on empirical research with five points Likert scale. Inferential and descriptive statistical tools were used to analyze the study. The results of the study support the entire hypothesis. The findings suggest that consumers buying decisions are mostly affected by the price, social influence and brand name of the mobile phone. In addition, innovative features, after sales service and multimedia factors also have a significant impact on the consumers buying decision.*

**Keywords:** Buying decision, Innovative features, Brand name, Price, Social influence.

### Introduction

The development of mobile communication and its technology has become the significant innovation in the world due to the tremendous change in customer needs and choices. Mobile phone has become the faster and superior household consumption according to its development. Today, mobile phone has got the first and foremost component of a person's daily life and the fastest communication tool from among other means of communications.

The renovation of mobile phone communication has introduced a new domain of correspondence among people who are thousands mileaway from each other. The huge utilization of mobile as a means of communication leads to rapid improvement of its technology. Simultaneously essential application and innovative features also increase continuously to serve the diverse needs of customers. Mobile phone as a communication tool has experienced through different transformations to make its functionalities more and more convenient between parties (Hakoama and Kakoyama, 2011). Mobile consumers in the developed world were less than a billion in 2001 but it reached five billion at the end of 2010, and the subscribers of developing countries exceed

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the developed countries (Kelly, 2009; Rebello, 2010). The use of mobile phone has dramatically increased in the form of texting, audio-video calling, and emailing, social networking and so on in Bangladesh which was not seen just before two decades back. At the early stage of mobile phone introduction in the country, only some of richer people were capable to using this new invention as a symbol of style. But the scenario is significantly changing day by day. From the socio-economic view, Bangladesh is not a developed country but 147 (Bangladesh Telecommunication Regulatory commission (BTRC), 2018) million subscribers own different mobile brands from among 164.7 million of total population (World Bank, 2018).

Along with the massive use of mobile phone people are getting more focused and complex about their choice of buying this device. As people are getting used to and heavily depend on this device, this sector has faced numerous experiences than before. People's consumption pattern has changed and treated it as an essential tool for living instead of fashionable tool. Now mobile phone is no more only a symbol of style. People are expecting that a mobile would have different product attributes such as brand, price, easy to use, battery durability, dual sim facility, extended memory availability and so forth which are helpful to serve their daily needs. People also become sensitive to functional attributes like audio-video calling, messaging, photo and video shooting & editing, online banking facilities, faster file transfer facilities etc. In Bangladesh mobile phone markets are mainly dominated by some world renowned mobile phone manufacturing companies like Samsung, Nokia, LG, Apple, Sony, HTC, Micromax etc. Though the subscriber of mobile phone is cumulatively increasing day by day but the expectation of common subscribers is not fully discovered yet especially in the northern area of the country. However mobile phone subscribers take into account numerous factors in their buying decision. Through the diverse purchasing pattern and complex choice of consumption, competitive positions have emerged among the mobile phone manufacturers. Manufacturer needs to add innovative features continuously to sustain in their market competitiveness. The study has been devoted to know the underlying factors of buying decision of mobile phone in the country. This study considers the attributes involved into the buying decision of a mobile phone and tried to find out the dominant factors in this process.

The rest of this paper is organized as follows. The next section presents the review of the empirical studies. The following section elucidates the research design of the study. Empirical results and outcomes are presented in sections 4. The final sections 5 and 6 conclude the paper with precious discussions and managerial implications, limitations and future research directions.

### **Review of the Empirical Studies**

Due to the aggressive competition, mobile phone industries are facing uncertainties in the market position. From the view of research prospect a significant number of scholars have invested their knowledge to understand the consumer purchasing behavior regarding this modern communication tool. The study aims to understand the underlying factors involved in the buying decision towards the mobile phone. A recent research work by Kumar and Chaubey (2015) has studied to understand the choice standards of customer which states that product factors are given

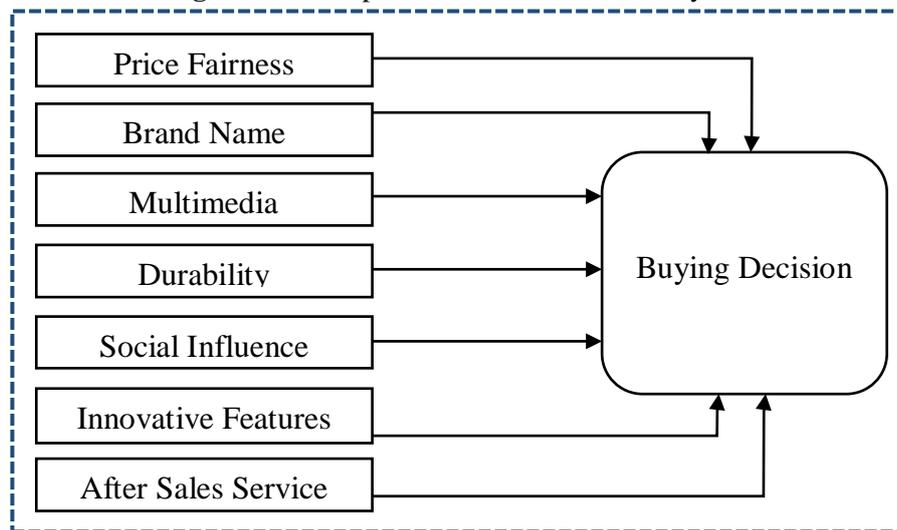
due care to compare with the functional factors while choosing the new brand of mobile phone. Product factors i.e. product price, features have dominant influence over functional factors into the purchasing process. Researches also indicate that demographic factors like income, education and occupation of customer do not have significant influence on product or functional features in purchasing decision. From the analysis of empirical research it is found that consumer purchasing pattern is heavily influenced by its product features. According to Mokhlis and Yaakop (2012) customer purchasing pattern is influenced by seven dominant product features such as innovative features, image, price, personal recommendation, durability and portable aspects, media influence, and post-sales service. Researchers also noted that personal recommendation does play a great role to avoid hazards of buying high risk products. Consumers make their selection strategy based on personal recommendation.

Khan et al. (2016) showed that product attribute durability is the main factor affecting the buying decisions of a consumer followed by price and enforce the consumer to buy substitute mobile brand. Brand name and after sales service have moderate influence on buying decision. Researchers suggest to the mobile phone manufacturers to carefully redesign its strategic framework to brand image, brand positioning and their product differentiation. Product features have always got attention of the customer as it forms product specifications. A research on confirmatory factor analysis shows that pricing, features, brand preferences, social influences have significant role on purchase decision (Malviya, 2013). Researchers also noted that price is not the only concern for the purchase decision. Another study of Petruzzellis (2010) stated that different dimensions which are very relevant to consumer psychological state are taken into account in the buying decision. Brand attitudes have positive effect on consumer psychology towards the purchasing decision. The author suggests that a new thinking is required to design the branding strategies for high-technology product (mobile). Sata (2013) in his study found that the factors affecting buying decision are dominated by price followed by the features incorporated in a mobile phone and work as a motivator to buy this device. The study was built upon six major factors as price, social group, product features, brand name, and durability and after sales services. All the factors do not have equal value on purchase decision and after sales service has least influence on it.

Despite the growing importance of mobile communication very few studies were conducted particularly in Bangladesh. Uddin et al. (2014) have studied to understand the underlying factors affecting customer buying decision. Authors argued that physical features of the mobile phone have dominant effect on buying decision. There are some other factors like price, size and weights, operating facilities and neighbor recommendation have also effect on buying decision. The study was built upon a series of factors to analyze the underlying factors. Another scholar Azam (2008) conclude his study with the findings that low connection charge or sim card charge has great impact on buying decision of mobile phone service and leads to rapid increase of mobile phone subscriber in the country. Consumer prioritizes the connection charge over the other charges during purchasing process of mobile phone. Brand value, internet connectivity, durability of battery, multimedia and performance are the dominant attributes regarding the purchasing process of mobile phone (Siddique et al., 2013). Researchers have concluded their study by

addressing some other factors like memory capacity, price, and country of origin which also have noted some influence on customer buying decision. Azam and Lubna (2013) that attitude towards the behavior has the impact on intention to the buying decision. Researchers also signify that subjective norms are another strong domain which explains the purchasing behavior of mobile customer.

**Figure 1:** Conceptual framework of the study



From the review of empirical research the study found that there are various underlying factors influencing the purchase decision of mobile phone. Some of the researchers indicate that product related factors have dominant behavior, some other researchers recommended that function related factors have dominant behavior over customer choice. From this context the study argued that Bangladesh could be the important area for further study of factors behind the purchase decision of mobile phone. This work grouped the underlying factors into the six broad categories which have influence on buying decision of customer. The study developed following conceptual framework and research hypothesis for this project.

The study is examined through the following hypotheses:

- H1:** Price fairness has significant positive effect on consumer buying decision.
- H2:** Brand name has significant positive effect on consumers buying decision.
- H3:** Multimedia facilities have significant positive effect on consumer buying decision.
- H4:** Durability and portability have significant positive effect on consumer buying decision.
- H5:** Social influence has significant positive effect on consumer buying decision.
- H6:** Innovative features have significant positive effect on consumer buying decision.
- H7:** After sales services have significant positive effect on consumer buying decision.

**Research Design**

This study is basically exploratory research in nature, where it was aimed to discover the relation among three broad independent attributes over the buying decision of consumer. Initially empirical researches, journals and publications were studied to investigate the relevancy for building a conceptual basis for intended research work. A questionnaire method with five points Likert scale has been used for data collection. A structured questionnaire was prepared to make it convenient to answer to cover the most of the common research questions. The questionnaire was designed to draw information on product features, functional features and demographic aspect of respondents. Primary data were collected through purposive sampling method covering various socio-economic and cultural groups. The developed questionnaire was pre-tested with 20 current mobile users. The feedback from the 20 users showed that the instructions and questions were well structured.

The survey questionnaire consists of eight constructs (e.g., price fairness, brand name, multimedia, durability and portability, social influence, innovative features, after sales service and buying attitude). The measurement of price fairness, brand name, durability and portability, social influence and after sales services was modified from Petruzzellis (2010), Mokhlis and Yaakop (2012) and Uddin et al. (2014). Innovative features, multimedia and buying attitude scale were modified from Haq et al. (2015) and Uddin et al. (2014). Microsoft Excel and Statistical Package for Social Science (SPSS) were used to data interpretation and analysis.

The reliability and consistency of the data used in this study was examined by the reliability analysis with Cronbach’s Alpha as a coefficient of internal consistency. The standardized Cronbach’s Alpha for internal consistency reliability is to be measured by the value greater than 0.70 (Hair et al., 2010). In our study this value is accounted 0.907 which indicates the internal consistency of data.

**Table 1: Reliability Statistics**

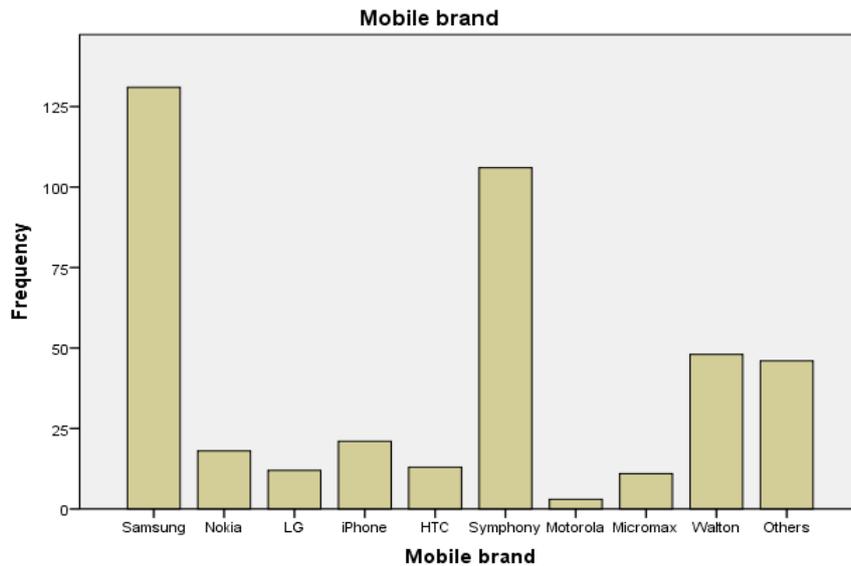
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.907	0.908	29
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.918
Bartlett's Test of Sphericity	Approx. Chi-Square	3608.798
	df	406
	Sig.	0.000

Bartlett’s and Kaiser-Meyer-Olkin (KMO) measures were conducted to measure the suitability of data for factor analysis. It shows KMO measure of sampling adequacy is 0.918 which exceeds the critical value of 0.5 and Bartlett’s test of Sphericity is significant at 0.000 of p value which meet the critical value condition.

**Empirical Results and Outcomes**

The demographic profile of respondents portrays that most of the respondents 38.3% fall in the age group 20-24 years. Out of 409 respondents male respondents are 236. Most respondents have a university degree. 55.3% respondents are students and 17.6% respondents' occupation is business. In case of income level 39.9% respondents fall under the zero income level because they might be students. Second largest income group is below 9000 at 27.9% followed by income group 10000-19000 at 12.7%.

**Figure 2:** Currently mobile brand used by respondents



**Brand of Mobile Phone Owned**

The following figure exhibits the respondents current mobile brand usage. Accordingly, 32% of the respondents currently use Samsung mobile phone followed by Symphony (25.9%), Walton (11.7%) and other brand (11.2%). Motorola is the lowest mobile brand (0.7%) used by the respondents. Moreover, Most of the respondents used Samsung mobile because of its innovative features, variety of model, brand value and its price. Besides, the reduced price is the prime consideration to choose the Symphony mobile brand.

**Descriptive statistics of the variables**

Table 2, portrays the descriptive statistics of variables. The factor with the higher mean value is brand name (mean=4.050) followed by price (3.990) and social influence (mean=3.887). Independent variable after sales service has the lowest score (mean=3.547). The standard deviation lies between 0.817 to 0.548.

**Table 2:** Descriptive Statistics

Variables	Items	Mean	Std. Deviation	N
Price Fairness	4	3.9908	0.54885	409
Brand Name	3	4.0505	0.58031	409
Multimedia	5	3.8083	0.64049	409
Durability and Portability	3	3.7286	0.69934	409
Social Influence	3	3.8875	0.69495	409
Innovative Features	5	3.7218	0.67718	409
After Sales Service	3	3.5477	0.81714	409
Buying Decision	3	3.8427	0.66338	409

**Correlation Analysis**

Pearson correlation analysis is conducted to see the relationship among the constructed factors of mobile phone. The correlation matrix depicts that all the variables are positively correlated with the buying attitude of respondents. Innovative features (0.572) have the higher degree of correlation with buying attitude followed by social influence (0.526) and after sales service (0.509). In contrary the variable multimedia (0.406) has the least correlation.

According to the table 3, the highly correlated factor is innovative features, that have effect on buying decision of mobile phone. In other words innovative features are the primary determinants of consumer buying decision. However, all the variables are positively correlated with the buying decision of mobile phone. Therefore, the proposed hypotheses H1-H7 are verified.

**Table 3:** Correlation table

	1	2	3	4	5	6	7	8
1. Price	1							
2. Brand	0.378	1						
3. Multimedia	0.472	0.555	1					
4. Durability	0.473	0.536	0.605	1				
5. Social Influence	0.442	0.437	0.544	0.420	1			
6. Innovative Features	0.437	0.567	0.615	0.577	0.683	1		
7. After Sales Service	0.373	0.442	0.478	0.487	0.542	0.696	1	
8. Buying Decision	0.437	0.466	0.406	0.423	0.526	0.572	0.509	1

**Regression Analysis**

The regression table illustrate that the relationship between buying decision and its independent variables (price fairness, brand name, multimedia, social influence, innovative features and after sales service) are statistically significant comprising with its critical value 5%. Durability and portability and Multimedia do not meet the critical value of significance. According to the Table

4, the leading factor is price fairness followed by social influence, brand name, and innovative features.

**Table 4: Regression Coefficients**

Model	Standardized Coefficients			Collinearity Statistics	
	Beta	t	Sig.	Tolerance	VIF
1 (Constant)		2.704	0.007		
Price	0.170	3.696	0.000	0.683	1.465
Brand	0.167	3.349	0.001	0.580	1.725
Multimedia	-0.089	-1.611	0.108	0.471	2.123
Durability	0.036	0.677	0.499	0.509	1.966
Social Influence	0.191	3.506	0.001	0.485	2.063
Innovative Features	0.199	2.955	0.003	0.317	3.154
After Sales Service	0.156	2.896	0.004	0.496	2.015

Dependent Variable: Buying Decision

R= 0.651, R squared= 0.424, Adjusted R Squared= 0.414, F= 42.212, Sig= 0.000

The higher the multiple coefficients are, the better the individual variables have effect on dependent variable. The multiple coefficient of 0.651 is better than the average. The adjusted R squared, the coefficient of determination, implies that consumer buying decision of mobile phone is explained 41.4% by price fairness, social influence, brand name, multimedia, innovative features and after sales service. It is noted the variance inflation factor (VIF) values are less than usual threshold of 4 to 10 (O'Brien, 2007) which represents that there is less likely to find multi-collinearity on the variance of regression coefficient. Furthermore, higher tolerance value is 0.683, which additionally confirm the reliability of the results.

## Discussion and Managerial Implications

In this study, several factors (price fairness, brand name, durability and portability, multimedia, social influence, innovative features and after sales service) have been identified as important in an individual's buying attitude toward mobile phone. Results portrait that majority of the respondents consider the price and social influence are the first priority to buy a mobile phone, whereas durability and portability does not show significant result according to regression analysis. The results of this study coincide with the other studies conducted in the consumer buying decision (Kumar and Chaubey, 2015; Malviya et al., 2013). Additionally, Mokhlis and Yaakop (2012), have noted customer buying decision is influenced by seven dominant features as innovative features, image, price, personal recommendation, durability and portable aspects, media influence, and post sales service, which can be a safeguard of these result.

This might happen because of price sensitivity of the consumer and inter relationship among the consumer groups. There could be another reason as almost half of the respondents are students with higher price complexities. The higher a person's burden for the costs of using a smartphone

is, the less likelihood there is that the person will buy a smart phone. Thus, marketers should consider the issues relating with the price factor and social influence factors into their marketing plan and overall strategy. The findings of the study provide additional domain with respect to the importance of price fairness, social influence, brand value and innovative features of the mobile phone.

Additionally, Samsung is the mostly used mobile phone in the country due to its innovative features and convenient price. So each manufacturer should carefully rethink their strategy when developing the marketing and distributing the mobile phone and focus on product design and differentiation, pricing and brand positioning. Moreover, manufactures should periodically conduct survey analysis to understand the consumer recent consuming trend. Finally, this study has contributed to the existing study by identifying the key factors affecting the purchase decision by the consumer.

### **Limitations and future research**

Of course, the findings of this study are weakened by a number of limitations and leave many questions for further investigation. A larger sample size is required in order to get more valid and reliable outcomes. This study was conducted based on single country which results might not be applied to other cultural settings.

Future research may be conducted to the determinants of credibility and continuance behavior of mobile user, exploring the satisfaction value and effectiveness. To predict a greater degree of accuracy in this research, improvements on a number of items, variables, methodology and demographic characteristics should be considered. Future trials could examine more valid items and variables will need to be added for better evaluation.

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