

Consumers' Attitude towards Brand Switching: A Study on Telecommunication Sector in Bangladesh

A dissertation submitted to the Department of Marketing, University of Dhaka in fulfillment of the requirements for the degree of Doctor of Philosophy in Marketing

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March 2018

DEDICATION

*This dissertation is dedicated to my beloved son, **Sheikh Abdur Rahman Bin Sayem** for his wholehearted affection and providing continuous support of my study.*

CERTIFICATE

This is to certify that Meher Neger, PhD Research Fellow, Department of Marketing, University of Dhaka worked on “**Consumers’ Attitude towards Brand Switching: A Study on Telecommunication Sector in Bangladesh**” for the PhD degree of University of Dhaka under my supervision and guidance. To the best of my knowledge and belief her work is original and not any part of the subject matter of any degree previously awarded to anybody elsewhere. She is permitted to submit her thesis for the award of the Doctor of Philosophy in Marketing under the University of Dhaka. I wish her every success.

Md. Zakir Hossain Bhuiyan, PhD

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DECLARATION

I do hereby solemnly declare that the dissertation entitled -“**Consumers’ Attitude towards Brand Switching: A Study on Telecommunication Sector in Bangladesh**” is the outcome of my own endeavor and research. Neither any part of the research outcome has been borrowed from any previous research nor has been submitted for any other degree in any University or Institute.

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ABSTRACT

This study is conducted empirically for measuring consumers' attitude towards brand switching on telecommunication sector in Bangladesh. A conceptual model has been developed based on two constructs and some factors. Telecommunication service related intrinsic and extrinsic constructs where five individual attributes are included (network availability, service quality, service charge strategies, brand image, offered value) and some influential factors (strong advertisement policy, huge offering packages, perception about network coverage, FnF tariff, perception about age of the consumer, profession of the consumer, marital status and user satisfaction level about the current usable SIM , call rate, SMS charge, income, and age of the consumer) are considered for the final study.

Tricomponent Attitude Model has been applied to find out the attitude formation towards telecommunication sector. A descriptive analysis technique (say, arithmetic mean) is used to find out the weighted average of intrinsic & extrinsic attributes which are considered by consumer for receiving telecommunication service.

Fishbein's Multiattribute Attitude model has been used for measuring the overall attitudes of consumers' toward telecommunication sector in Bangladesh, which could help for successful business operation, management, and long-term sustainability of attitude measurement in order to improve product or service quality as per consumer expectation level.

Next guideline of this study was that the support of Markov Chain (Transition Probability) for assessing the brand switching tendencies of the consumer from one state to another, which could help to take right strategies for improving the brand quality of different service providing

organization and to capture high market share by reducing the brand switching behavior of the consumer.

After that binary logistic regression Model has been applied to find out the significance of the influential factors which are considered by the consumers for switching from one to another brand of telecommunication sector.

A total of 840 respondents who have direct role for receiving telecommunication service are selected on the basis of stratified random sampling to fill up the questionnaires where some of the information gathered by using Likert and Semantic Differential scales. Data has been collected from students and different professional (Universities Teacher, Bankers, Corporate officers, Housewife, Government and Nongovernment employees) through a set of structured questionnaire. To measure the overall evaluation (ei) regarding the selected attributes for the specific firm rating scale ranging from extremely good to extremely bad (+3 to -3) was used and asked to encircle the point to express their opinion. The respondents were also asked through the Seven Point Likert scale ranging from 7 indicates very strongly believe, and 1 indicates very strongly disbelieve to know how strongly they believe that the individual firm contains the said attributes.

The result of Tricomponent Attitude Model proved that the consumers of Grameenphone Ltd. are showed significantly positive feelings on the network availability, brand image and service quality dimensions ($p < 0.01$). The score indicates that the service charge strategies and offered value of Grameenphone Limited are not up to the mark.

On the other hand, the table explores that consumers have significant positive feelings ($p < 0.01$) on Banglalink only for network availability. The score also indicates that feeling of the consumers about offered value, service charge strategies, brand image and service quality of Banglalink are not significantly positive. The affection level about Robi is not significantly positive for all said attributes (offered value, service charge strategies, service quality, brand image and network availability).

Findings of Fishbein's Multiattribute Attitude Model point out that the consumers' overall attitude towards Grameenphone Ltd. as the telecommunication service providing firm is higher than other selected firms in Bangladesh. The consumers perceived the telecommunication service which provided by the Grameenphone Ltd. more positively than other firms. So, the consumers' overall attitude to Grameenphone Ltd. is viewed top most favorable position and Banglalink is the next position; Robi is the last position among the three alternatives on the basis of said attributes.

Findings of Markov – Chain (Transition Probability) highlight that the consumer will switch from GP to Banglalink, GP to GP, GP to Robi and GP to Teletalk, whereas the consumer will switch from BL to BL, BL to GP, BL to Robi and BL to Teletalk. Lastly, the likelihood that the consumer will switch from Robi to Airtel, Airtel to Robi, Robi to Teletalk, and Teletalk to Robi.

The result of Binary Logistic Regression Model proved that brand switching is significantly ($p < 0.01$) influenced by strong advertisement. Again, the consumers' those who have positive belief about the perception of offering package is 1.542 times more likely to brand switching rather than those who does not. Age, multiple SIM use, profession, perception about total

attributes rating of the current SIM are the factors which have strongly influenced on brand switching behavior towards the telecommunication sector.

Consumers' vast knowledge and experiences about the product or service and their long- term observation and interactions have played an important role in a service sector. Therefore, attitude and switching behavior of the consumers in Bangladesh can be measured by descriptive analysis or using various types of deterministic and stochastic models.

The implications of these findings can be applied by the different stakeholders to enhance competitive position of different telecommunication service providing firms in the competitive market. From research perspective, the study suggests fruitful directions about the appropriate methods of measuring brand switching and detecting reasons behind brand switching for further research.

ACRONYMES

AGE	Age of the Consumer
ANC	Area of the Network Coverage
BTTB	Bangladesh Telegraph and Telephone Board
CC	Call Charge
FMAM	Fishbein's Multiattribute Attitude Model
FnF	Number of Family and Friends
LRM	Logistic Regression Model
NSPC	Number of SIM of the Consumer
PP	Promotional Package
SIM	Subscriber Identification Module

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Chapter 1

Introduction

1.1 Prelude

Communication is an integral part of human life. From the very beginning of human civilization people were tried to communicate each others to fulfill their social needs. Over the passes of time though the tools of communication have been changed but still it is exist in the society. Currently cellular phone has brought a revolution in the field of communication. Telecommunication makes the whole world in a small village. By using this service life become more comfortable and easier.

It helps us in the field of business, official function, personal communication, recreation, space station and so on. In this 21st century, technology is transforming many aspects of business and market activities. In its broadest sense, telecommunication is used to conduct commerce, including within business, business to business and business to consumers' interaction.

Moreover today's business firms are giving more attention towards competitors than their target market or consumers. Due to privatization and liberalization policy, telecommunication sector is going to pass global changing circumstances all over the world. People are moving from one place to another and they want to talk with the connected people for taking the right decision at the right time during their movement.

So, in a country where the land line is very hard to come by most of the consumers now a day's depend on cell phone to communicate with each other. Mobile or cell phone is a device that made the communication easier. The telecommunication sector, specially the mobile phone sector, is one of the fastest growing business segment of the country which provides a lot of value addition to the society with their services and creating employment opportunities.

The term consumers' attitudes are a composite of a consumer belief, feelings, and behavioral intentions towards the object. It is an enduring organization of motivational, emotional, perceptual, and cognitive process with respect to some aspect of the individual world. It is related with the intention to buy a product or service. The attitude of consumer towards any product or service is the vital influencer in buying behavior. The target of a company in attracting its consumers' is to create consumers favorable attitude. Like many other companies, telecommunication companies are trying to capture high market share by creating favorable consumer attitude.

Another term brand switching refers situations in which consumer changes from purchasing a product brand different from that previously or usually purchased. Brand switching can be instigated by price, promotion, in-store displays, superior availability, perceived improvement or innovations in competitive brands, desire for novelty, number of available brands, perceived risk, frequency of purchase, changes in quality, level of satisfaction with the most recent purchase and others.

So, brand switching is the process of choosing to switch from routine use of one product or brand to steady usage of a different but similar product or dual user. Even if a consumer is loyal to a particular brand; and if the brand does not satisfy his/her needs, the consumers switch to a competitor brand. There are different factors and determinants which affect the switching behavior from one brand to another brand.

Amid many constraints the telecommunication companies in the country are gradually developing. There are six mobile phone operators offering their services to customers in Bangladesh. Grameen Phone Ltd. (GP) owned by Telenor (62%) and Grameen telecom (38%) is the largest and the fastest growing cellular service provider in Bangladesh. It has 56.132 million subscribers which is 47.07% of total. Orascom Telecom Bangladesh Limited (Banglalink), the

second largest cellular service provider, has 31.960 million subscribers which is 34.65% of total. It is a wholly owned subsidiary of Orascom Telecom. Robi Axiata Limited (Robi), the 3rd largest cellular service provider in Bangladesh, has 27.553 million subscribers which is 29.74% of total. The fourth largest cellular service provider in Bangladesh is Airtel Bangladesh Limited (Airtel) which has 10.351 million subscribers, 10.35% of total.

The other two mobile phone operators in Bangladesh are Pacific Bangladesh Telecom Limited (Citycell), it has 0.833 million subscribers which is 0.83% of total and Teletalk Bangladesh Ltd. (Teletalk), it has 4.257 million subscribers which is 4.25% of total market share. Based on market position among the six mobile phone operators the first, second and third largest operators have been selected respectively for the convenience of the study.

The study is conducted to find out the consumers' attitude towards brand switching on telecommunication sector in Bangladesh and also tried to identify the influential factors related with brand switching and consumers' attitude about brand performance. Consumers' attitude towards the objects on the basis of information cues. Such cues have been separated into two categories, namely intrinsic and extrinsic (Jacoby and Olson, 1971). Thus, various intrinsic and extrinsic cues and some factors can influence consumers' attitude towards brand switching on telecommunication sector in Bangladesh.

1.2 Background of the Study

Researchers have taken various approaches to measure brand switching behavior with various reasons being attributed for switching. Accordingly to Bass, (1974), Brand switching phenomenon has long been of interest to switch from routine use of one product or brand to steady usage of a different but similar product or dual user. Marketing researchers at modeling brand switching behavior and providing a useful representation of the influence past purchase on current purchase.

The interest in brand switching has continued to evolve over with different researchers tabling various reasons. In recent years studies continued to be carried out in relation to brand switching looking at the various factors such as demographics especially age and gender (Karani and Francastoro, 2010).

A number of studies have examined the different types of attributes which consumers consider when receiving the services. Examples of different types of attributes include descriptive versus evaluative (Baswise and Ehrenberg, 1987), functional versus representational (De Chernatony and Mc William, 1990) and implicit versus explicit (Biel, 1991).

Holden (1993) found that three broad types of attributes were present in the thoughts of consumers when evoking options to choice. He referred to these as (1) the product category and other brands, (2) functional attributes, benefits and attitudes and (3) purchase and consumption situations. Holden's (1993) found that the presence of different types of attribute resulted in very different evoked/ consideration sets being established.

This research had important implications for brand management as it suggested the linkages to attribute other than the service category that have an influence at the consideration stage. Therefore, it gives managers a wider range of attribute options to establish/ reinforce via marketing communication.

There has been little research undertaken in order to test empirically which types of attributes and factors are considered by consumer. This is an important question given that, in most marketing communications, there is only the opportunity for communicating a simple message. A marketing manager therefore has to answer the question of which is the best message to communicate.

Therefore, the aim of this research is to see whether there were specific types of attributes and determinants that were better for incorporating into marketing activities, namely it is better to develop links between the brand name and the products or service attributes offered by the brand, benefits or likely purchase/ consumption situations.

The service attributes represent the specific services offered by the brand or what the customer is actually receiving. If consumers are unaware about the services offered by a firm, the ability for considering (and therefore choosing) the brand are severely compromised (Romanuik, 2003). Multiple researchers have found relationships linkage between the brand or product cues and brand choice (Cohen, 1966; Axelrod, 1968; Nedungadi, 1990).

An additional benefit of strong linkage with the service category is that it has been shown to have inhibitory effects on the recall of other brands (Alba and Chattopadhyay, 1986). Thus, association with the appropriate product/service is universally considered to be an important aspect of a brand image.

Prior research has typically focused on one product/service for a brand. However, in recent times companies have been constantly expanding their product/service using umbrella brands and bundling multiple products together in one offering for the consumer. Therefore, such a narrow measure has limited use for marketers when evaluating the effectiveness of marketing activities and influencing/ predicting the brand switching behavior of consumers.

The systematic brand switching behavior measurement provides a solid foundation for understanding the roles and values of brand acceptance in the competitive market. Subsequently, it has been suggested that brand attribution should be developed in order to effectively deliver actual services to the markets. The overall brand association, and integrity for product experiences and activities should be equal or surpass those of other available brands of competitors in order to be sustained in the market.

However, because of unevenly distributed product/service attractions, as well as limited availability for attitudes towards brand switching measurement for each brand should be assessed in terms of its own strengths and weaknesses, and differing values and competitiveness in the markets. Thus, the inventory and evaluation brand choice behavior often becomes an important subject management as well as consumer.

Now a days, companies are trying to differentiate their products/ services emphasizing some trivial attributes that in a real sense create no differences from those of its competitors' or sometimes they are not actually used by consumers at all (Chowdhury and Islam, 2003). Different techniques are suggested in the literature to find out which attributes consumers use to judge the products / services (Snelders and Schoormans, 2000). In reality, during the decision for a dealing, it is assumed that consumer not only consider the present value of the products / services but also take the future performance or future associated with the product/service attributes into consideration (Chowdhury and Islam, 2003).

Developing the satisfied customers is clearly a key to successful marketing and to retain the customer toward a specific brand. Before switching from one to another brand the consumers perceive the quality of the product/service related with the other competitor's products/ services available in the market. Consumers' perceptions of quality are generally formed on the basis of some cues. The consumer's task in evaluating the quality of any product/service is to use cues for making evaluation and judgments about that product/service.

However, each brand should be assessed in terms of its own strengths and weaknesses, and differing values and competitive in the markets. The attributes and determinants of the product/service are major stimuli that influence consumers' cognition and switching behavior.

Consumers may be evaluated the attributes of a product/service in terms of their own values, beliefs, and past experiences. Depending upon what and how attributes develop value for consumer, and also how well marketing and promotional programs are managed, brand positioning takes on a successful position in the brand market which can reduce the brand switching from one to other brand; and further successful discussions provide that consumers are more social and economic welfare so far.

1.3 Statement of the Problem

Attitude-behavior relationship is important to marketers because they theoretically summarize a consumer's evaluation of an object (or brand/company) and represent positive or negative feelings and behavioral tendencies. At the same time the link between attitude and behavior can be affected by other factors. Particularly, the quality and attributes of the product \ service are influencing factors in brand choice. It is a difficult task to identify how consumers perceive the quality of a product or service. Consumers are considered to arrive at product/ service choices by utility maximization.

The utility attached to a product or service is derived from its attributes. When faces with a choice decision, consumers use information on the attributes of the alternatives to determine utilities for the alternatives (Michel *et al.*, 1995). Attribute information may be retrieved from memory or may be derived from the choice situation (Hastie and Part, 1986). When consumers are more familiar with the products or services in questions, the quantity of such accessible information in memory is higher.

Hence, at higher levels of familiarity the amount of information that is retrieved from memory on abstract attributes may be larger (Alba and Hutchinson, 1987; Bettman and Part 1980; Sutan, 1985). Hence, if a consumer in unfamiliar with a product or service, she/he tends to evaluate the

product on the basis of the concrete attributes that are directly perceptible when a choice decision is made (Rao and Monroe, 1988).

The complex nature of perception quality can be well understood when a product with excellent attributes do not impress the consumers, whereas, a poorly made product or service impress the consumers as having excellent quality. For buying a certain product the consumer perceive the quality of the product or service related with the other competitors' product or service available in the market.

We know there are many telecommunication companies in Bangladesh. Every company takes various marketing strategies and implement these in the target market which differentiate them from others and create competitive advantages. The research has been tried to test the relationship between(intrinsic, extrinsic) cues and perceived quality of the telecommunication service in Bangladesh.

Product or service quality always depends on different trivial attributes. The image attributes incorporated were based on the service categories, situations and benefits offered. While mentioning the service quality for an image attribute was positively related to future purchase, this relationship did not vary from one to another service providing organization.

The more attributes of product/service is associated with the greater likelihood of the consumer will think and therefore consider the service providing firm for receiving the services and the service firm will be acceptable or any criteria used. The long-term aim is that to select suitable firm for any number of attributes likely to be used by the consumer. This is not investigated carefully for Telecommunication Company in our country, which should be investigated with higher priority and care.

However, even though studies on attitudes measurement, and switching behavior of consumers' towards telecommunication service have been conducted from various perspectives, the dynamic complex natures of the factors of attitudes, especially, firm selection of consumers' and their opinions about attribute preferences and competitive strategies have not been clearly addressed in Bangladesh.

Generally, consumer's attitudes and brand switching behavior are influenced with the various types of factors, including the perceived attributes development impacts, environmental attitudes, affects and cognition (feeling, thinking) and culturally adoption with the products and services have become a problem for the country.

Otherwise, consumers have every chance of switching the mobile service provider due to industry expansion. Mobile industry is growing technically and becoming economical due to competitor's innovative and attractive services. Number of players in this sector is increasing, so, each of them wants to over play with others to attract the consumers. It has become economic; with the end of the result that consumers have less switching cost.

So, the study has empirically tested its relevant components from the perspectives of Bangladeshi consumers. Therefore, the information from this study can help policy -makers and planners to build more competitive brand in the market choice.

1.4 Research Questions

While attitudes cannot be directly observed because of their covert nature, they are nevertheless useful because they are assumed to be precursors of behavior. In other words, an attitude is a predisposition to respond overt behavior. Marketers stand to benefit from favorable consumer attitudes, as reflected in the consistency of consumer behaviors with respect to their brand. The presumed "attitude - leads - to - behavior" relationship allows the use of attitude measurements

as predictors of switching behaviors toward the brand in the market place for the product/service.

We know intervening between attitude and behavior is intention, which is simply the person's subjective estimate of the likelihood that he or she has been engaged in the behavior under study. In order to predict a specific behavior (such as receiving the telecommunication service of a particular company during some specified time period), it is necessary to measure the person's attitude toward performing that behavior, not just the general attitude toward the object at which the behavior is directed.

Accordingly, attitude toward behavior should predict a specific overt behavior better than attitude toward an object. In sum, attitude is a key link in the causal chain between attribute perceptions on the one hand and intentions and behaviors on the other for image based brand. Marketers who take decisions considering causal consequence have a powerful position in their battle for superiority in the market place for choice product or service.

There are many quality and quantity dimensions of the products and services create positive or negative attitude and influence to switch from one to other brand. The study has been considered the telecommunication service as object. The consumers usually follow all the attributes before receiving the telecommunication service in Bangladesh. Therefore, researcher had drawn following research questions based on research problems:

- 1) What are the components influenced to form the attitude of consumer towards the object?
- 2) What are the attributes considered by consumer to use telecommunication service?
- 3) What are the overall attitudes towards the telecommunication sector in Bangladesh?
- 4) What are the factors influenced to switch from one brand to another brand of telecommunication?

1.5 Objectives of the Study

The overall objective of the study is to measure consumers' attitude towards brand switching on telecommunication sector in Bangladesh. The specific objectives are-

- i)** to find out the formation of attitude towards the telecommunication sector;
- ii)** to identify the different attributes which are considered by Bangladeshi consumers for receiving telecommunication service;
- iii)** to measure the overall attitude of consumers towards the telecommunication sector in Bangladesh;
- iv)** to measure different factors and determinants which influence the brand switching behavior of consumers towards telecommunication sector; and
- v)** to provide some suggestions for improving the market position of mobile phone operators in Bangladesh.

1.6 Contributions of the Study

The potential contributions of the study can be discussed from both theoretical and practical standpoints. Basically, the study contributed to a theoretical enhancement of the current level of knowledge in the existing literature on consumers' attitude and brand switching behavior towards the object. This has been achieved by empirically testing the relationships between (intrinsic, extrinsic) attributes and some influential factors to look for consumer perception about specific brand.

One expected advantage of an improved understanding of this relationship is that the reactions of consumer to brand development could be demonstrated. Especially, since little research has focused on consumers' attitude and brand switching behavior from the view point of foreign consumers.

This study could provide new insights about how brand competitiveness could be improved by examining the affecting factors (strong advertisement policy, huge offering packages, perception about network coverage, FnF tariff, perception about age of the consumer, profession of the consumer, marital status and user satisfaction level about the current SIM, call rate, SMS charge, income, and age of the consumer) and some intrinsic and extrinsic attributes (network availability, service quality, service charge strategies, brand image, offered value) development impacts. In terms of its practical contribution, the findings of the study could aid in the planning and development of brand competitiveness strategies.

Since it has been emphasized that consumers' support and participation are among the most important factors in the business, this study could provide information about consumer perception on three telecommunication firms' and attitudes based on different attributes. This professional involvement, knowledge, and practical experiences regarding brand acceptance management planning and development must be reliable sources of developing brand planning programs and strategies in order to enhance the market competitiveness.

Finally, this systematic examination of relationships among the constructs could facilitate a clearer understanding of the nature of consumers' reactions to brand perception, so that the results could help producers, planners and policy-makers to develop more appropriate attributes and influential factors of products/services as well as to enhance competitiveness in brand markets.

Thus, there are three aspects of this research. *The first* is to establish whether there is a quantitative relationship between the brand's association with different types of attributes (network availability, service quality, service charge strategies, brand image, offered value) and future behavior towards the brand of telecommunication sector in Bangladesh. *The second* is to see which, if any, of the attributes are more "strongly" associated with attitude, such that the

attribute could be considered more important/effective to form the attitude. *The third* is that to find out the influential factors (strong advertisement policy, huge offering packages, perception about network coverage, FnF tariff, perception about age of the consumer, profession of the consumer, marital status and user satisfaction level about the current SIM, call rate, SMS charge, income, and age of the consumer) and level of influence on switching behavior towards the telecommunication sector in Bangladesh.

The basic purpose of this study is to provide guidelines to the marketers in choosing the best message for marketing promotion or, indeed, if the 'best message' to the manufacturers or agents for measuring attitude towards brand switching behavior of telecommunication sector. It has been also contributed important information to our understanding of what attributes consider by consumers and how in brand choice being made in the competitive market for the same product or service.

1.7 Functional Definition of Related Terms

Attitude: Attitudes are expression of inner feelings that reflect whether a person is favorably or unfavorably predisposed to some objects (a brand, a service, a retail establishment) Azam (2005). He also added it is closely related with human psychology and it influences the human behavior. Attitude is very important because it reflect what people think, feel and are inclined to do about a product and service.

Brand Switching: Brand switching refers situations in which consumer changes from purchasing a product brand different from that previously or usually purchased. Brand switching can be instigated by price, promotion, in-store displays, superior availability, perceived improvements or innovations in competitive brands, desire for novelty, number of available brands, perceived risk, frequency of purchase, changes in quality, level of satisfaction with the most recent purchase and others. So, brand switching is the process of choosing to switch from

routine use of one product or brand to steady usage of a different but similar product or dual user.

Brands: The brand is conceptualized as node in memo which allows other information about the brand to be "anchored" to it (Aaker, 1991). A brand that is not considered cannot be chosen (Baker *et al.*, 1986) and further the probability of the brand being chosen is a function of the numbers of other brands in the consideration set.

Attributes: Attributes are characteristics or features than an object might or might not have. Attribute represent the specific products/services offered by the brand or what the customer is actually purchasing. If consumers are unaware of the products/services offered by a brand, the ability for considering (and therefore choosing) the brand severely compromised.

Intrinsic and Extrinsic Attributes: In general, attributes relate to product/service performance. They can be further divided into intrinsic and extrinsic attributes. Intrinsic attributes are connected to the product's/services physical characteristics and vary by product/service category. Extrinsic attributes are defined as external aspects, which relate to a product's purchase or consumption.

Objects: Object means products/services, people, companies, and things about which people hold beliefs and attitudes.

Belief: The belief is the knowledge that a consumer has about objects, their attributes, and their benefits.

Factors: Factors refer quantitative characteristics or behavior of the objects. Another sense, a factor is a part or element that contributes to a result. According to the Business Dictionary factor that means a constituent or element to bring about certain effects or results, or indicates a specific multiple, number, or quantity.

Telecommunication Sector: The liberalization of Bangladesh's telecommunication sector began with small steps in 1989 with the issuance of a license to a private operator for the provision of inter alia cellular mobile services to compete with Bangladesh Telegraph and Telephone Board (**BTTB**), the previous monopoly provider of telecommunications services within Bangladesh. Significant changes in the number of fixed and mobile services deployed in Bangladesh occurred in the late 1990s and the numbers of services in operation have subsequently grown exponentially in the past five years.

The incentives both from government and public sectors have helped for industrial growth and it is now one of the biggest industries in Bangladesh. As a populous country, its huge market has attracted many foreign investors. There are 6 mobile phone operators in Bangladesh, operating under the names of Airtel, Banglalink, Citycell, Grameenphone, Robi and Tele Talk. The number of mobile phone subscribers in Bangladesh has reached 135.982 million at the end of June, 2017.

Tricomponent Attitude Model: Tricomponent attitude model views the formation of attitude towards the object. Tricomponent attitude model, attitudes consist of three major components: a cognitive component, an affective component, and a conative component which influence to form the attitude of consumer.

Multiattribute Attitude Model: A Multiattribute attitude model views an attitude object, such as a product or service, as possessing a number of attributes that provide the basis on which consumers form their attitudes. Marketers have been using Multiattribute attitude models to study consumer attitudes. According to this model, consumers have beliefs about specific brand attributes and attach different levels of importance to these attributes (Belch & Belch, 1998).

Fishbein's Multiattribute Attitudes Model: According to Fishbein, "Attitude is an independent measure of affect for or against the attitude object, which is a function of belief strength and evaluative aspect associated with each attribute". Using the model, people tend to like objects that are associated with the good characteristics and dislike objects that they believe have bad attributes.

In Fishbein's Model focus has been given on overall attitude towards an object function of two factors, the strength of the salient belief associate with the object and evaluation of those beliefs (Fishbein's 1963). This attitude theory since has had perhaps the greatest influence on consumer attitude research over three decades.

Logistic Regression Model: According to Hosmer that logistic regression model is the same as that of any other regression model used in statistics, that is, to find the best fitting and most parsimonious, clinically interpretable model to describe the relationship between an outcome (dependent or response) variable and a set of independent (predictor or explanatory) variables. The logistic regression model is that the outcome variable is binary or dichotomous response.

Markov Chain: A stochastic process whose probability of being in any state depends only on its previous state. A markov analysis is a procedure that can be used to describe the behavior of a state in a dynamic situation. Specifically, it describes the behavior of a state in a dynamic situation.

Another sense, future purchasing decision depends on recent past choice. It is well known that brand choice can be described by a Markov chain. It is used to take a two-stage decision making process: *(i) whether to continue or whether to reconsider the last choice, (ii) in the latter case which brand to choose.*

1.8 Synoptic View of the Study

This chapter introduces the background of the study, research problem and questions upon which the study is based. The research objectives are defined and relevant concepts are delineated. Contributions of the study are discussed. Operational terminologies and concepts of this study are defined. **Chapter II** reviews the relevant literature to attitude and brand switching behavior of the consumer, and each of the proposed constructs. The theoretical background and previous conceptual and empirical research findings are discussed. **Chapter III** observes details of the models and conceptual frame work of the study are also presented. **Chapter IV** presents the research framework, a detailed discussion of the research design, development of the survey instrument, sampling, and procedures of data analysis. **Chapter V** reports the results of the empirical analyses of the proposed theoretical model that have been discussed. **Chapter VI** conclusions and the implications of the research are delineated and future research directions are presented.

Chapter 2

Literature Review

2.1 Introduction

This chapter reviews the relevant literature to the study of brand switching behavior and attitudes towards the object. First, a review of relevant concepts, including intrinsic (internal attributes), extrinsic (external attributes) like network availability, service quality etc.; and some influential factors like promotional packages, age of the respondents and so on while discussing the need for this study. The discussion of these concepts serves as the research background for the research questions and objective of the study.

Then, the next section has been provided a review of the relevant literature from where we can find out the research gap. Different theories those are related with the study have been discussed special emphasis was given on attitude and brand switching behavior measurement related theory. A discussion of the linkage between the theoretical background and the components of the proposed model have been presented. Subsequently, the relevant field of the study that pertains to the conceptual model has been discussed in next chapter. Particularly, the section devoted to the development of a theoretical and conceptual model for measuring consumers' attitude towards brand switching behavior and addresses the basis for the relationships among the constructs to be tested in the study followed for next chapter.

2.2 Review of the Relevant Concepts

2.2.1 Intrinsic Attributes

Intrinsic cues referred to the attributes that can't be changed without changing the physical characteristics of the products. To take purchasing decision which cues will be most important for evaluating a product or service for consumer, it is really difficult to know. It is quite natural that high quality product or service would certainly be preferred to consumers' than the low

quality product or service. But the question becomes important while one brand is preferred over another although they contain the same attributes (Chowdhury and Islam, 2003). In this regard, Erickson, Johansson, and Paul (1984) argued that the quality of a good is not only inherently related with the attributes in the good but also the psychological outcome a person or people have for it. Many psychological mechanisms may influence perceived quality, but it is evident from the previous research that product attributes are most salient to consumer (Garvin, 1983, 1984).

Attributes are called the benefits of products/services, and these benefits are the surface means used in advertisement and promotion offer to connect the brand with a motivation which influence brand attitude (Rossister and Percy, 1987). Different techniques are suggested in the literature to find out which attributes consumers use to judge products (Snelders and Schoormans, 2000). In reality, during the decision for a dealing, it is assumed that consumer not only consider the present value of the products but also take the future performance or future associated with the product attributes into consideration (Chowdhury and Islam, 2003). Hence, intrinsic attribute has been considered for this study as the core benefit of the product/ service for which consumers actually receive the product/service.

2.2.2 Extrinsic Attributes

Extrinsic cues are product/service attributes that are not part of the physical characteristics of the product/service but consumers take into consideration during the evaluation of products/services (Chowdhury, 2001). When consumers are not familiar with the services internal attributes like offered value of telecommunication service depends on extrinsic cues. Say for example reasonable service charge is most influential variable for receiving service by consumers. According to Anderson and Beeke (1979), when reasonable service charge is the only informational cue provided, the results might be positively biased toward detecting reasonable service charge effects. It is found that when additional cues are presented, the relative

importance of reasonable service charge on service evaluation diminishes (Dodds and Monroe, 1985). Reasonable service charge is most influential than guaranty/ warranty in consumers' take decision for receiving service (Dodds *et al.*, 1991). For telecommunication service consumers rely more on extrinsic cues in evaluating since the cost of searching for intrinsic cues often exceeds the relative benefits (Zeithaml, 1988).

2.2.3 Network Availability

Network availability is how far in terms of places is the network accessible. Subscribers need to be able to still have network access in the rural areas, highway roads and villages. If subscriber has no network coverage in their locality, they are likely to switch to a competing provider if it has coverage in those locations (Abdullah, Sunny, and Hasan, 2015). In Bangladesh, there are some particular areas where a particular operator has the majority of subscribers. In Chittagong, Robi gain the largest of consumers. In hill tracks area, Teletalk gain competitive advantage because of building mobile network for the first time by them. Hence consumers consider these facts. If network coverage area, quality of network, connection time and sound clarity of current operator do not matches with the customer's expectation, it create conflicts in satisfaction which lead to switching of brand in mobile telecommunication sector in Bangladesh.

2.2.4 Service Quality

Service quality that means an attitude formed by a long-term, overall evaluation of a performance. This quality construct has been variously defined value (Feigenbaum, 1951). Parasuraman (1988), in order to improve service quality, it must be reliably assessed and measured. According to the SERVQUAL model (Parasuraman *et al.*, 1988) service quality can be measured by identifying the gaps between customers' expectations of the service to be rendered and their perceptions of the actual performance of the service.

2.2.5 Service Charge

From a consumers' perspective, service charge is what is given against obtain a product/ service. Service charge has a dual effect on consumer decision making process for receiving service (Rao and Monroe, 1988). First, service charge is a cue to perceived service quality, an effect that is generally positive (Rao and Monroe, 1988; Ratchford and Gupta, 1990). Its strength may be reduced by non-price cues (Zeithaml, 1988). Second, service charge is an indicator of financial sacrifice, an effect that is also generally positive (Venkatesam, 1969). When consumers evaluate products/service they trade- off priced-based perceptions of quality and sacrifice their money (Dodds *et. al.*, 1991; Monroe and Krishnan, 1985; Zeithaml, 1988). To evaluate service positively, consumers must perceive that they are gaining benefits that exceed concomitant sacrifices (Monroe, 1990; Zeithaml, 1998).

2.2.6 Brand Image

The most intangible aspects of the products/services are the brand name, quality perceptions, reputation etc. (de Chernatory and McDonald, 1998). Among the intangible aspects of the product/service, the brand is the most important, given that the majority of marketing strategies tend to highlight the brand including all of its added elements like logotype or slogan more than the product is being sold. Aaker (1994) indicates that the brand associations are based on aspects such as the attributes of the product/service, intangible factors (perceived quality, technological leadership, etc.), and benefits provided to the customer, relative price, use or application, the kind of user or customer.

Hence the brand has the power to differentiate the product/service and separate it from other competitive options, as well as to help motivate consumers in choosing and purchasing the product, thus making them satisfied and loyal. Brands have the different roles for the consumer like: identifying the origin of the product/service; defining the responsibility of the manufacturer; diminishing risk; diminishing the cost of searching for a product; a promise,

guarantee or contract with the manufacturer; a symbolic means and sign of quality (Keller, 1998). Therefore, perceived brand image has been considered for this study as pivotal factor for consumer risk diffusion.

2.2.7 Offered Value

Zeithaml's (1988) exploratory investigation of the value construct identifies four unique definitions upon which consumers appear to base their evaluations of service exchanges. However, she further argues that the four can be summed into a single definition, "offered value is the consumers' overall assessment of the utility of a product/service based on perceptions of what is received and what is given", (Zeithaml, 1988).

The term "offered value" originated in 1950s by Feigenbaum (Milakovich, 2005). Mittal and Gera (2012) defined service value as the tradeoff between perceived sacrifice and perceived benefits. This definition of offered value can provide more critical insights of behavioral intentions. Some researchers, offered value is imperative for influencing behavioral intentions (Choi *et al.*, 2004; and Pura 2005; Lu *et al.*, 2011). Within marketing literature, scholars have noted that offered value is the overall customers' assessment of products/services utility that is based on the perception of what delivered and what is received (Mittal and Gera, 2012).

2.2.8 Promotional Packages

Marketing efforts of the competitors, especially, the advertising and sales promotions have been the areas of interest to researchers because of its influence on brand switching behavior of consumers. Much of the advertising process is aimed at encouraging brand switching among consumers. Lavidge & Steiner (1961) investigated the purpose of advertising relating the switching behavior of consumer that shows the purpose can be classified into either short term-attract more consumers and boost sales or long term-provide information and distinguish brands. Henderson *et al.*, (1994) had found a significant relationship between advertising and brand

switching. It indicates a higher switching rate existed if a consumer had more chances of seeing an advertisement of alternative brands.

Sales promotions have a positive influence on consumers brand switching behavior. Shi, Cheung, & Prendergast (2005) indicated that majority of sales promotion elasticity is linked to brand switching behavior of consumers. The promotional activities of one mobile network operator affect other operators. Subscribers are drawn to special offers and seek offers; such as: bonus on recharge, cash back on use that are better and match them most.

2.2.9 Age of the Respondents

Age is the one type socio-demographic factor; which influence on switching behavior of consumers. Ranganathan *et al.* (2006) established significant effect of demographic factors like: age influences the switching behavior of consumers towards telecommunication sector. The impact of age on consumer behavior is widely accepted (Yoon and Cole, 2008). Age has a profound impact on the way consumers interpret experiences and form attitudes towards marketing communication (Patterson *et al.*, 1997). When compared to younger customers, older customers are less likely to change their purchasing patterns and product preferences and have less desire to switch providers (Yoon and Cole, 2008; Patterson, 2007).

2.2.10 Areas of Network Coverage

Consumers prefer to use those services which are accurate and good value for money. The high network quality provided by companies do influence on consumer toward utilizing the services. Such type of action positively influences consumers and encourage brand switching. However, if the existing brand is able to maintain the service or network quality then a consumer does become loyal due to the satisfaction level, even if the prices are high. Literature also justifies that based on network quality and coverage the cellular networking brand is gaining competitive advantage in Pakistan (Ashraf *et al.*, 2013).

2.2.11 Number of FnF

FnF is known as **Friend and Family**. Every customer has some special number which is very much essential to him. She/he needs to talk with these numbers frequently. So, he/she expects a lower tariff for these numbers. Cell phone operators provide some facilities for these FnF number. The operators who provides lower tariff and gives opportunity to more FnF number the customers are more satisfied with that operator.

2.2.12 Number of Current Useable SIM

This is known as **Subscriber Identification Module**. Every subscriber has the identification module to reduce the crime from the society. At present time biometric SIM registration system is mandatory for all SIM card owners. Under the system every mobile phone SIM card has been associated with its user's identity as it appears in the national identity card database of the Election Commission. Every SIM card owner will be allowed to register a maximum of fifteen mobile phone SIM cards to their national identity card.

As every SIM card will be able to be traced back to a single identity. It will no longer be possible to buy a SIM card from a licensed dealer without explicitly linking it to the identity of a registered Bangladeshi citizen. If any subscriber has more than single SIM he/she will be interested to switch from one to another operator that will provide better service to the customer. So, it has impact on customer to switch from one to another brand.

2.3 Relevant Literature Review

To find out the research gap, it is essential to review the related research works such as articles, books and published research reports. The review of literature can help a researcher for building up the conceptual frame work about certain topics. So, to assume the research problem and find

out the specific research gap, literature reviews are considered an essential assignment. In order the above purpose, some selected reviews have been presented below:

Ranganathan *et al.* (2006) examined the switching behavior of mobile users who were not under any contractual obligations to stay with a provider. Drawing upon the literature on relationship marketing and switching costs, they examined if the relational investments made by mobile users in a user- provider relationship and demographics influenced their switching behavior. Based on data on over 30,590 mobile users, they examined their research questions. Statistical analysis supported significant associations between mobile users "Service Usage", service building and their switching behavior. Support was also found for the influence of age and gender on mobile user switching.

The main limitation of the study was that they had not included the internal and external factors which influence on brand switching behavior.

Price (2006) explored the impact of usage, budgetary constraints involvement and customer characteristics on consumers' intention to switch mobile service provider. The sampling frame was the central register of residents of Slovenia with a random sampling of 1000 individuals, aged 14 to 74 years. The sample was representative of permanent residents of Slovenia. Multivariate regression analysis was used to analyze the data. The result revealed that characteristic of the consumer such as: age, sex influenced the switching behavior.

The main limitation of the study was that only the people in Slovenia have been targeted where majority of the respondents were University students. We could have extended our study to various areas and regions.

Lee & Murphy (2005) investigated the determinants that caused mobile phone customers to transit from being loyal to switching. This study involved almost 50 part-time Singapore University students, divided into 10 groups of 4 to 6 members. Participants were 20 to 30 years

old, and about 3 of 5 were females. By examining what kept customers loyal, and then examining what provoked or enticed the same customers to switch, the findings suggested that the transition from loyalty to switching may be due to changes in the underlying determinants as well as new determinants. Service firms then caused customers to switch service. Customer's reasons for switching service were classified into eight general categories. She found eight main categories of switching behavior. This study concluded that customer switching behavior damages market share and profitability of service firms.

The main limitation of the study was to consider limited number of sample unit. It could have been larger in order to get more responses from the population and made our research more concrete.

N. Meher (2009) objective was that to measure consumer attitude towards internet service. As the stimuli internet service was selected. Fishbein's Multi-attributes attitude model was used to measure the variables. The result of the study was that all of the hypotheses were supported so, product/service related intrinsic cues where included three individual attributes i.e. easy access, seamless connectivity, freedom of service and non product/service related extrinsic cues where also included three individual attributes i.e. guaranty/warranty, reasonable service charge, brand image that served to influence consumer's attitude toward internet service.

The major limitation of the study was that attempted to consider only two internet service providing firms. It would have been more representative if the total number of internet service providing firms of Bangladesh could have been taken under this study.

From the published article "Consumer Attitudes towards Mobile Advertising: An Empirical Study" by **Tsang et, al. (2004)**, it is revealed that the rapid proliferation of mobile phone and other mobile devices has created a new channel for marketing. The use of short message service to access customers through their handheld devices is gaining popularity, making the mobile phone the ultimate medium for one-to-one marketing.

The study investigated consumer attitudes towards mobile advertising and the relationship between attitude and behavior. The result of the study was that consumers generally have negative attitudes towards mobile advertising unless they have specifically consented to it, and there is a direct relationship between consumer attitudes and behavior. Thus, it is not a good idea to send SMS advertisements to potential customers without prior permission.

Anderson, et, al. (1979) objective was that to test a simple structural model relating attitude toward business to product satisfaction, experience, and search effort. Automobiles were selected to measure attitude towards business. The confirmatory factor analysis (CoFAMM) and the LISREL model were used to test the hypotheses. All hypotheses of the model were supported. The relationships among business attitudes and experience and product satisfaction are positive and the relationships between business attitude and search effort in negative.

A Major disadvantage of those models is that large samples sizes are required. It is time and cost constraints for researcher.

Donald G. Morrison (1965) objective was that to test brand-switching models. In most proposed models of consumer behavior, analytical methods of parameter estimation have proven intractable. A computational method for obtaining minimum chi-square estimates is presented. In this method goodness - of - fit statistic that can be used for testing hypotheses is a by - product of the parameter estimation. A quantitative approach for discriminating among competing models of consumer behavior is also developed.

The disadvantage of this minimum chi-square procedure is that many entire are needed in each cell of the contingency table, which is not easily manageable.

Makwana, Sharma, and Arora (2014) objective was that to find out the factors influencing consumer brand switching behavior in telecommunication industry: an empirical study. The

study focused on identifying factors influencing consumer switching behavior in telecommunication industry. On the basis of questionnaires administered to consumers in telecommunication industry, the study reveals that by providing value added services and effective pricing strategies; telecom service providers can control consumer brand switching behavior and can relation the customers.

The major limitation of the study was that though many other factors both internal and external can influence the brand switching behavior, but are excluded from the study due to the scope of the model used.

Hasan et, al. (2013) objective was that to identify the factors influencing to Bangladeshi consumers' mobile phone operators choice and change behavior. Both primary and secondary data were used and data were collected from 174 respondents based on survey method, using self-administered questionnaires distributed to the respondents at the study area irrespective of respondents' socio-demographic characteristics. The study explored that call charge, network coverage, faster internet service and promotional package such as bonus on recharge, cash back on use are the main features that influence consumers' mobile phone operators' choice and switching behavior.

Reza et, al. (2015) objective was that to identify the factors affecting brand switching in telecommunication sector. Variables of the research were service quality, price, brand image, value offered, trust, satisfaction, customer loyalty where as the dependent variable is switching cost. Different techniques were to collect data. The data analysis for the research was done by using the statistical package “SPSS”. This research indicates several factors that play an important role in switching consumers in telecom industry.

The major limitation of the study was to consider some selected factors, but there are some intrinsic and extrinsic attributes which influence on brand switching behavior are excluded from the study.

Satish et, al. (2011) identified the factors that influence the consumers to switch the service providers. They concluded that there is a relation between switching the service provider and the factors like poor network coverage, frequent network problem, high call rates, influence from family and friends.

The limitation mainly all those said factors have some service benefits and risks. Future study may be conducted to assess services benefits and risks of each factors of telecommunication service.

Xuan Zhang (2009) investigated the impact of relationship marketing tactics on customer satisfaction and trust, which in turn increase customer loyalty, by focusing on Swedish mobile telecommunication sector. An analytical model is developed as a guideline to test the relationships between relationship marketing tactics, relationship quality (trust and satisfaction) and customer loyalty.

The main limitation of the study was that only the people in Sweden have been targeted where majority of the respondents were students. We could have extended our study to various areas and regions.

Kuusik (2007) used LOGIT method for testing level of loyalty of 1000 customers of the biggest telecommunication company in Estonia. The author analyzed four factors affecting customer loyalty that is satisfaction, trustworthiness, image and importance of relationship.

Lee and Murphy (2005) explored determinants that cause mobile phone customers to transit from being loyal to switcher. They concluded that there are different factors which affect the customers to switch from loyalty to switching intentions such as price, technical service quality, functional service quality, switching costs, etc. The result shows that price is the most important factor which affects the customers to switch loyalties to another provider.

John (2011) explored the factors that influence customer loyalty of BSNL mobile customers. A sample of 100 consumers who have BSNL mobile services in Jaipur City were surveyed to assess the reasons behind the hard core customer loyalty even in an environment with high quality alternatives. The author recommended that BSNL mobile service enterprises should work on its problems related to servers in order to further strengthen its customer satisfaction and loyalty.

Parmar and Chaudhari (2012) surveyed 100 customers from Surat city to find out the comparative analysis of customer satisfaction before and after the adoption of mobile number portability. Poor network facility of the previous service provider, better SMS pack from new service provider and full talk time on recharge are some of the reasons for switching from one operator to another.

Joseph and Joachim (2010) discussed switching cost and its relationship with customer retention, loyalty and satisfaction in the Nigerian telecommunication market. The author found that customer satisfaction positively affects customer retention and the switching cost affect significantly the level of customer retention.

The limitation mainly telecommunication service was considered for evaluation in this study. Future studies must also explore how the discussed model works for a wider range of products, situations, settings and populations.

Hanif *et al.* (2010) targeted various subscribers of telecom sector in Pakistan to identify the factors affecting customer satisfaction. The results showed that both the factors have significantly contributed towards customer satisfaction but comparatively price fairness had the larger impact on customer satisfaction than customer services.

Douglas A. Galb (1999) identified issues and trade-offs that should be considered in regulating prices for shifting between service providers. Service providers, customer acquisition cost, the

cost to customer of changing service providers and the level of change are important factors in evaluating the effects of a network's operator charge for shifting customers between service providers.

Mohana Prasad and Dr. D. Prasanna Kumar (2016) objective was that factors influencing the behavior of the mobile phone users to switch their service providers Andhra Pradesh. They concluded that there are different factors which affect the customers to switch from loyalty to switching intentions such as price, service quality, technology change, social influence, switching cost, and advertising. The results show that the cellular service providers pay attentions to all factors and especially towards the price of the services, because the consumers' switching intentions were found to be most significantly influenced by the price.

Major limitation was that the study empirically examined six factors that may influence consumers' switching behavior in cellular services. However, there may be other factors that can have an impact on consumers' switching behavior but there were not examined in this study.

Amber Gulamali and Julia Person (2017) objectives was that to find out which type of informant the Social Media Influencer embodies when consumers voluntarily switch brands after the endorsement of a brand by a Social Media Influencer. The data results of the 190 successful questionnaires indicated that when the consumer switches out of dissatisfaction and a need for variety, the Social Media Influencer foremost embodies the role of an opinion leader. The results indicated that the Social Media Influencer functions as an opinion leader, social leader and micro-celebrity.

The major limitation was that the approach which could be relevant to the world to be investigated how diverse consumptions motivations might be related to certain brand switching motivation.

2.4 Research Gap

After reviewed some related literatures, it is clear that maximum researchers tried to measure the consumers' attitude and brand switching behavior separately from the perspectives of foreign consumers, but this research has been tried to focus on both areas at a time from the perspectives of Bangladeshi consumers which remained as an unexplored field. Besides, these literatures considered some factors which serve to influence consumers' switching behavior toward the telecommunication sector. But still there are some intrinsic and extrinsic attributes which serve to influence consumers' attitude toward brand switching behavior of the product or service yet to be explored.

Moreover, in Bangladesh, there is no depth research conducted yet so far in this regards. So, the study has been tried to fill up this gap by using intrinsic and extrinsic attributes (network availability, service quality, service charge strategies, brand image, offered value) and some other factors (strong advertisement policy, huge offering packages, perception about network coverage, FnF tariff, perception about age of the consumer, profession of the consumer, marital status , user satisfaction level about the current SIM, call rate, SMS charge, income, and age of the consumer) at a time for measuring consumers' attitude towards brand switching behavior on telecommunication sector in Bangladesh.

Chapter 3

Model Specification

3.1 Introduction

The main purpose of the study is to measure consumers' attitude towards brand switching on telecommunication sector in Bangladesh; **Chapter 1** introduced the research problem, the objective of the study, and the knowledge foundation of the study. **Chapter 2** presented concepts of relevant topics and a review of relevant literature to find out the research gap of this study. This **Chapter 3** is observed details the models used in the study to fill up the research gap on the basis of literature review.

3.2 Conceptual Framework

From the recent past research have been expended much effort to explore, marketing problem thought the use of Multiattribute models. The modeling approaches can be classified either compositional or de-compositional. Compositional models are usually Multiattribute attitudes models while the most commonly used de-compositional models are conjoint analysis and dimensional scaling.

In early 1970s the literature concerning Multiattribute attitude model proliferated (Wildt *at el.*, 1981). These models appealed to researchers for several reasons. *First*, the models treat complex phenomena in a multivariate formation. *Secondly*, the models attempt to comprehensively capture the nature of the marketing problem in the sense that may potentiality relevant characteristic are incorporated in the formulation and linked to the dependent variables believed to be associated with one or more components of the consumer choice process (preference, behavior intention, purchase etc.). *Third*, the incorporation of identifiable components in the models enhances their explanatory value and, therefore, their diagnostic value (Wildt *et al.*, 1981).

Brand switching has been described traditionally in a straight forward way by Markov chains (Bass 1961, Montgomery and Urban 1969, Schmalensee 1972). In order to put some structure into the transition probabilities it has been suggested that brand loyalty or switching involves two- stage decision process: **i) *whether to stick to the same brand, and if not, ii) which new brand to choose*** (Schmalensee 1972).

On the other hand, brand attitudes have been conceptualized as Multiattribute expectancy value model (Fishbein and Aizen, 1975). The model views attitudes as the sum of the salient beliefs; a consumer holds about a product/service, multiplied by the strength of evaluation of each of those beliefs as good or bad.

The literature on attitude towards brand switching has been related to both intrinsic and extrinsic related attributes and some influential factors which influence to switch from one to another brand. Negative evaluation decreases the brand loyalty and increases the brand switching from one to another, and positive overall evaluation towards the brand increases the customer retention towards a specific brand.

Brand attributes consist of 'bits' of information that are linked to the brand name in consumer memory and that, when combined with the brand name, make up a brand's image (Keller, 1993). The brand attributes and influential factors themselves can come from a variety of sources, including consumer experiences, marketing communications, or word of mouth (Krishnan, 1996).

The linkages between the brand name, its attributes, and other brands in the market place mean that associated attributes can be unique to the consumer, unique to the brand, or shared with other brands (Meyers - Levy, 1989). The telecommunication sector, specially the mobile phone sector, is one of the fastest growing business segments of the country. Telecommunication makes the whole world in a small village and by using this service life become more comfortable and easier.

Consumers always try to receive the service based on a lot of attributes. The main attributes those are considered for the study are; network availability, service quality, service charge strategies, offered value, and brand image. These attributes represent the specific products/services offered by the brand.

However, brand switching behaviors are affected by various factors. The major factors those are considered for the study are; strong advertisement policy, huge offering packages, perception about network coverage, FnF tariff, perception about age of the consumer, profession of the consumer, marital status, user satisfaction level about the current SIM, call rate, SMS charge, income, and age of the consumer which influence on consumer to switch from one to another brand of telecommunication sector in Bangladesh.

Familiar brands GP, Banglalink, and Robi considered for each attribute and factor. These attributes and influential factors may do not exist equally in all said brands. The focus of the study is to look for the situation of consumer brand switching behavior on the basis of different attributes and factors of telecommunication sector in Bangladesh.

3.3 Conceptual Model of the Study

Attitudes cannot be directly observed because of their covert nature. In other words, an attitude is a predisposition to respond overtly and that this predisposition leads to actual overt behavior. Marketers stand to benefit from favorable consumer attitudes, as reflected in the consistency of consumer behaviors with respect to their brand (Kim, 2002).

The presumed "attitude-leads-to-behavior" relationship allows the use of attitude measurements as predictors of brand switching behavior in the market place. Researchers in a variety of marketing settings have found intentions to be very good predictors of subsequent behavior. This is because in order to predict a specific behavior (such is purchasing of a particular brand during some specified time period). It is necessary to measure the consumers' attitude towards

brand switching behavior, not just the general attitude toward the object at which the behavior is directed.

Communication is an integral part of human life. People receive the telecommunication service to talk with the connected people for taking the right decision at the right time during their movement. Consumers always try to receive the service based on a lot of attributes. The main attributes those have been considered for the study are; network availability, service quality, service charge strategies, brand image, offered value; and some influential factors which influence on consumers' brand switching behavior are that strong advertisement policy, huge offering packages, perception about network coverage, FnF tariff, perception about age of the consumer, profession of the consumer, marital status, user satisfaction level about the current SIM, call rate, SMS charge, income, and age of the consumer. Familiar brands GP, Banglalink and Robi are considered for each factor and attribute. These factors and attributes may do not exist equally in all said brands.

The attitude measurement of consumers towards brand switching behavior is very important to the manufacturing companies and marketing managers for their total marketing strategies. Therefore, the focus of the study is to look for the situation of consumer brand switching behavior on the basis of different trivial factors and attributes towards a specific brand of telecommunication sector in Bangladesh.

Figure-3.1 indicates that product/service related attributes are divided into two broad categories, i.e., Intrinsic or Internal and Extrinsic or External and both attributes are influenced on forming attitude of consumers. Otherwise, there are some influential factors which influence to switch from one brand to another brand.

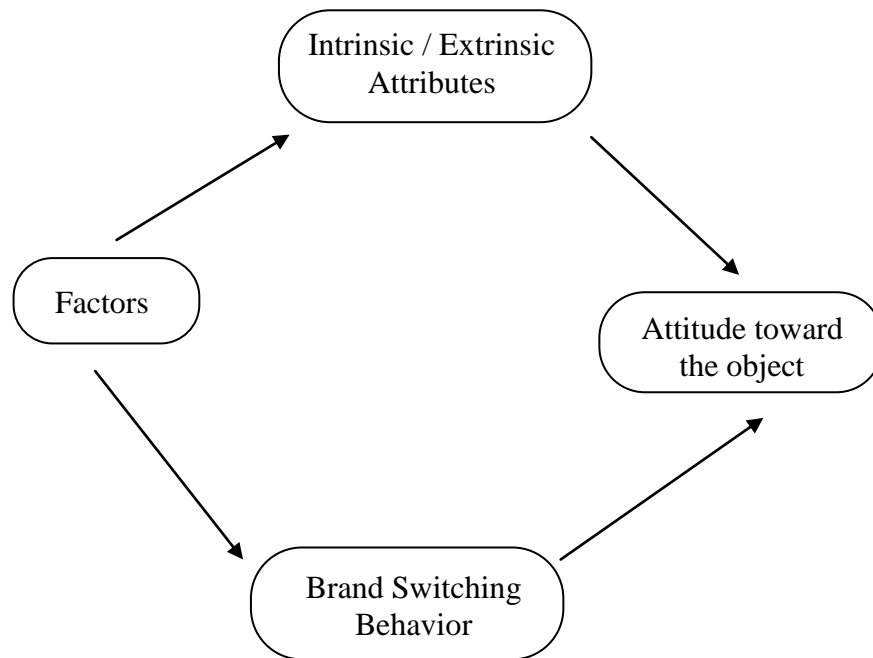


Figure 3.1 Proposed conceptual model for consumers' attitude towards brand switching behavior

3.4 Theoretical Background

Favorable attitude can be reduced the switching behavior, and attitude of consumers are influenced with the total attributes of the product/service. Better service has emerged as an issue of paramount importance for the telecommunication service providing firms. It has been identified as one of the most effective means of building a competitive position and improving organization performance (Lewis, 1993). Establishing better service enhances customer satisfaction – thus generating increased market share and profitability of organization (Hoffman and Bateson, 1997).

From the recent past years, researchers have expanded much effort in exploring marketing problem through the use of Multriattribute models. These modeling approaches can generally be classified as either compositional or de-compositional. Compositional models are Multriattribute attitudes models, while the most commonly used decomposition model conjoint analysis and

multidimensional scaling (Albert *et al.*, 1981). Attitudes represent our covert feelings of favorability or unfavorability toward an object.

Formally, attitude is defined as "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object" (Fishbein and Ajzen, 1975). Consumers learn these attitudes overtime by being exposed to the object directly (experience) or through receiving information about the object.

Brand switching behavior measurement is essential for marketer to take appropriate marketing strategies. Researchers have defined brand switching behavior in different ways. Brand switching has long been of interest to marketing researchers at modeling on brand switching behavior and providing a useful representation of the influence past purchase on current purchase (Bass, 1974).

However, because of increased the customer retention in the service sector, researchers are defining switching behavior from the customer's perspective. Among brand switching behavior related literature, the widely used definition of switching behavior is that the process showed by a consumer, behaving differently to a particular brand and alteration in the preference of the existing product or service. Brand switching occurs when a consumer switches his allegiance from one brand of a certain type of product to another brand.

In general, consumer satisfaction is found to be the most common factor responsible for the consumer's switching action or behavior (Fernandes and Santos, 2007). When any company loses a consumer they are not only losing future earnings but incurring the cost of finding new consumers. For this reason, the researchers have also developed an instrument called Markov-chain to measure the brand switching behavior of the consumer.

Our learned attitude towards brand switching behavior serve as general guides to our overt behavior with respect to the attitude object, giving rise to a consistently favorable or unfavorable

pattern of response. Favorable pattern of response indicates that consumers have no possibility or chance to switch from one to another brand, and unfavorable pattern of response indicates that consumers have possibility or chance to switch from one to another brand.

3.4.1 Tricomponent Attitude Model

Tricomponent attitude model represents the three components of an attitude; and those components are interrelated. Such as:

3.4.1.1 The Cognitive Component

The first part of the tricomponent attitude model consists of a person's cognitions, that is, the knowledge and perceptions that are acquired by a combination of direct experience with the attitude object and related information from various sources. This knowledge and resulting perceptions commonly take the form of beliefs; that is, the consumer believes that the attitude object possesses various attributes and that specific behavior will lead to specific outcomes.

Although it captures only a part of consumer's belief system about three types of telecommunication service providing firms (e.g., GP, Banglalink, and Robi); and consumer's belief system for those selected firms consist of the same basic five attributes: network availability, service quality, service charge strategies, brand image and offered value. However, consumers have somewhat different beliefs about three selected firms with respect to those attributes.

3.4.1.2 The Affective Component

A consumer's emotions or feelings about a particular product or brand constitute the affective component of an attitude. These emotions and feelings are frequently treated by consumer researchers as primarily evaluative in nature; that is, they capture an individual's direct or global

assessment of the attitude object (i.e., the extent to which the individual rates the attitude object as "favorable" or "unfavorable", "good" or "bad").

Research indicates that such emotional states may enhance or amplify positive or negative experiences and that later recollections of such experiences may impact what comes to mind and how the individual acts. For instance, a person visiting a service center is likely to be influenced by his or her emotional state at the time.

The emotionally enhanced response to the service center may lead the service provider to recall with great pleasure the time spent at the service center. It also may influence the individual service sector to persuade friends and acquaintances to visit the same service center and to make the personal decision to revisit the center.

3.4.1.3 The Conative Component

Conation, the final component of the tricomponent attitude model, is concerned with the likelihood or tendency that an individual will undertake a specific action or behave in a particular way with regard to the attitude object. According to some interpretations, the Conative component may include the actual behavior itself.

In marketing and consumer research, the Conative component is frequently treated as an expression of the consumer's intention to buy.

3.4.2 Fishbein's Attitude Theory

Fishbein's (1963) attitude theory has had perhaps the greatest influence on consumer attitude related research over three decades. According to Fishbein's attitude is an independent measure of affect for or against the attitude object, which is a function of belief strength and evaluative aspect associated with each attribute.

Fishbein drew his support for this proposition from behavioral learning theory. Simply stated, his contention was that an attitude toward an object is more or less automatically learned as one learns about the object itself. That is, when one learns about a new product, that learning occurs in the form of beliefs about product/service attributes. Associated with each attribute is an evaluative aspect, which can be thought of as a "sub-attitude", an attitude toward that attribute which already exists. Therefore, Fishbein's attitude theory captures how beliefs attributes of a certain object lead to the attitude toward that object.

The notion of attribute salience has important implications for attitude change within the Fishbein theory. Since attitudes are viewed as being causally determined by cognitive structure, then the Fishbein theory implies three basic strategies for attitude change: *(1) Change the belief strength associated with an attribute, (2) Change the evaluative aspect associated with an attribute, and (3) Introduce a previously non-salient attribute into cognitive structure.* Therefore, promotional tools focusing on one or more of the above three strategies should succeed in changing, reinforcing or creating one's attitude (Mowen, John C. 1990).

3.4.3 Fishbein's Multiattribute Attitude Model (FMAM)

A great deal of marketing research has focused on developing models for predicting the attributed produced by this integration process. These are called Multiattribute attitude model because they focus on consumers' beliefs about multiple product or service attributes. Of these Martin Fishbein's model has been most influential in marketing.

The key proposition in Fishbein's theory is that the evaluations of salient beliefs cause overall attitude. Simply stated, people tend to like objects that are associated with "good" characteristics and dislike the objects they believe have "bad" attributes. In Fishbein's Multiattribute model, overall attitude toward an object is a function of two factors: *the strengths of the salient beliefs associated with the object and the evaluation of those beliefs.*

Formally, the model proposes that:

$$A_0 = \sum_{i=1}^n b_i e_i$$

where A_0 = attitude toward the object, b_i = the strength of the salient belief that the object has attributed i , e_i = the evaluation of attribute i , n = the number of beliefs about the object (**Fishbein, 1963**). Fishbein's model was developed to predict consumer attitudes although; marketers often use it to diagnose marketing strategies. The model is used to examine the component beliefs that underlie consumer attitudes.

3.4.4 Importance of Multiattribute Attitude Model

Marketers have been using Multiattribute attitude models to study consumer attitudes. A Multiattribute attitude model views an attitude object, such as product/service, as possessing a number of attributes that provide the basis on which consumer form their attitudes. According to this model, consumers have beliefs about specific product attributes and attach different levels of importance to these attributes (Beleh, 1998).

For example, a consumer may have beliefs about various brands of telecommunication service on certain attributes. One brand may be perceived as having brand image, network availability and reasonable service charge. Another brand may be perceived as having these attributes, but consumers may believe it better service on other attributes such as offered value and technical excellence. In order to predict attitudes, we must know how important consumers attach to each of these attributes. To parents, they may prefer a brand that performs well on network availability which leads to a more favorable attitude toward the first brand.

To teenagers, they may be more interested in the second brand for said attributes, reasonable service charge and technical excellence. Consumers may hold a number of different beliefs about brands in any product or service. However, not all of these beliefs are activated in forming

attitude. Just as what we discussed before, marketers should identify the salient beliefs among different market segments, over time, and across different consumption situations (Belch, 1998).

Multiattribute Attitude Model helps marketers to diagnose the underlying basis of consumers' attitudes. By knowing their beliefs, markets are able to develop communication strategies for creating, changing or reinforcing product attitudes and, in the end, leading to purchasing the products or services. A number of different Multiattribute attitude models had been adopted in order to predict consumers' attitude toward object.

The attitude towards the object model or Fishbein's model received the most attention from consumers and marketing research (Mowen, 1993, Azam, 2005). The model stated that to determine a person's overall attitude towards some objects, it is necessary to first determine those beliefs that have the most influence on his/her attitude. These most relevant beliefs we are called salient belief. The overall attitude towards an object can be obtained by multiplying the belief score with the evaluation score.

3.4.5 Logistic Regression Model

The logistic regression model is that model where to outcome (dependent or response) variable is binary or dichotomous. The qualitative response of this model is that yes/no or presence/absence and this response are coded by numerical value "1" and "0". The distribution of this model is binomial distribution. Maximum likelihood method is used to analyze the logistic regression model.

The maximum likelihood estimate and is denoted as $\hat{\beta}$. In practice many researchers choose the logistic regression model because of its comparative mathematical simplicity that means, easily useable and understandable. In summary, we have shown that in a regression analysis when the outcome variable is dichotomous:

- i) *The model for the conditional mean of the regression equation must be bounded between zero and one.*

ii) *The binomial, not the normal, distribution of the errors and is the statistical distribution on which the analysis is based.*

iii) *The principles that guide an analysis using linear regression also guide us in logistic regression.*

The proposed logistic regression model is that

$$Y_i = \beta_0 + \beta_1 PP_i + \beta_2 AGE_i + \beta_3 FnF_i + \beta_4 NSPC_i + \beta_5 ANC_i + \beta_6 CC_i + \varepsilon_i ; \quad i = 1, \dots, n$$

Where $Y = \begin{cases} 0, & \text{No Switching} \\ 1, & \text{Switching} \end{cases}$

PP = Promotional Packages

AGE = Age of the consumer

FnF = Number of FnF

NSPC = Number of SIM of the consumer

ANC = Area of the network coverage

C = Call charge

ε_i = Random of error.

3.4.6 Markov - Chain Model

Brand switching has been described traditionally in a straight forward way by Markov Chains (Bass 1961, Montgomery and Urban 1969, Schmalensee 1972). A markov analysis is a procedure that can be used to describe the behavior of a state in a dynamic situation. The important part of the markov - chain is transition probability matrix.

Transition probability matrix is a matrix used to describe the transitions of a markov chain. Each of its entries is a nonnegative real number representing a probability. In order to put some structure into the transition probabilities it has been suggested (Schmalensee 1972,) that brand loyalty or switching behavior involves two-stage decision process : **i) *whether to stick to the same brand, and if not, ii) which new brand to choose?***

There are two basic possibilities here, whether the old brand will be ruled out or not. While Schmalensee assumed the probabilities of brand loyalty to be the same for all brands, we allow it to depend on the brand, since it is after all an indication of consumer satisfaction with the product.

Transition probability matrix is the matrix; by which to determine the possibility or chance of the consumer to switch from one state to another. The probability transition matrix for three state GP, Banglalink, and Robi are given below-

State	GP	BL	Robi	Airtel	Teletalk
GP	P_{11}	P_{12}	P_{13}	P_{14}	P_{15}
BL	P_{21}	P_{22}	P_{23}	P_{24}	P_{25}
Robi	P_{31}	P_{32}	P_{33}	P_{34}	P_{35}
Airtel	P_{41}	P_{42}	P_{43}	P_{44}	P_{45}
Teletalk	P_{51}	P_{52}	P_{53}	P_{54}	P_{55}

Since the total of transition probability from a state i to all other states must be 1, so that

$$\sum_{j=1}^n P_{ij} = 1.$$

Chapter 4

Research Methodology

4.1 Introduction

The main purpose of the study is to measure consumers' attitude towards brand switching on telecommunication sector in Bangladesh. The aim of the current chapter is to discuss a detail research methodology which has been used to collect and analyze the data. With a view to conduct a research study, what is necessary is to design the research framework and select the appropriate research methodology.

4.2 Research Framework

An attitude is a predisposition to respond overtly and this predisposition leads to overt behavior. Marketers stand to benefit from favorable consumer attitudes, as reflected in the consistency of consumer behaviors with respect to their products/services. The presumed "attitude leads to switching behavior" relationship allows the use of attitude measurement as predictors of brand switching behavior in the market place. Researchers in a variety of marketing setting have found intentions to be very good predictors to predict a specific behavior such as, using a particular brand during a specified time period.

It is necessary to measure the consumers' attitude towards brand switching behavior, not just the general attitude toward the object at which the switching behavior is directed. Due to privatization and liberalization of policy telecommunication sector is experiencing phenomenal global change all over the world.

Consumers mainly receive this service for maintaining communication and taking the right decision at the right time during their movement. Consumers always try to receive the service based on a lot of attributes. The main attributes those have been considered for the study are; network availability, service quality, service charge strategies, brand image, offered value; and some influential factors which influence on brand switching behavior towards

telecommunication sector in Bangladesh. Familiar telecommunication service providing organization; such as GP, Banglalink and Robi have been considered for each attributes and factors. These attributes and factors may do not exist equally in all said organizations.

The attitude of consumers' towards brand switching behavior of telecommunication sector is very important to the service providing organizations and marketing managers for their total marketing strategies. Therefore, the focus of the study is to look for the attitude of consumers' towards brand switching behavior of Grameenphone Ltd., Banglalink, and Robi which are influenced with the total attributes and some influential factors of the telecommunication service.

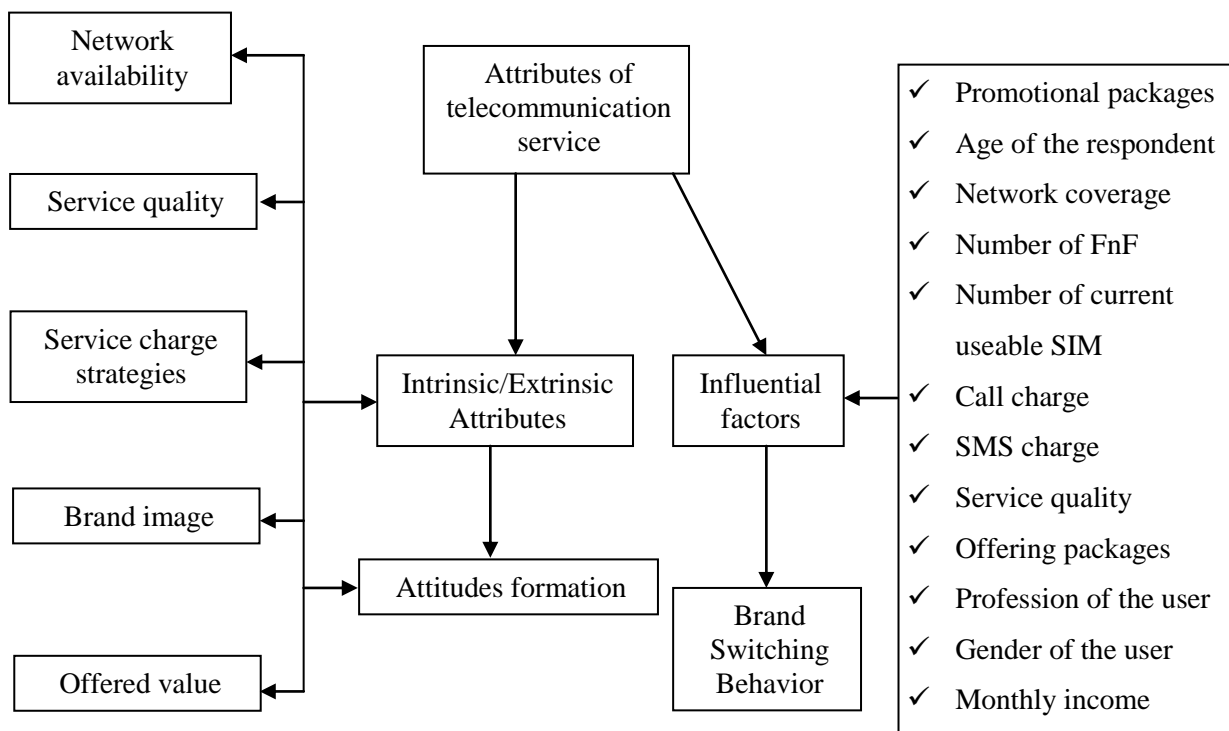


Figure 4.1 Individual variables for proposed conceptual model

4.2.1 Research Phase

Exploratory and descriptive research designs have been used for the study. The reason for using the exploratory research design is to gain insights into the problem. Descriptive research design has been used to describe the characteristics of the object.

4.2.2 Object Selection

Telecommunication has become a part of the social fabric in the 21th century (Herbert 2002). All most spare of modern life is influenced one way or other ways by the telecommunication service (Sandage, 1999). Consumers' brand switching behaviors are always influenced by a numbers of factors, which lead them to select a particular brand preference to other (Kamal, 1992). In this case consumers' consider both intrinsic and extrinsic attributes to take decision for receiving the telecommunication service.

In Bangladesh maximum consumers are economically so much conscious for which they provide much effort and even are usually using reference group to take decision. They put forward their concentration on some important attributes which are very important and salience to them during the receiving it. Consumers of our country usually let much money for receiving the service. Moreover, all attributes and factors are effective for Bangladeshi consumers in case of receiving the telecommunication service.

At present time there are six mobile phone operators available offer the service in Bangladesh. Individual consumer considers some important attributes and factors which influence on consumers' attitude towards brand switching behavior. Consumers avoid those services' which are not attributed as expected by them (Mia, 1999). Therefore, from the variety of thought telecommunication service has been considered as stimuli for the study.

4.2.3 Attributes Selection

The purpose of this stage was to select the attributes those were considered by the consumers. This information cultivated among 100 respondents where approximately 70% were students of the universities (public and private) and rests 30% were professionals of different categories (Universities Teachers, Different Businessmen, Bankers, Corporate Officers, Housewife, and others Government, Non government employees). When asked the subject about the attributes of

telecommunication service that are basically considered for receiving the service, they replied 10 attributes (*Table: 4.1*). Among those attributes' that (up to 30% and above) have been selected for the convenience of the study.

Table 4.1: Consumers' opinion for different attributes of telecommunication service

No.	Attributes' Name	T.R.	T.R.D	%
1	Network Availability	100	75	75
2	Service Quality	100	60	60
3	Service Charge Strategies	100	45	45
4	Brand Image	100	42	42
5	Offered Value	100	40	40
6	Customer Care Service	100	28	28
7	Guaranty/ Warranty	100	22	22
8	Technical Excellence	100	17	17
9	Un-compromised Security	100	10	10
10	Less Radiation	100	06	06

Source: Field Survey

TR = Total Respondents, TRD = Total Respondents' Response

From *table-4.1*, it is found that network availability, service quality, service charge strategies, brand image, and offered value as opined by 75%, 60%, 45%, 42%, 40% respondents respectively. So, those five attributes bear up to 30% and above had been selected for the convenience of the final study.

4.2.4 Type of Data

Both primary and secondary data have been used to get the actual findings of the study. Primary data has been collected from the field directly and secondary data has been collected from the published materials of different organization (BTRC, Grameen Phone Limited and others).

4.3 Measurement Scales and Instruments

The conceptual model of the study has been designed to empirically test the systematic relationship among different attributes (extrinsic / intrinsic) and some factors. Preferences of consumers about brands and attributes ultimately come out from both attributes supported not only for attitude development but also sustain for the long time in the competitive market. Basically, two attributes and some influential factors are examined to find out the actual

behavior of the consumer. The measurement variables or scales collection of items intended to reveal levels of theoretical variables to measure the attributes (Devellis, 1991).

Accordingly, the measurement scales were developed to measure phenomena that are believed to exist because of a theoretical underpinning or observations, but cannot be accessed directly. As a result, this measurement enables one to assign numerals to objects, events, or observable phenomena with different degrees of a quality or property (Duncan, 1984).

The measurement scales for this study are developed based on the literature review and relevant theories, previous empirical studies and results, and observations and experiences of the given phenomena. Measurement of scale for this research has been followed in light of research performed by Yoon (2002). The following section details the measurement scales and the components used to find the formation of the attitude; the items used in measuring both constructs in this study.

4.3.1 Measurement of consumer thinking about intrinsic and extrinsic attributes of telecommunication sector

The three individual telecommunication service providing firms have been selected for determining the attitude formation regarding the selected attributes for the specific brand of telecommunication sector. This has been done to satisfy the requirement of Tricomponent Attitude Model to measure the consumer attitude formation towards the telecommunication service provided by Grameen Phone Ltd., Banglalink and Robi firms in Bangladesh.

The statements for determining the formation of consumer attitude about individual attribute measurement have been shown *table 4.2*. Rating scale ranging from very strongly believe to very strongly disbelieve (+3 to -3) has been used and asked to write score to express their opinion (Malhotra, 1996). The final result has been reported in the result section, **Chapter 5**.

The question is to the respondents as; *what is your thinking about the following attributes that influence attitude formation towards the telecommunication sector of some selected firms in Bangladesh?*

Table 4.2 Measurement of consumer thinking about intrinsic and extrinsic attributes of telecommunication sector

Attributes (Intrinsic / Extrinsic)
1. Network Availability
2. Service quality
3. Service charge strategies
4. Brand image
5. Offered value

Note: +3 = *very strongly believe*, +2 = *strongly believe*, +1 = *believe*, 0 = *neither believe nor disbelieve*, -1 = *disbelieve*, -2 = *strongly disbelieve*, -3 = *very strongly disbelieve*.

4.3.2 Measurement of consumer feelings about intrinsic and extrinsic attributes of telecommunication sector

The three individual telecommunication service providing firms have been selected for determining the attitude formation regarding the selected attributes for the specific brand of telecommunication sector. This has been done to satisfy the requirement of Tricomponent Attitude Model to measure the consumer attitude formation towards the telecommunication service provided by Grameen Phone Ltd., Banglalink and Robi firms in Bangladesh.

The statements for determining the formation of consumer attitude about individual attribute measurement have been shown **table 4.3**. Rating scale ranging from very bad to very good (**1 to 5**) has been used and asked to write score to express their opinion. The final result has been reported in the result section, **Chapter 5**. The question is to the respondents as; *what is your*

feeling about the following attributes that influence attitude formation towards the telecommunication sector of some selected firms in Bangladesh?

Table 4.3 Measurement of consumer feeling about intrinsic and extrinsic attributes of telecommunication sector

Attributes (Intrinsic / Extrinsic)
1. Network Availability
2. Service Quality
3. Service Charge Strategies
4. Brand Image
5. Offered Value

Note: 1 = very bad, 2 = bad, 3 =neither good nor bad, 4 = good, 5 =very good

4.3.3 Measurement of consumer evaluation about intrinsic and extrinsic attributes of telecommunication sector

The 3 individual telecommunication service providing firms are chosen for measuring consumer evaluation about the intrinsic and extrinsic attributes corresponding variables identified. This has been done to satisfy the requirement of Fishbein's Multiattribute Attitude Model (Fishbein's, 1963) to measure the consumer attitude towards telecommunication service provided by Grameen Phone Ltd., Banglalink and Robi firms in Bangladesh.

The statements for evaluation of consumer about individual attribute measurement are shown **table 4.4**. A Seven Point Staple Scale is used as the response format with assigned values ranging from +3 = extremely Good, -3 = extremely Bad (Malhotra, 1996). The final result has been reported in the result section, **Chapter 5**. The question is to the respondents as; *what is your evaluation about the following attributes that influence attitudes towards the telecommunication service of some selected firms in Bangladesh?*

Table 4.4 Measurement of consumer evaluation about intrinsic and extrinsic attributes of telecommunication service

Attributes (Intrinsic / Extrinsic)
1. Network Availability
2. Service Quality
3. Service Charge Strategies
4. Brand Image
5. Offered Value

Notes: +3 = extremely Good, +2 = very Good, +1 = good, 0 = neither good nor bad, -1 = bad -2 = very bad, -3 = extremely bad.

4.3.4 Measurement of consumer strength of beliefs about intrinsic and extrinsic attributes of telecommunication sector

In order to measure consumers' strength of beliefs on different intrinsic and extrinsic attributes of telecommunication service in Bangladesh. 3 individual firms have been taken based on salient belief of attributes. These telecommunication service providing firms have been taken for measuring consumer evaluation about the intrinsic and extrinsic attributes due to satisfy the requirement of Fishbeins' Multiattribute Attitude Model.

The statement for strength of beliefs measurement has shown **Table 4.5**. A Seven-point Likert scale has been used as the response format with assigned values ranging from **7** = very strongly believe to **1** = very strongly disbelieve. The actual result has been presented in the result section, **Chapter 5**. The question is to the respondents as; *how strongly do you believe or strongly disbelieve with the following each statement that influences the consumers' beliefs towards telecommunication service in Bangladesh.*

Table 4.5 Measurement of consumer strength of beliefs about intrinsic and extrinsic attributes of telecommunication service

Attributes (Intrinsic / Extrinsic)
1. Network Availability
2. Service Quality
3. Service Charge Strategies
4. Brand Image
5. Offered Value

Notes: 1 = very strongly disbelieve, 2 = strongly disbelieve, 3 = disbelieve, 4 = neither believe nor disbelieve, 5 = believe, 6 = strongly believe, 7 = very strongly believe.

4.3.5 Attitude Formation Measurement Procedures

Tricomponent attitude model is an instrument to measure the attitude formation towards the telecommunication sector in Bangladesh. There are three components of this model; and those components are: (i) *cognitive component*, (ii) *affective component* & (iii) *conative component*.

Here it has been used rating scale ranging from very strongly believe to extremely disbelieve (+3 to -3) for measuring the consumer thinking regarding the selected attributes for the specific brand of telecommunication sector. Next it has been also used rating scale ranging from very bad to very good (1 to 5) for measuring the consumer feeling regarding the selected attributes for the specific brand of telecommunication sector. After that, some statements are represented for measuring the future tendencies of consumers to receive the service from the specific brand of telecommunication sector.

4.3.6 Attitude Measurement Procedures

Fishbein drew his support for this proposition from behavioral learning theory. Simply stated, his contention was that an attitude toward an object is more or less automatically learned as one

learns about the object itself. That is, when one learns about a new product that learning occurs in the form of beliefs about product attributes (Kim, 2002).

The "amount" of affect transferred from each evaluative aspect is a function of the belief strength associated with the attributes; the stronger the belief, the greater the amount of the attribute's evaluative aspect that have been generalized to the attitude object. So, Fishbein's attitude theory captures how beliefs attributes of a certain object lead to the attitude toward the object.

It was expressed as

$$A_0 = \sum_{i=1}^n b_i e_i$$

where $A_0 = \text{Attitude towards the objects}$, $b_i = \text{the strength of the salient belief that the object has attributed (i)}$, $e_i = \text{the evaluation of attribute (i)}$, $n = \text{the number of the salient attributes}$ (Engel, Roger, Paul 1990).

4.3.7 Brand Switching Behavior Measurement Procedures

Markov-chain (Transition probability matrix) is an instrument to measure the brand switching behavior towards the telecommunication sector in Bangladesh. Transition probability matrix is a matrix used to describe the transitions of a markov chain. That means, by using the matrix to determine the possibility or chance of the consumer to switch from one to another state. The probability transition matrix for three state Grameen Phone Ltd., Banglalink, and Robi are given below-

$$\begin{bmatrix} \text{State} & GP & BL & Robi \\ GP & P_{11} & P_{12} & P_{13} \\ BL & P_{21} & P_{22} & P_{23} \\ Robi & P_{31} & P_{32} & P_{33} \end{bmatrix}$$

Since the total of transition probability from a state; to all other states must be 1, so that

$$\sum_{j=1}^n p_{ij} = 1$$

Here, n = number of considerable object

p = switching probability

i = different state

j = switching state from one to another

4.4. Questionnaire Design and Pretesting

Data has been collected from students of the Universities (public and private) and professionals of different categories (Universities Teacher, Bankers, Corporate officers, Housewife, Government and Nongovernment employees) through a set of structured questionnaire. Here both structured and unstructured questions and three categories questions; such as some of them are introductory or opening questions, informative and sensitive questions have been used to collect data from the respondents. In the first page of the questionnaire it has been well described the purpose of the study. After that some introductory questions are incorporated in the questionnaire.

In the next page of the questionnaire the respondents have been asked to turn the page including information regarding the attributes of individual brand which influence to form the attitude of consumers towards the telecommunication sector in Bangladesh. To measure the thinking level of consumers regarding the selected attributes for the specific brand of telecommunication sector rating scale ranging from very strongly believe to extremely disbelieve (+3 to -3) has been used and asked to write score to express their opinion. Semantic differential scale has been also used to measure the overall evaluation (ei) regarding the selected attributes for the specific brand rating scale ranging from extremely good to extremely bad (+3 to -3) has been used and asked to encircle the point to express their opinion.

Next to measure the feeling level of consumers regarding the selected attributes for the specific brand of telecommunication sector rating scale ranging from extremely bad to extremely good (1 to 5) has been used and asked to write score to express their opinion. 5 points Likert scale has been also used to measure the ranking position of each attributes rating scale ranging from not important to very important (1 to 5) has been used and asked to encircle the score to express their opinion.

After that some statements are represented and the respondents are also asked to answer the questions for determining the future tendencies of consumers to receive the service from the specific brand of telecommunication sector.

The respondents are also asked through the Seven Point Likert scale ranging from 7 indicates very strongly believe, and 1 indicates very strongly disbelieve to know how strongly believe that the individual brand contains the said attributes. Those scales are widely used in comparing brand, product and company images (Malhotra *et al.*, 1996).

Then, some dichotomous questions are incorporated in the questionnaire to find out the effect of some influential factors which influence the switching behavior of consumers towards the telecommunication sector in Bangladesh. Next, some informative questions are used for analyzing the switching tendencies of consumers.

Same questionnaires are also used for collecting data from professionals of different categories. Some open ended questions are used here to know the opinion of respondents. For finding out the psychological and demographic factors, there are also six prescribed questions are mentioned in the questionnaires. A total of 1100 questionnaires were distributed to the people who were the target respondents of this study. 912 respondents were received, of which 840 were completed and usable. So, finally **840** questionnaires have been used for the analysis purpose.

Pretests

Pretest 1: The purpose of the first pretest was to select the attributes those considered by the consumer to receive the telecommunication service. The information cultivated among 100 respondents where approximately 70% were students of the universities (public and private) and rests 30% were professionals of different categories (Universities Teachers, Different Businessmen, Bankers, Corporate Officers, Housewife, and others Government, Non government employees). When asked the subject about the attributes of telecommunication service that are basically considered for receiving the service, they replied 10 attributes (***Table: 4.1***). Among those attributes' that (up to 30% and above) has been selected for the convenience of the study.

Pretest 2: The purpose of the second pretest was to obtain information, which helped in developing questionnaire. 10 corporate officers, 50 students of both public and private Universities, 10 housewives, 10 bankers and 20 University teachers from both public and private Universities who stay at Dhaka Metropolitan city and they are the voice caller have been selected for pretesting.

The respondents were asked through the Seven point Staple Scale ranging from +3 to -3 to know the cognition and evaluation; Likert Scale ranging from 5 to 1 and 7 to 1, to know how the individual firm contains the said attributes. The pretest sample confirmed the similarity ordering consistent with the prior expectation for the final study.

Pretest 3: In this stage the initial pretest survey questionnaire was circulated to universities teachers, students of both (public and private) universities, corporate officers, housewives, bankers, and businessmen who stay at Dhaka Metropolitan city and they are the voice caller. The purpose of this procedure was to determine if there was a necessity for revision of the

survey design, layout, wording, and if it was necessary to clarify any ambiguous measurement items.

Participants were encouraged to provide their feedback and comments about the initially developed survey questionnaire, and then such suggestions were taken into account in the revision of the questionnaire. A total of 100 participants from the sampling frame were selected and asked if they understood the questions and if anything was left out that they felt should have been included.

Their comments and suggestions were incorporated into the design of the final questionnaire. This procedure further clarified the measurement scales and survey questionnaire. Once the final measurement scales and design of the survey questionnaire were confirmed through the above procedures, the final survey questionnaires were delivered to the randomly selected mobile phone users according to the sampling procedures.

4.5 Sampling Design Process

The steps of the sampling design process as follows:

4.5.1 Target Population

Since the main objective of this study is to measure consumers' attitude towards brand switching behavior of telecommunication sector in Bangladesh, the population of this study are mainly students of the universities (Public and Private) and professionals of different categories (Universities Teachers, Different Businessmen, Bankers, Corporate Officers, house-wives, and others government, non-government employees) who stay at Dhaka Metropolitan city; age 18 to 65 years, and they are the voice caller. The information can be collected from them, because the target population is the collection of elements or objects that possess the information sought by the researcher.

4.5.2 Sampling Technique and Sample Size

In this study the probability sampling technique (**Stratified Sampling**) has been used on the basis of gender and profession of the customers. The desired sample size can be calculated on the basis of the following formula

$$n_{\text{strat}} = D \times n_{\text{srs}} = 2 \times 383 = 766$$

Where, n_{srs} refers sample size of simple random sampling

$$n_{\text{srs}} = \frac{Z^2 pq}{d^2} = \frac{(1.96)^2 \times 0.47 \times 0.53}{(0.05)^2} = 383$$

n = required sample size

Z = standard value of 1.96 at 95% confidence level

p = estimated proportion of Grameenphone users

d = margin of error at 5% (Standard value of 0.05)

D = refers design effect for stratified random sampling (say, D = 2)

There are many arguments in favor and against the sample of students (Beltramini, 1983 and Oakes, 1972) these scholars have been generally cited threats to external validity as their primary concern, arguing that students are atypical of the "general population" and that any findings based on students samples may therefore not be generalized to other population.

However, some scholars disagree on this issue arguing that this situation is particularly desirable when researches are engaged in theory testing (Chowdhury, 2002). Oakes (1972) and Chowdhury (2002) contend that such arguments are specious because regardless of what population is sampled; generalization can be made only with caution to other populations.

Actually in our country university student have enough sound knowledge and they all are intensive use the mobile phone. Parents provide the money but decision for which brand purchase maximum time come from the young son or daughter who have strong education

(Hossain, 2003). Besides, university students have usually come from different parts of the country, so represented information might collected from them, which may not possible from other sources.

Rests of the data have been taken from the professionals of different categories who stay at Dhaka Metropolitan city. Research found that there is a good similarity between output of data which have been collected from students and professionals from different categories.

4.6 Data Collection

Primary data has been collected through a set of structured questionnaires, and secondary data has been also collected from the published materials of different organization (BTRC, Grameen Phone Limited and others).

4.7 Design of the Models and Variables

The following models have been applied to measure the consumers' attitude towards brand switching behavior of telecommunication service providing firms those are widely providing service in Bangladesh.

Model 1: Fishbein's Multiattribute Attitude Model

$$A_0 = \sum_{i=1}^n b_i e_i$$

where A_0 = attitude toward the object, b_i = the strength of the salient belief that the object has attributed i , e_i = the evaluation of attribute i , n = the number of beliefs about the object.

Model 2: Binary Logistic Regression Model

$Y_i = \beta_0 + \beta_1 PP_i + \beta_2 AGE_i + \beta_3 FnF_i + \beta_4 NSPC_i + \beta_5 ANC_i + \beta_6 CC_i + \epsilon_i$ where

$$Y = \begin{cases} 0, & \text{No Switching} \\ 1, & \text{Switching} \end{cases}$$

Model 3: Transition Probability Matrix of Markov-Chain Model

State	GP	BL	Robi	Airtel	Teletalk
GP	P_{11}	P_{12}	P_{13}	P_{14}	P_{15}
BL	P_{21}	P_{22}	P_{23}	P_{24}	P_{25}
Robi	P_{31}	P_{32}	P_{33}	P_{34}	P_{35}
Airtel	P_{41}	P_{42}	P_{43}	P_{44}	P_{45}
Teletalk	P_{51}	P_{52}	P_{53}	P_{54}	P_{55}

Where, $\sum_{j=1}^n P_{ij} = 1$

Here, three selected telecommunication service providing firms (X_{GP} = Grameen Phone Ltd., X_{BL} = Banglalink, and X_{R_i} = Robi), five attributes (X_1 = Network availability, X_2 = Service quality, X_3 = Service charge strategies, X_4 = Brand image, and X_5 = offered value) and some influential factors (PP = Promotional packages, AGE = Age of the consumer, FnF = Number of FnF, NSPC = Number of SIM of the consumer, ANC = Area of the network coverage, and CC = Call charge, PU= Profession of the user, GU= Gender of the user, MS= Marital status) are addressed.

4.8 Analysis Procedures

Graphical and tabular presentations, some descriptive statistics (average, percentages) have been used to evaluate the current situation of the telecommunication sectors in Bangladesh. Tricomponent Attitude Model has been used to determine the attitude formation towards the telecommunication sector.

Then, Mertin Fishbein's Multiattribute Attitude Model has been used to measure the overall attitude of consumers towards the object. Markov-chain (Transition probability matrix) has been used to find out the brand switching behavior of consumers from one to another brand of telecommunication sector in Bangladesh.

After that logistic regression model has been also applied to find out the significance influential factors which are considered by the consumer to switch from one to another brand of telecommunication sector.

4.9 Statistical Software

The collected primary data have been analyzed by using Statistical Software (SPSS). Microsoft Excel also has been used.

4.10 Conclusion

This chapter has been devoted to explain the research methodology that has been used in the study. The first section has been covered a brief discussion about the research framework. In the second section, the research design and nature of data have been presented. The next section explains how the measurement scale and the survey instruments have refined through the pretest procedures.

Specifically, the target population, sampling technique and sample size have been presented. Data collection techniques have been represented in this Chapter. Finally, the study has been provided a discussion of the statistical methods that are used to get the actual findings.

Chapter 5

Analysis and Findings (Univariate and Multivariate Analysis)

5.1 Introduction

Brand switching is a risk factor for business sustainability. High brand switching rate is the cause of reducing profit margin. So, an exploratory study can be used to evaluate socio-demographic characteristics of the respondents and to measure consumers' attitude formation based on three components (say, affect, cognition and conation) which are involved with brand switching. Hence, Univariate analysis is widely used as a statistical approach to describe and evaluate data for individual variables. Socio-demographic characteristics of the respondent are discussed in **section 5.2**. Measurements of attitude formation are included in **5.3 to 5.5** and weighted average of the considerable intrinsic and extrinsic attributes are presented in **section 5.6**.

After that consumer behavior among the brands and reasons behind the brand switching both are not depend on only one factor whereas several influential factors are related to brand switching and brand loyalty. Hence, the analysis is complex to evaluate the actual scenario. **Multivariate data analysis** refers to any statistical technique used to analyze data that arises from more than one variable simultaneously. So, multivariate analysis is important where each situation, product, or decision involves more than a single variable.

In this chapter, Fishbein's Multiattribute Attitude model is used to identify the more preferred telecommunication brand on the basis of consumer's response. Again, Markov analysis especially transition probabilities have been used to determine the current transitions probability among the brands. The Binary Logistic Regression models have been used to find out the influential factors related to brand switching.

5.2 Socio-demographic Characteristics of the Respondents

Age, gender, profession and income are the selected socio-demographic characteristics of the consumers relate to brand switching. Firstly the study reveals the age and sex distribution pattern of the consumers.

Table 5.1 Age and sex distribution of the consumers

Age	Number of the consumers			Percentage (%) of the consumers
	Male	Female	Total	
18-25	412	128	540	64.3
26-35	136	50	186	22.1
36-45	81	15	96	11.4
46-55	6	9	15	1.8
56-65	2	1	3	.4
Total	637	203	840	100.0

From *table 5.1* and *figure 5.1*, the study reveals that 86.4% respondents are in age 18 to 35 from where 75.48% are male. The main focus of the study is to find out the switching tendencies of the consumers. Since the young generation play the vital role in this sector who are already adapted with digitalization concept of Bangladesh; so the study has been considered 86.4% respondents within age 18 to 35.

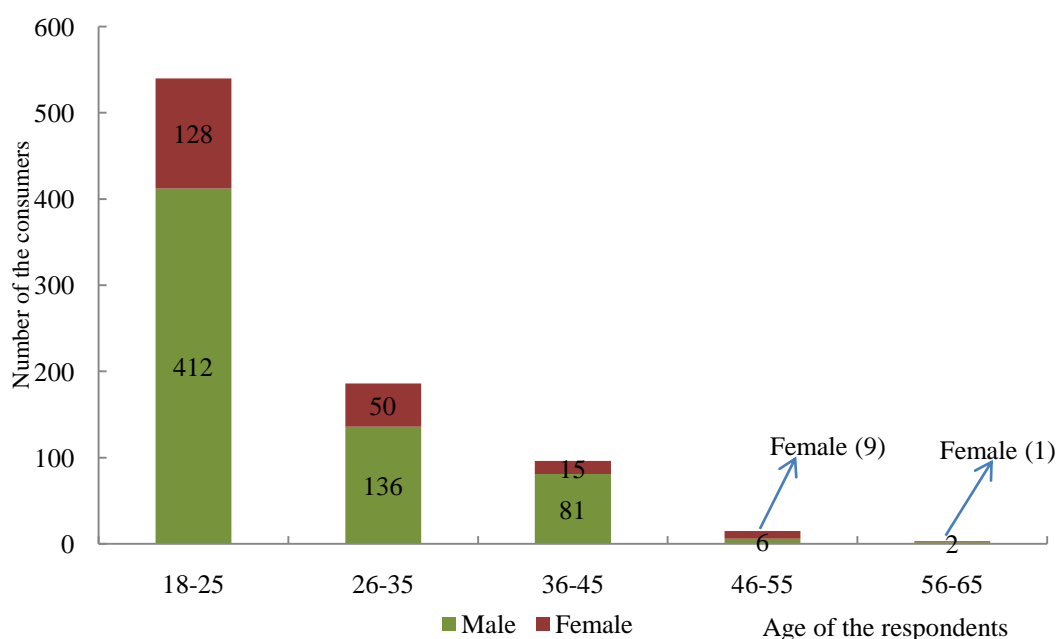


Figure 5.1 Age and sex distribution of the consumers

Table 5.2 Profession of the respondents

Profession of the respondents	Number of the consumers	Percentage (%) of the consumers
Student	557	66.3
University Teacher	35	4.2
Banker	29	3.5
Businessman	66	7.9
Corporate Officer	28	3.3
Government Employees	29	3.5
Nongovernment Employees	50	6.0
Housewife	46	5.5
Total	840	100.0

About 66% of the respondents are students of the tertiary levels who have adaptable capability about sophisticated technology and also aware about market change (*table 5.2*).

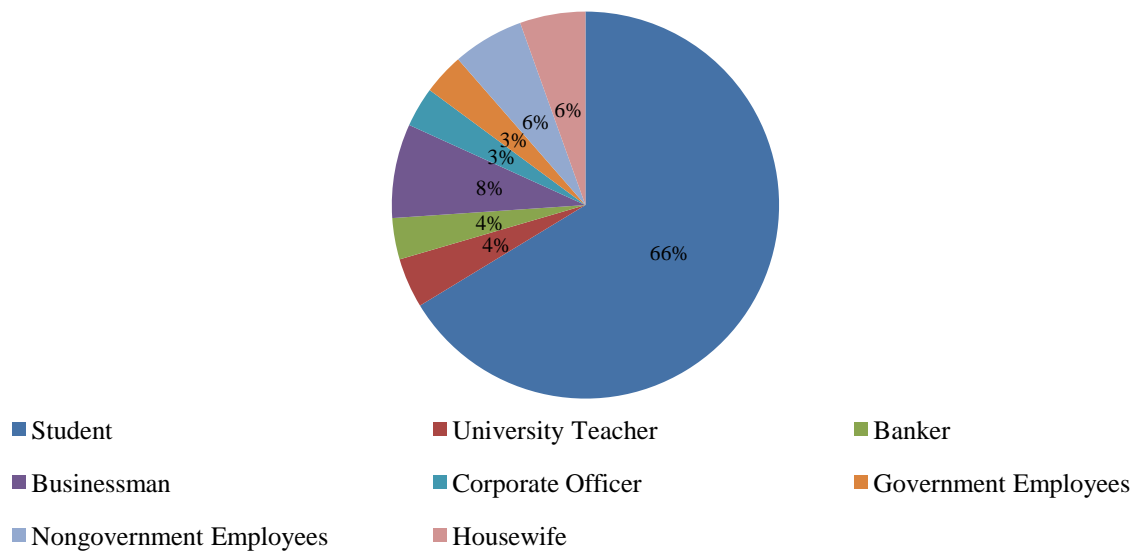


Figure 5.2 Profession of the respondents

5.3 Measuring Consumers' Attitude Formation Based on Affection

Network availability, service quality, service charge strategies, brand image and offered values are five major attributes to evaluate affection level of the consumers about telecommunication brands. Percentage with significant level, mode and median are used to measure the affection of the respondents.

Table 5.3 Consumers' attitude formation towards three brands based on affection component

Attributes	Grameenphone			Banglalink			Robi		
	Mode	Median	% of the consumer response ≥ 4	Mode	Median	% of the consumer response ≥ 4	Mode	Median	% of the consumer response ≥ 4
Network Availability	5	5	85.4***	4	4	65.8***	4	4	60.7
Service quality	4	4	64.6***	4	4	54.4	3	3	47.9
Service charge strategies	3	3	29.4	4	3	46.3	3	3	46
Brand image	4	4	72.8***	4	4	59.1	4	4	56.6
Offered value	3	3	35.2	3	3	40.9	3	3	41.1

Source: Field Survey *** $p < 0.01$ at 1% level of significance.

Table-5.3 reveals that all the respondents consider five attributes which affect on consumer attitude for using telecommunication service. The table represents the nature of positive feelings of consumers towards Grameenphone Ltd., Banglalink and Robi. The consumers of Grameenphone Ltd. are showing significantly positive feelings on the network availability, brand image and service quality dimensions ($p < 0.01$). The score indicates that the service charge strategies and offered value attributes of Grameenphone Limited are not up to the mark.

On the other hand, the table explores that consumers have significant positive feelings ($p < 0.01$) on Banglalink only for network availability. The score also indicates that feeling of the consumers about offered value, service charge strategies, brand image and service quality of Banglalink are not significantly positive. The affection level about Robi is not significantly positive for all said attributes (offered value, service charge strategies, service quality, brand image and network availability).

5.4 Measuring Consumers' Attitude Formation Based on Cognition

Positive thinking about network availability, service quality, service charge strategies, brand image and offered values can be reduced brand switching. In this section, the nature of thinking about Grameenphone Ltd., Banglalink and Robi are evaluated.

Table 5.4 Consumers' attitude formation towards three brands based on cognition component

Attributes	Grameenphone			Banglalink			Robi		
	Mode	Median	% of the consumer response ≥ 1	Mode	Median	% of the consumer response ≥ 1	Mode	Median	% of the consumer response ≥ 1
Network Availability	3	3	95.8 ^{***}	2	2	85.6 ^{***}	1	1	83.6 ^{***}
Service quality	2	2	87.2 ^{***}	2	2	84.6 ^{***}	1	1	78 ^{***}
Service charge strategies	1	1	58.9	1	1	73.6 ^{***}	1	1	71.7 ^{***}
Brand image	3	2	83.3 ^{***}	2	2	81.7 ^{***}	1	1	78.3 ^{***}
Offered value	1	1	67.8 ^{***}	1	1	68.5 ^{***}	0	1	66.5 ^{***}

Source: Field Investigation ^{***} $p < 0.01$ at 1% level of significance.

Table-5.4 reveals the composition of the consumers belief system about these three alternatives (GP, BL and Robi). Consumer's belief for three type's telecommunication firms consists of the same basic five attributes. The table suggests that the consumers' belief about the network system of Grameenphone is comparatively better than Banglalink and Robi. Next, service quality of Grameenphone is also better than Banglalink and Robi. But service charge strategies and offered value of Banglalink are fairly better than Grameenphone and Robi. After that consumers' belief about brand image of Grameenphone Ltd. is comparatively better than other said firms.

5.5 Measuring Consumers' Attitude Formation Based on Conation

From **table- 5.5.1**, cell frequency indicates that 17 respondents from total are very unlikely GP's service and definitely will not receive GP's service in future. Whereas, 13 respondents like GP's service but they definitely will not receive service from GP. Then, 95 respondents like GP's service but they response that they will not probably receive service probably from GP. After

that, maximum respondents 255 like GP's service and in future they probably will receive service from GP. Lastly, 143 respondents very likely GP's service and practically they definitely will receive service from GP.

Table 5.5.1 Consumers' behavior towards GP service based on conation component

Cross-Tabulation (Chance vs. Choice of Receiving GP Services)		Choice of Receiving GP Service				Total
		Very Unlikely	Unlikely	Likely	Very Likely	
Chance of Receiving GP Service	Definitely Not Receive	17	23	13	6	59
	Probably Not Receive	5	78	95	10	188
	Probably Receive	6	40	255	63	364
	Definitely Receive	2	6	78	143	229
Total		30	147	441	222	840

Source: Field Investigation

Table 5.5.2 Consumers' behavior towards BL service based on conation component

Cross-Tabulation (Chance vs. Choice of Receiving BL Services)		Choice of Receiving BL Service				Total
		Very Unlikely	Unlikely	Likely	Very Likely	
Chance of Receiving BL Service	Definitely Not Receive	12	28	12	1	53
	Probably Not Receive	14	133	209	15	371
	Probably Receive	4	28	235	38	305
	Definitely Receive	0	2	64	45	111
Total		30	191	520	99	840

Source: Field Investigation

From **table- 5.5.2**, it is found that among the total number of respondents 12 respondents response that they very unlikely BL's service and said that they definitely will not receive service in future. Whereas, 12 respondents like BL's service but practically they definitely will not receive service from BL. Then, 209 respondents likely BL's service but practically they probably will not receive service from BL. After that, maximum respondents 235 like BL's

service and in future they probably will receive service from BL. Lastly, 64 respondents likely BL's service and practically they definitely will receive service from BL.

Table 5.5.3 Consumers' behavior towards Robi service based on conation component

Cross-Tabulation (Chance vs. Choice of Receiving Robi Services)		Choice of Receiving Robi Service				Total
		Very Unlikely	Unlikely	Likely	Very Likely	
Chance of Receiving Robi Service	Definitely Not Receive	12	52	11	6	81
	Probably Not Receive	15	98	227	15	355
	Probably Receive	4	17	212	56	289
	Definitely Receive	1	4	58	52	115
Total		32	171	508	129	840

Source: Field Investigation

From **table- 5.5.3**, it is found that among the total number of respondents 12 respondents response that they very unlikely Robi's service and said that they definitely will not receive service in future. Whereas, 52 respondents unlike Robi's service and decide that they definitely will not receive service from Robi. Then, 227 respondents likely Robi's service but practically they probably will not receive service from Robi. After that, maximum respondents 212 likely Robi's service and in future they probably will receive service from Robi. Lastly, 58 respondents likely Robi's service and practically they definitely will receive service from Robi.

5.6 Consumers' Overall Perceptions about Telecommunication Services

Network availability, service quality, service charge strategies, brand image and offered values are the five determinant of changing the consumers' perception about their current brand. This section is going to determine the rank of those determinants of the telecommunication sectors in Bangladesh using weighted average on the basis of intrinsic and extrinsic attribute..

Table 5.6 Consumer consideration based on intrinsic and extrinsic attributes for using telecommunication service

Attributes (Internal / External)	Responses					Weighted Average (WA) [*]	Ranks
	Unimportant (1)	Quite Unimportant (2)	Neither Important not unimportant (3)	Important (4)	Very Important (5)		
Network Availability	8	42	75	91	624	4.5250	1
Service quality	9	22	124	374	311	4.1381	2
Service charge strategies	22	41	156	294	327	4.0274	3
Brand Image	34	72	232	259	243	3.7202	5
Offered Value	51	88	167	208	326	3.7976	4

* $WA = \frac{\sum W_i X_i}{\sum W_i}$ where X_i is the score (1 to 5) for each response and W_i is the corresponding weight (score frequency)

Source: Field Survey

Table- 5.6 reveals that all the respondents consider five attributes, which affect on consumer behavior for using telecommunication service. On the five attributes, “network availability” is considered as highest importance where the weighted average is 4.525 for the attribute. The other important attributes are i) service quality (weighted average being 4.13); ii) service charge strategies (weighted average being 4.02); iii) offered value (weighted average being 3.79); and iv) brand image (weighted average being 3.72).

5.7 Consumers’ Attitude towards Telecommunication Operators in Bangladesh: A Fishbein’s Multiattribute Attitude Model Approach

The total number of Mobile Phone subscriptions was 135.982 million at the end of June, 2017 (<http://www.btrc.gov.bd/content/mobile-phone-subscribers-bangladesh-june-2017>). Among the total operators, 97.604% mobile phone subscribers are belong to the three operators namely, Grameen Phone Ltd. (GP), Banglalink Digital Communications Limited, Robi Axiata Limited (Robi). Hence, Fishbein’s Multiattribute Attitude Model has been applied to evaluate consumers’ attitude among Grameen Phone Ltd. (GP), Banglalink Digital Communications Limited, Robi Axiata Limited (Robi) operators.

Table 5.7: Fishbein's Multiattribute Attitude Model for measuring consumers' attitude towards three telecommunication operators in Bangladesh

Affection Items	Grameenphone			Banglalink			Robi		
	e_i	b_i	$e_i b_i$	e_i	b_i	$e_i b_i$	e_i	b_i	$e_i b_i$
Network Availability	2.2560	5.4881	12.381	1.3929	4.8536	6.761	1.2881	4.7869	6.166
Service quality	1.4226	4.7512	6.759	1.1905	4.4821	5.336	1.1214	4.4190	4.955
Service charge strategies	.1060	3.7690	0.400	.8940	4.2583	3.807	.9167	4.2821	3.925
Brand image	1.6345	4.9131	8.031	1.3512	4.5429	6.138	1.2107	4.5357	5.491
Offered value	.5583	4.0512	2.262	.9488	4.2179	4.002	1.0131	4.2155	4.271
$A_0 = \sum e_i b_i$	29.833			26.044			24.808		

Source: Field Survey

From the Fishbein's model, overall position of consumers' attitude towards the individual object based on different attributes can be evaluated. The strength of belief (b_i) is the i^{th} value of the salient belief about individual attribute for each object. This belief has been measured on the basis of consumers' rating about individual attribute for each object. The evaluation about the importance of the attributes (belief evaluation, e_i) reflect how favorably consumers perceived the attributes (**Table 5.7**). It is clear from the table that attitude of different telecommunication service providing firms on the basis of Fishbein' Multiattribute Attitudes model are 29.833, 26.044 and 24.808 for Grameen Phone Ltd. (GP), Banglalink Digital Communications Limited, Robi Axiata Limited (Robi) respectively (**Table 5.7**).

The findings from Fishbein' Multiattribute Attitudes model has been suggested that GP is viewed top most favorable position on all desired attributes because it was received total value 29.833 for the attitude towards object (GP). Banglalink Digital Communications Limited has next position selected by respondents. After that Robi Axiata Limited (Robi) is the last position among the three selected firms by using consumers' rating.

5.8 Markov Analysis for Measuring Brand Switching Behavior

A Markov analysis is a procedure that can be used to describe the behavior of a system in a dynamic situation. Specifically, it describes and predicts the movement of a system, among different system

states, as time passes. The Markov process describes the movement of a system from a certain condition in the current stage to one of n possible states in the next stage. The transition probability is the likelihood that the system, currently in one state, will move to another state in the next period.

The probability that a consumer will move from GP to Banglalink is 0.345 whereas a consumer will move from Banglalink to GP is 0.190. Again, the likelihood that a consumer will move from GP to Robi is **0.190** whereas a consumer will move from Robi to GP is 0.360. Other hand, the probability that a consumer will move from GP to Teletalk is 0.063 whereas a consumer will move from Teletalk to GP is 0.283 (*table 5.8*).

Table 5.8: Transition probability table for measuring brand switching

	Grameen Phone Ltd. (GP)	Banglalink Digital Communications Limited	Robi Axiata Limited (Robi)	Airtel Bangladesh Limited	Teletalk Bangladesh Limited
Grameen Phone Ltd. (GP)	0.289	0.345	0.19	0.113	0.063
Banglalink Digital Communications Limited	0.19	0.357	0.224	0.176	0.053
Robi Axiata Limited (Robi)	0.36	0.093	0.338	0.115	0.094
Airtel Bangladesh Limited	0.194	0.129	0.269	0.29	0.118
Teletalk Bangladesh Limited	0.283	0.132	0.264	0.057	0.264

Source: Field Survey

A consumer will switch from Banglalink to Robi with probability 0.224 whereas switching probability will be 0.093 from Robi to Banglalink. The likelihood that a consumer will move from Banglalink to Airtel is 0.176 whereas a consumer will move from Airtel to Banglalink is 0.129. The probability that a consumer will move from Banglalink to Teletalk is 0.053 whereas a consumer will move from Teletalk to Banglalink is 0.132 (*table 5.8*).

The likelihood that a consumer will move from Robi to Airtel is 0.115 whereas a consumer will move from Airtel to Robi is 0.269. Lastly, the probability that a consumer will move from Robi to Teletalk is **0.094** whereas a consumer will move from Teletalk to Robi is 0.264 (*table 5.8*).

5.9 Binary Logistic Regression for Identifying Influential Factors Related to Brand Switching towards Telecommunication Sectors in Bangladesh

Brand switching is a very crucial issue in telecommunication industries. To increase profit margin and reduce business risk, operation manager need to know the influential determinant related to consumers' brand switching behavior. Network availability, strong advertisement policy, huge offering packages, perception about network coverage, FnF tariff, Perception about age of the consumer, profession of the consumer, marital status and user satisfaction level about the current SIM are the significant associated factors related to brand switching ($P < .0.1$) on the basis of χ^2 and Crammers' V (table 5.9.1).

On the other hand, the study has been considered call rate, SMS charge, income, and age of the consumer as quantitative variables which may be correlated with brand switching.

Table 5.9.1: Association among brand switching and other factors

Factors	Brand Switching			
	χ^2		Crammer's V	
	Statistic	P value	Statistic	P value
Network availability	8.630	.071	.101	.071
Service quality	3.318	.506	.063	.506
Strong advertisement	52.149	.000	.249	.000
Offering packages	52.611	.000	.250	.000
Perception about network coverage	2.957	.086	.059	.086
FnF tarrif influence	30.892	.000	.192	.000
Perception about age of the user	37.996	.000	.213	.000
Multiple SIM use	.413	.520	.022	.520
Profession of the user	33.476	.000	.200	.000
Gender of the user	1.531	.216	.043	.216
Marital status of the user	29.729	.000	.188	.000
User satisfaction about current SIM	5.983	.014	.084	.014

Source: Field Investigation

Brand switching is a binary response variable (switch=1 or non-switch=0) in this study which may be depend on several predictors. To find out the degree of the dependency among binary response variable and predictors, logistic regression is appropriate.

The value of the Hosmer-Lemeshow test statistic is 5.51 with P-value=0.702 which is greater than 0.05, so the null hypothesis (H_0 : *There is no difference between the observed and predicted values*) cannot be rejected. Hence, there is enough evidence to conclude that the current model appears to fit the data reasonably well.

Again, higher overall percentage of correct predictions gives better model. The overall percentage of correct predictions is 65.60% by this model.

Table 5.9.2: Logistic Regression estimates of the effects of different determinants on brand switching towards telecommunication sectors in Bangladesh

Independent Variables	β	S.E.	Odds Ratio (OR)
Strong Advertisement (<i>r: No</i>)			
Yes	.713***	.181	2.041
Offering Packages (<i>r:No</i>)			
Yes	.433**	.186	1.542
Perception about Network Coverage (<i>r:No</i>)			
Yes	.004	.169	1.004
Call Rate Per Minute	-.235	.293	0.791
SMS Charge (Per SMS)	-.524	.332	0.592
FnF Tariff Influence	.060	.187	1.062
Perception about Age of the Consumer (<i>r:No</i>)			
Yes	.553***	.175	1.738
Multiple SIM Use (<i>r:Single</i>)			
Multiple	.303*	.180	1.354
Age of the Respondent	-.053**	.021	0.948
Profession of the Respondent (<i>r:Housewife</i>)			
Student	.647	.543	1.910
Universities Teacher	1.592***	.606	4.913
Banker	.871	.642	2.389
Businessman	1.230**	.554	3.422
Corporate Officer	.740	.642	2.095
Government Employees	1.573**	.634	4.822
Nongovernment Employee (NGO, Company etc.)	.434	.565	1.544
Monthly Income	-.111	.084	0.895
Gender of the Consumer (<i>r: Male</i>)			
Female	-.230	.214	0.794
Marital Status (<i>r:Single</i>)			
Married	.077	.284	1.080
Number of Out Call	.006	.006	1.006
Perception about Total Attributes Rating (<i>r:Negative</i>)			
Positive	-.566***	.163	0.568
Constant	.448	.841	1.566

Note: Level of significance *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$.

Source: Field Investigation

The binary logistic regression model suggested that brand switching is significantly influenced by strong advertisement ($p < 0.01$) effort of the telecommunication firm whereas the consumers'

those who have positive belief about the perception of strong advertisement is 2.041 times more likely to brand switching rather than those who does not.

Again, the consumers' those who have positive belief about the perception of offering package is 1.542 times more likely to brand switching rather than those who does not. The *table 5.9.2* reveals that perception of offering package is a significant determinant ($p<0.05$) for brand switching in the telecommunication sector.

The likelihood of the users who believe that age is a considerable factor for brand switching is about 74% more than the users who does not believes so. The *table 5.9.2* also explained that average switching status will be decrease for every unit increase of age. These indicate that age of the users is a significant determinant of brand switching behavior ($p<0.05$).

The binary logistic regression model suggested that brand switching is significantly influenced by multiple SIM use of the consumer ($p<0.10$) whereas the consumers' those who have multiple SIM is 1.354 times more likely for brand switching rather than those who have single SIM.

Table 5.9.2 reveals that profession of the users is one of the significant factors for brand switching behavior whereas switching rate of university teachers, businessman and other government employee are higher than housewife.

The consumers' who has positive perception about their own service providing brand is 43% less likely to switch their brand than who has comparative less positive perception. This means that, perceptions about total attribute rating about brand is a significant indicators for brand switching.

5.10 Findings of the Research Questions

First research question was that *“what are the components influenced to form the attitude of consumer towards the object?”* From the findings of the research **question 1**, it is found that with the help of Tricomponent Attitude Model we can find out three components (affect, cognition and Conative components) influenced to form the attitude towards the object have been presented in (*Table:5.3, 5.4, 5.5.1, 5.5.2, 5.5.3*).

Second question was that *what are the attributes considered by consumer to use telecommunication service?* Findings of the research **question 2** are that all of the respondents consider five (intrinsic and extrinsic) attributes for receiving telecommunication service in Bangladesh. Network availability has got the highest importance, weighted average being 4.52 for the attribute. The other important attributes are i) service quality (weighted average being 4.13); ii) service charge strategies (weighted average being 4.02); iii) offered value (weighted average being 3.79); and iv) brand image (weighted average being 3.72). The last attribute brand image falls below weighted (*Table 5.6*). Thus, both intrinsic and extrinsic attributes are considered by Bangladeshi consumers’ for receiving telecommunication service.

Next question was that *what are the overall attitudes towards the telecommunication sector in Bangladesh?* Findings of the **3rd research question** are that the positioning of different telecommunication service providing firms based on Fishbein’s Multiattribute Attitude model are 29.833, 26.044 and 24.808 for Grameen Phone Ltd. (GP), Banglalink Digital Communications Limited, Robi Axiata Limited (Robi) respectively (*Table 5.7*) which have clearly indicated consumers’ opinion about the different telecommunication service providing firms which were selected for the study.

Last question was that *what are the factors influenced to switch from one brand to another brand of telecommunication?* Finally researcher has been explored the answer of the **question**

4th and found that with the help of Logistic Regression Model brand switching is significantly influenced by strong advertisement, offering packages, age, multiple SIM user, profession, and perception about total attributes rating (*Table 5.9.2*).

5.11 Overall Findings of the Study

Telecommunication service is considered as a sophisticated or modern service item in our country, the consumers have more or less knowledge about the different attributes and factors of telecommunication service those lead consumers' attitude toward brand switching on telecommunication sector in Bangladesh.

The result of Tricomponent Attitude Model proved that the consumers of Grameenphone Ltd. are showed significantly positive feelings on the network availability, brand image and service quality dimensions ($p < 0.01$). The score indicates that the service charge strategies and offered value attributes of Grameenphone Limited are not up to the mark.

On the other hand, the table explores that consumers have significant positive feelings ($p < 0.01$) on Banglalink only for network availability. The score also indicates that feeling of the consumers about offered value, service charge strategies, brand image and service quality of Banglalink are not significantly positive.

The affection level about Robi is not significantly positive for all said attributes (offered value, service charge strategies, service quality, brand image and network availability).

Findings of Fishbein's Multiattribute Attitude Model highlight that the overall attitude of Bangladeshi consumers' towards Grameenphone Ltd. is higher than other selected firms. So, the consumers perceived the telecommunication service which provided by the Grameenphone Ltd. more positively than other firms.

In Fishbein's model the mean beliefs and mean evaluations are multiplied and added, so the consumers overall attitude to Grameenphone Ltd. is viewed top most favorable position and Banglalink is the next position; Robi is the last position among the three selected firms on the basis of said dimensions.

Findings of Markov – Chain (Transition Probability) highlight that the consumer will switch from GP to Banglalink, GP to GP, GP to Robi and GP to Teletalk. Again, the probability that the consumer will switch from BL to BL, BL to GP, BL to Robi and BL to Teletalk. Lastly, the consumer will switch from Robi to Airtel, Airtel to Robi, Robi to Teletalk, and Teletalk to Robi.

The result of Binary Logistic Regression Model Proved that brand switching is significantly influenced by strong advertisement. Again, the consumers' those who have positive belief about the perception of offering package is 1.542 times more likely to brand switching rather than those who does not. Age, multiple SIM use, profession, and perception about total attributes rating are the factors which have significantly influenced on brand switching behavior towards the telecommunication sector.

5.12 Conclusion

This chapter has been devoted descriptive analysis by using statistical techniques. First, the demographic factors are discussed systematically in a logical manner. The results of the attitude formation based on tricomponent attitude model are presented. Then the results of the measurement scales for the intrinsic and extrinsic attributes are presented and interpreted.

After that the chapter has been devoted to explain different statistical test and interpretation of the result in the study. Consumers' overall attitudes are presented for individual telecommunication service providing firms based on Fishbein's Multiattribute Model for different mention attributes.

Then the results of transition probability represent the brand switching tendencies of Bangladeshi consumers.

Finally, binary logistic regression model has been used to find out some determinants or factors which influenced on brand switching behavior towards telecommunication sectors in Bangladesh.

Chapter 6

Conclusions and Recommendations

6.1 Introduction

This study is conducted empirically for measuring consumers' attitude towards brand switching on telecommunication sector in Bangladesh. A conceptual model was developed based on two constructs and some factors. Tricomponent Attitude Model has been used to find out the attitude formation towards telecommunication sector. A descriptive analysis technique (say, arithmetic mean) is used to find out the weighted average of intrinsic & extrinsic attributes which are considered by consumer for receiving telecommunication service.

Fishbein's Multiattribute Attitude model has been used for measuring the overall attitudes of consumers' toward telecommunication sector in Bangladesh, which could help for successful business operation, management, and long-term sustainability of attitude measurement in order to improve product or service quality as per consumer expectation level. This model has been used for more than last three decades for measuring consumers' attitude and has the vast support in literature.

Next guideline of this study was that the support of Markov Chain (Transition Probability) for assessing the brand switching tendencies of a consumer from one state to another, which could help to take right strategies for improving the brand quality of different service providing organization and to capture high market share by reducing the brand switching tendencies of the consumers.

After that logistic regression Model has been applied here to find out the significance influential factors which are considered by the consumer to switch from one to another brand of telecommunication service. Consumers' solid knowledge and experiences about the product or

service and their long- term observation and interactions have played an important role in a service sector.

Therefore, attitude and switching behavior in our country can easily be measured with the observations or using various types of models. In this study, attitude towards brand switching included individuals who are working in different profession and matured students. The major focus of this final chapter is to present the summary, discussion, managerial and theoretical implications of the findings of the study. The limitations of the study are discussed and the chapter concludes with suggestions for future research and concluding remarks.

6.2 Conclusions

Mobile communication technology has brought tremendous change in day to day activities of common people and created several entrepreneurs in Bangladesh. Bangladesh has adopted information and communications technologies (ICTs) as tools for development. This study has employed to identify consumers' attitude towards brand switching based on different model. Tricomponent attitude model has been applied on the basis of three components which represent the formation of attitude towards telecommunication sector in Bangladesh. Besides, the Fishbein's model has been applied for three telecommunication service providing firms which provide wide service in Bangladesh.

A considerable five attributes have been selected as determinates of firm choice. The result has been reported here strongly to support that the consumers' attitudes are related to the attitude measurements based upon beliefs about and relative importance of service or product-specific attributes. Grameenphone Ltd. is the telecommunication service providing firm, bears highest attitude of consumers, Banglalink and Robi next popular respectively for telecommunication service in Bangladesh as per the opinions of the consumers.

The results of weighted average indicate that network availability (X_1) is more important attribute to the consumer for receiving telecommunication service. This study also examines the switching tendencies of the consumer from one brand to another based on Markov Chain (Transition probability). The findings highlight that the consumer will switch from GP to Banglalink, GP to GP and GP to others.

Then logistic regression model has been applied to find out the significance influential factors which are considered by the consumer to switch from one to another brand of telecommunication service. The findings highlight the need to gain an understanding of the impacts of factors and their contribution to the brand preference individually.

Finally it can be said that though there are some limitations of the study it might be an effective avenue for the service providers of telecommunication service to measure the attitude towards brand switching on telecommunication sector in Bangladesh. Without measuring actual perception of consumers on different attributes and factors of telecommunication service that are usually considered by consumers in Bangladesh it can affect the marketing process for the said service providing firms.

Marketing managers and other applied researchers rely on attitude construct because of its supposed causal influence on switching behavior. Hopefully, the methodology employed for this study can be used in other experiments to understand more fully the effect of service quality differentiation on consumer choice and decision process. Students and academicians may follow the systematic process of quantitative and qualitative analysis from this study.

If any company wants to dominate the market and retain their consumers, they must have to consider the switching behavior of consumers. They should introduce such an offer or package as the consumers demands, improve network quality, arrange innovative advertisement and

promotional campaign to ensure satisfactory level of customer services; otherwise it is not possible to survive in the competitive market of telecommunication firms in Bangladesh.

6.3 Suggestion for Managerial Implications

Based on the findings the study provides the following recommendations:

- i)** Telecommunication service providers need to reduce the higher customer cost and provide increased quality of service. They may offer attractive bundle packages with low price for increasing future consumer attraction.
- ii)** Operators of telecommunication sector should have quick expansion in network development with the latest technology. They should have to upgrade the 4G network with video calling facility as early as possible.
- iii)** Operators should create trustworthy and rational appeal in their advertisements. They should conduct innovative promotional campaign and generating subject oriented advertisement for creating attraction of different professional.
- iv)** The suggestions for the telecommunication service providing firms are that they should try to improve the technical quality of the service based on their subscribers' expectation.
- v)** Each operators should take short term plan for achieving reliability of the consumers about offered value especially "offered value consists of efficiency of the check in process", "transfer services", and "on-time performance of the services", "having interest in solving customers' problems" and "performing the services right the first time".
- vi)** Managers should increase their controlling, commanding, monitoring and coordinating overall systems for business sustainability.

- vii)** To improve service charge strategies, telecommunication firms can determine some discounts and allowances for loyal customers who regularly use their service. These programs have mutual benefits and increase the satisfaction among customers. Nevertheless, some strategic alliances look not so economical but they bring long term benefits. It is more important to do what is strategically right than what is immediately profitable (Kotler, 2003).
- viii)** Managers of telecommunication firms should study their target market precisely and recognize customers' attitudes and their expectations, what they really want and how they can be satisfied. Having a loyalty program to recognize frequent customers can bring a competitive advantage for the telecommunication service providing firms in Bangladesh. They need some strategic alliances and joint ventures to have other telecommunication service related partners.
- ix)** Employees of telecommunication firms should participate in scheduled training courses and we should note that behavior of employee is often instrumental in bringing a desired outcome. Learning involves both the development and modification of thoughts and behaviors and it is a never ending process for all employees. So by providing informative feedback on employees' performance, using different rewards and punishments and consistently training; organization can improve their employees' performance and their customers' satisfaction.
- x)** Telecommunication service providers should try to identify customers' need and work to satisfy them. It means that managers need to redefine goals and policies, modify the organizational structure reengineer job and design necessary specifications, likewise training and monitoring, rewarding and punishing employees.

- xi)** Telecommunication service providers should monitor their activities and take initiative to improve its both intrinsic and extrinsic attributes of service in comparison to competitors' firms.
- xii)** The managers can take various strategies such as, maintain and develop these attributes, operate strong advertisement for gaining the competitive advantage based on service differentiation. Besides, manufacturers of different firms can follow all possible attitudes change strategies, which are add new salient belief about the attitude towards brand switching- ideally one with a positive. Increase the strength of an existing the belief more salient. It may be said that as the markets are ever changing in relation to change consumers' attitude towards brand switching, so for gaining the competitive advantage in the long run the marketers should take various marketing strategies on the basis of customization.

6.4 Limitations and Directions for Further Research

This study spawns a number of limitations and potential fertile directions for future research. The study explains various aspects and issues in relation to attitude formation and various attributes of telecommunication service. The study reveals that some attributes are considered for measuring consumers' attitude towards brand switching of some selected telecommunication firms, which have strength of belief (b_i) that always may not be true. There might be more attributes like internal package variation of different brand and its availability, internet facility of different brand are not considered in the study. Therefore, further research may be conducted to assess services benefits and risks of each attributes of telecommunication service considering more attributes related to the object.

Then the study concentrates on analyzing the factors (network availability, strong advertisement policy, huge offering packages, perception about network coverage, FnF tariff, Perception about

age of the consumer, profession of the consumer, marital status and user satisfaction level about the current SIM) related to the object. Through many other factors both internal and external can influence the brand switching behavior. Further research can detect and evaluate significance of unexplored internal and external factors relate to brand switching.

Next, 5.5% housewife are considered as sample, almost among did not fully aware about telecommunication service. They provided their opinion based on their likely most one and willingly they are not interested to answer of the questionnaire. This is especially important for manufacturers who need to determine whether the telecommunication service providing firms and attributes of telecommunication service shown in this study were limited to these populations due to not taking the opinion from unconscious and illiterate housewives etc.

Besides, the major limitation of this study is that the study attempts to consider only three leading telecommunication firms. It would have been more representative if the total number of telecommunication service providing firms of Bangladesh could have been taken under this study. But it is not possible by the researcher due to the financial and time constraints. It is the responsibility of the future researchers to overcome these shortcomings.

After that respondents who stay at Dhaka Metropolitan city and are the voice caller have been considered for the study. But future researchers can be considered the whole geographical areas of Bangladesh to select the sample unit; and not only they will be the voice caller but also be the internet user from the said telecommunication firms.

Lastly, Fishbein's Multiattribute Attitude model has been used for measuring consumers' attitude towards the telecommunication service in this study. Unfortunately, high level of academic research effort expanded on this model was not reflected in the actual use of managers to assist the decision making and planning. Traditionally, the researchers have argued that a

useful focus on research is to provide the description of complex process that would aid in the systematic examination of that process and high light areas of further research.

Besides, Fishbein's model could not explain how a consumer leads to a certain buying behavior introduces normative influences into the overall model and a causal relationship between the two antecedents and intention. In addition, where macro marketing influence is higher, how a consumer can take the decision has not given the avenue in this model.

Bibliography

- Aaker, (1994), "Effects of intangible factors and multi-attribute product evaluations" *Journal of Consumer Research*, 13: 148 – 152.
- Abdullah, S.S. and Rakibul, H. (2015), "Factors Influencing the Behavior of the Mobile Phone Users to Switch their Mobile Telecommunication Operators in Bangladesh", *International Journal of Trade & Commerce*, 4(1): 15 – 26.
- Ajzen, leek and Fishbein, Martin (1980), *Understanding Attitudes and Predicting Social Behavior*, Englewood Cliffs, N. J. : Prentice – Hall.
- Alba, Joshph W. and J. Wesley Hutchinson (1987), "Dimensions of consumer Expertise", *Journal of Consumer Research*, Vol. 13: 411 – 454.
- Albert, R. Wildt Albert V. Bruno, James L. Gintes, (1981), "Attitudes Model", *Journal of Advertising Research*, 21(4): 112 – 121.
- Anderson, E. and Beaker, G. (1979), "Structural equation modeling in practice: A review and recommended two step approach," *Psychological Bulletin*, 103: 411- 423.
- Anderson, Eugene W., Claes Fornell and Sanal K. Mazvanchery (2004), "Customer Satisfaction and Shareholder Value", *Journal of Marketing Research*, 68: 172 – 185.
- Ashraf, I. and Kumar, A. (1913), "Enhancing Competitive Advantage on Cellular Industry in Pakistan", *Journal of Consumer Marketing*, 20(5): 430 – 440.
- Azam, M. S. (2005), "Customers' towards General Insurance: An Investigation into Public and Private Sectors in Bangladesh", an unpublished research paper.
- Azam, M. S. (2005), "Factor Influencing the Adoption of Internet: In Inquiry into the Perceptions of University Academician in Bangladesh", 10th International Conference on Cybernetics and Information Technologies System and Application, Proceeding, 4: 138 – 183.
- Baker, and Ehrenberg, A. S. C. (1986), "A Framework for Brand Management", *Sloan Management Review*, 34: 87 – 92.
- Bass, F. M. (1974), "The Theory of Stochastic Preference and Brand Switching", *Journal of Marketing Research*, 11: 1 – 20.
- Baswise, T. P. and Ehrenberg, A. S. C. (1987), "Consumer beliefs and awareness", *Journal of the Market Research Society*, 29(1): 88 – 94.

- Bearden, William, O. and Terence, A. Shimp (1982), "The Use of Extrinsic Cues to Facilitate Product Adoption", *Journal of Marketing Research*, 19: 229 – 239.
- Beckmann, M. J. (1991), "Two Models of Brand Switching", *Stochastic Process and their Applications* (spring), pp. 177 – 187.
- Beleh, (1998), "Situational Variables and Consumer Behavior", *Journal of Consumer Research*, 4: 90 – 101.
- Burnham, T. A., Frels, J. K. and Mahajan, V. (2003), "Consumer switching costs: a typology, antecedents and consequences," *Journal of the Academy of Marketing Science*, 33(2): 109 – 126.
- Chawdhury, H.K. (2001), "Generalizability of Perceived Quality Measures: An Evaluation", *Yokohama Journal of Social Sciences*, 6(1): 27 – 38.
- Choi, K.S.; Cho, W.H.; Lee, S.; Lee, H. and Kim, C. (2004), "The relationships among quality, value, satisfaction and behavioral intention in health care provider choice: A South Korean Study", *Journal of Business Research*, 57(8): 913 - 921.
- Chowdhury and Islam (2003), "A Critical Factors in Consumer Quality Perceptions: A Cognitive Approach", *Journal of Business Research*, 7(2): 40 – 52.
- Churchill, Gilbert A. and Peter, P.J. (1984), "*Marketing Research: Methodological Foundations*", Sixth Edition the Dryden Press, Harcourt Brac College Publishers.
- Cohen, A. and Nedungadi (1966), "The measurement of corporate image", in the corporation and its publics, John W. Riley, Jr., Ed. New York: John Wiley & Sons, 49 – 63.
- Colgate, M. and Lang, B. (2001), "Switching barriers in consumer markets: an investigation of the financial service industry", *Journal of Consumer Marketing*, 18(4): 201 – 212.
- Cunningham, William, H., W. Thomas Anderson, Jr. and John H. Murphy (1974), "Are Students Real People"? *Journal of Business*, 47: 399 – 409.
- De Chernatony and McDonald (1998), "Measurement of Brand Attitudes of Brands Loyal towards the object", *Advances in Consumer Research*, 13: 330 – 340.
- De Chernatony, L. (1990), "Brand Management through narrowing the gap between brand identity and brand reputation", *Journal of Marketing Management*, 15(103): 157 – 180.
- Dodds, W.B., and Kent, B. Monroe (1991), "Factors affecting in consumers' decision making for receiving service", *Journal of Marketing Research*, 30: 205 – 216.

- Dodds, William BN. and Kent B. Monroe (1985), “The Effect of Brand and Price Information on Subjective product Evaluation”, *Advance in Consumer Research* 12, Elizabeth Hirschman and Morris Holbrook, (eds.).
- Donald, G., Morrison (1965), “Testing Brand-Switching”, *Journal of Marketing Research*, 3(4): 401 – 409.
- Douglas A. Galb (1999), "Customer Shifting between Service Providers", *Journal of the Academy of Marketing Science*, 22(2): 99 - 113.
- Engel F. James, Roger D. Blackwell, Paul W. Miniard (1990), “Consumer Behavior”, Sixth Edition. The Dryden Press. A division of Holt, Rincart and Winston Inc.
- Erickson, Gary M., Johny, K. Johansson and Chao Paul (1984), “Image Variables in Multi-attribute product Evaluations: Country-of-origin Effects”, *Journal of Consumer Research*, 11: 694 – 699.
- Erickson, Gasy M. and Johny K. Johansson (1985), “The Role of Price in multi-Attribute Product Evaluations”, *Journal of Consumer Research*, 12: 195 – 199.
- Feigenbaum (1951), “An evaluation of the service quality which affect on attitude”, *Journal of Marketing*, 40: 30 – 40.
- Fernandes and Santos (2007), “Factors affecting the brand switching behavior”, *Journal of Business*, 24: 200 – 212.
- Fishbein, M. (1963), “An investigation of the Relationship between Beliefs about an object and the Attitude towards that object”, *Human Relations*, 16: 233 – 240.
- Fishbein, M. and Ajzen (1975), “Attitudes towards objects and predictors of single and multiple behavioral criteria”, *Psychological Review*, 81(1): 59 – 74.
- Fraccastoro, K. A. and Karani, G. K. (2010), “Resistance to Brand Switching: The Elderly Consumer”, *Journal of Business and Economics Research*, 8(12): 35 – 42.
- Garvin, D. A. (1984), “What Does ‘Product Quality’ Really Mean”? *Sloan Management Review* (fall), pp. 25 – 43.
- Garvin, David, A. (1983), “Quality on the Line”, *Harvard Business Review*, September, October, pp. 65 – 73.
- Guatam, P. and Chandhok, D. A. (2011), “Switching behavior of subscribers in Indian telecom Sector”, *International Journal of Research in Finance and Marketing*, 1(3): 31 – 46.

- Gulamali, A. and Julia, P. (2017), "Social Media Influencer and brand switching", *MSc Thesis (unpublished)*, School of Economics and Management, LUND UNIVERSITY.
- Halsted (1993), "Identifying the Form of Consumer Satisfaction with Complaint Resolution," *Journal of Business*, 22: 222 – 229.
- Hanif, M.; Hafeez, S. and Riaz, A. (2010), "Factors Affecting Customer Satisfaction". *International Research Journal of Finance and Economics*, 44 - 52.
- Hasan (2013), "Factors influencing to Bangladeshi consumers' mobile phone operators choice and change behavior", *Journal of Economics and Sustainable Development*, 4(2): 159 – 167.
- Hastie and Part, (1986), "Generalized Additive Models", *Statistical Science*, 1(3): 297 – 318.
- Henderson, Deighton, J., C. P., and Neslin, S. A. (1994), "The Effects of Advertising on Brand Switching and Repeat Purchasing", *Journal of Business & Economics*, 6: 40 – 51.
- Herrmann, A., Xia, L., Monroe, K. B. and H. F. (2007), "The influence of price fairness on consumer satisfaction: An empirical test in the content of automobile purchase", *Journal of Product & Brand Management*, 16(1): 49 – 58.
- Hoffman and Bateson (1997), "Measurement of Consumers Satisfaction with Retention," *European Journal of Marketing*, 26(5): 30 – 42.
- Holden, Stephen J. S. (1993), "Understanding Brand Awareness: Let Me Give You a C(L) ue", *Advances in Consumer Research*, 20: 383 – 388.
- Jacoby, J., Szybillo, G., and Busato-Schach, J. (1977): "Information Acquisition Behavior in Brand Choice Situations", *Journal of Consumer Research*, 3: 309 – 216.
- Jacoby, Jacob, Jeny Olson and Rafact Hoddock (1971), "Price Brand Name, and Product Composition Characteristics as Determinants of Perceived Quality", *Journal of Applied Psychology*, 55(6): 570 – 579.
- John, J. (2011), "An Analysis on the Customer Loyalty in Telecom Sector: Special Reference to Bharath Sanchar Nigam Limited, India", *African Journal of Marketing Management*, 3(1): 1 - 5.
- Jones, M. A., Mothersbaugh, D. L. and Beatty, S. E. (2000), "Switching barriers and repurchase intentions in services", *Journal of Retailing*, 76(2): 259 – 274.
- Joseph, O. and Joachim, A. (2010), "Switching Cost and Customers Loyalty in the Mobile Phone Market: the Nigerian Experience", *Business Intelligence Journal*, 3(1): 111-121.

- Kamal, M. Moinuddin (1992), "Consumers Brands Choice Behavior for Television", *Dhaka University Journal of Business Studies*, 13(1): 27 – 44.
- Keaveney, S. M. (1995), "Customer Switching behavior in service industries: an exploratory study", *Journal of Marketing*, 59(2): 71 – 82.
- Keller (1998), "Understanding Brand Equity: Answers to ten common Branding Questions", *Exchange*, (winter), pp. 15 – 19.
- Kim (2002), "Acceptance of Brand Extensions: Interactive Influences of Product Category Similarity, Typically of Claimed Benefits, and Brand Relationship Quality", *Advances in Consumer Research*, 29: 190 – 198.
- Kothari, C. R.; *Research Methodology: Methods and Techniques*; Second Edition; Wishwa Prakashan; New Delhi; 2003; EN.
- Krishnan, S.H. (1996), "Characteristics of Memory Associations: A Consumer-Based Brand Equity Perspective", *International Journal of Research in Marketing*, 13: 389 – 405.
- Kumar, R.R. and Charlas, D. L. (2011), "Brand Switching in Cellular Phone Service Industry because of bill-related issues Faced by Clients", *International Journal of Event Management Research*, 1(5):pp.30-42.
- Kumaravel and Kandasamy (2011), "Impact of Mobile Number Portability on Mobile Users Switchover Behavior- Indian Mobile Market, *Journal of Arts, Science and Commerce*, pp. 200 – 205.
- Kuuskk, A. (2007), "Affecting Customer Loyalty: Do Different Factors Have Various Influences in Different Loyalty Levels?" pp. 3-24.
- Lavioge and Steiner (1961), "A Model of Predictive Measurements of Advertising Effectiveness", *Journal of Marketing*, 25: 59 – 62.
- Lee and Murphy (2005), "Factors Affecting Clients Switching Behavior Towards Mobile Phone Operator", *Advanced in Consumer Research*, 12: 498 – 503.
- Lee, R, M. J. (2011), "Customer Switching and Service Quality: Study on Mobile Phone Service", *Far East Journal of Psychology and Business*, 35(48): 73.
- Lee, R, M. J. and Feick, L. (2001), "The impact of switching costs on the customer loyalty link: mobile phone service in France", *Journal of Service Marketing*, 15(1): 35 – 48.
- Lee, R. and Murphy, J. (2005), "From Loyalty to Switching: Exploring Determinants in the Transition", *ANZMAC Conference: Consumer Behavior*, pp.196 – 201.

- Loudon, David and Bitta, Albert J. Della (1988), "Consumer Behavior: Concepts and Applications," 3rd ed., New York: McGra-Hill Book Company.
- Makwana, Sharma and Arora (2014), "Factors influencing consumer brand switching behavior in telecommunication industry: An empirical study" *Prestige e-Journal of Management and Research*, 1(1): 1 – 10.
- Malhotra, Naresh K. (2003), "*Marketing Research: An Applied Orientation*", International Edition; Printing Inc.; Upper Saddle River, New Jersey.
- Meyers and Levy (1989), "The Influence of a Brand Name's Association Set Size and Word Frequency on Brand Memory", *Journal of Consumer Research*, 16(2): 197 – 207.
- Michel (1995), "*Exploring the Service Recovery Paradox*", *AMA Summer Educators' Conference 2002 in San Diego*, pp. 1 – 18.
- Milakovich (2005), "Improving Service Quality in the Global Economy: Achieving High Performance in Public and Private Sectors", 2nd ed., A Urbach publication.
- Mittal, S. and Gera, R. (2012). "Relationship between Service Quality Dimensions and Behavioral Intentions: An SEM study of Public Sector Retail Banking Customers in India", *Journal of Service Research*, 12(2): 38 – 47.
- Monroe, K. B. (1990), "Pricing: Making Profitable Decisions", 2nd ed., McGraw-Hill New York, NY.
- Nagashima, A. (1970), "A Comparison of Japanese and US attitudes toward foreign products", *Journal of Marketing*, 34(1): 68 – 74.
- Neger, M. (2009), "Measuring Consumer Attitude towards Beautification Products: A Study on Some Selected Brands in Bangladesh", *Journal of Business and Technology (Dhaka)*, 4(2): 59 – 69.
- Neger, M. (2009), "Measuring Consumers' Attitude towards Internet Service: A Study on Selected Firms in Bangladesh", M. Phil Thesis (unpublished).
- Parasuraman (1988), "SERVQUAL: A Multiple – Item Scale for Measuring Consumer Perceptions of Service Quality", *Journal of Retailing*, 64(1): 12 – 40.
- Parmar, H. and Chaudhari, J. (2012), "A Comparative Analysis of Customer Satisfaction before and After the Adoption of Mobile Number Portability", *Business Innovation and Entrepreneurship: Transforming World Economy*, pp. 342 - 348.

- Patterson (1997), “Impact of People Management Practices on Performance”, *Institute of Personnel and Development*, London.
- Prasad, M. and Prasanna, K. (2016), “Factors influencing the behavior of the mobile phone users to switch their service providers in Andhra Pradesh”, *Global Journal of Management and Business Research: E Marketing*, 16(5):23-32.
- Price (2006), “The Impact of Usage, Budgetary Constraints, Involvement and Customer Characteristics on Customers’ Intention to Switch Mobile Service Provider”, *The Quarterly Journal of Economics*, 102: 376 – 394.
- Radhakrishna, G. (2007), “Consumer Behavior and Marketing Planning: A Case Study of Mobile Communication System in Delhi State”, PhD Thesis, Department of Commerce and Business Studies, Jamia Milia Islamic University, India.
- Ranganathan (2006), “Switching Behavior of Mobile User”, *Journal of the Academy of Marketing Science*, 31(2): 109 – 126.
- Reardon James, Vida Irena, Miller Chip (2005), “An Extension of Brand and Ad Attitudes Formation of Two Emerging Economics, Proceeding of International Conference on Marketing Paradigm for Emerging Economics, January 12 – 13, pp. 120 – 123. Indian Institute of Management Ahamedabad, Research, 26 (August): 351 – 357.
- Reza (2015), “Factors Affecting Brand Switching in Telecommunication Sector”, *Journal of Business and Management*, 4(4): 415 – 428.
- Rizwan, M., Akbar, I., Muqtadir, A., Shafique, U., Zia, H., Naseer, W. and Amin, S. A. (2013), “Impact of Brand Switching, Brand Credibility, Customer Satisfaction and Service Quality on Brand Loyalty”, *IOSR Journal of Business and Management*, 1(Special issue): 12 – 20.
- Rizwan, M., Imran, M., Qayyum, A., Yousaf, M., Qaiswer, S., Afzal, S. and Fatima, N. (2013), “Consumer’s Purchase intention towards Counterfeit Mobile Phones”, *IOSR Journal of Business and Management*, 1 (Special issue): 36 – 43.
- Robertson, T. S., Ward, S. and Zielinski, J. (1984), “Consumer Behavior” Foreman and Company, USA.
- Romanuik (2003), “Understanding and Predicting Brand Attribute Frequency Distributions”, *ANZMAC*, pp. 1 – 9.
- Sabbir Rahman (2010), “Exploring influencing Factors for the selection of mobile phone service providers: A Structural equational modeling (SEM) approach on Malaysian Consumers”, *African Journal of Business Management*, 4(13): 2885 – 2898.

- Satish, M.; Kuman, K.; Naveen, K. and Jeevanantham, V. (2011), "A Study on Consumer Switching Behavior in Cellular Service Provider: A Study with Reference to Chennai," *Far East Journal of Psychology and Business*, pp. 71-81.
- Schmalensee (1972), "The Models of Brand Switching", *Stochastic Processes and their Applications*, Proceedings, Bombay, India, p. 106.
- Schiffman, Leon, G. and Kanuk, Lealie Lazar (1994), *Consumer Behavior*, 5th ed., New York: Prentic Hall International, Inc.
- Shi, Cheung, and Prendergast, (2005), "The Impacts of Sales Promotion on Brand Switching", *Journal of Marketing Research*, 22: 28 – 43.
- Snelders, Dirk and Jan, P. L., Schoormans (2000), "Are Abstract Product Qualifications More Subjective? A test of the Relation between Abstraction level and Opposite Naming", *Advances in Consumer Research*, 26:pp. 584 – 587.
- Srinivasan, S. K. (1974), "Stochastic Point Processes and Their Applications," New York: Hafner press.
- Tsang (2004), "Consumer Attitudes towards Mobile Advertising: An Empirical Study", *International Journal of Electronic Commerce*, 8(3): 65 – 78.
- Walonick, David, S. Ph.D. "Elements of research proposal and report" Internet Browsing.
- Wang and Lo (2000), "Issues in Marketing Use of Multi-attitude Models", *Journal of Market Research*, 10: 428 – 441. www.btcl.com.bd.
- Wen-Hua, S., Wu, Z. and Jing-Yi, L. (2010), "Analysis of the Influencing Factors of Users' Switching Intention in the Context of One-way Mobile Number Portability", *The Journal of China Universities of Posts and Telecommunications*, 17: 112 – 117.
- Wieringa, J. E. and Verhoef, P. C. (2007), "Understanding Customer Switching behavior in a liberalizing Service Market", *Journal of Service Research*, 10(2): 174 – 186.
- Wildt Albert R., Bruno Alber V. and Ginter James, L. (1981), "Attitude Models", *Journal of Advertising Research*, 21(4): 61 – 70.
- Wilker, W.L. and Pessimier, E. A. (1973), "Issues in Marketing Use of Multiattitude Model", *Journal of Market Research*, 10: 428 – 441.
- Wulder, M. (2004), "Multivariate Analysis", http://www.pfc.forestry.ca/profiles/wulder/mvstats/index_e.html.

- Yang, Z., and Peterson, R. T. (2004), "Customer Perceived Value, Satisfaction, and Loyalty: The role of Switching Costs", *Psychology and Marketing*, 21(10): 799 – 822.
- Yoon and Cole (2008), "Detecting non-modal phonation in telephone speech", In Proceedings of the 4th International Conference on Speech Prosody, SP 2008 (pp. 33 – 36). International Speech Communications Association.
- Yuan Zhang (2009), "The Impact of Customer Relationship Marketing Tactics on Customer Loyalty-Withing Swedish Mobile Telecommunication Industry", *Master Thesis*, Halmstad University.
- Zeithaml, V.A. (1988), "Consumer Perceptions of Price, Quality and Value: a means-end model and Synthesis of Evidence", *Journal of Marketing*, 52(3): 2 – 23.
- Zhang, X. and Feng, Y. (2009), "The Impact of Customer Relationship Marketing tactics on Customer Loyalty- within Swedish Mobile Telecommunication Industry," *Master Thesis*, Halmstad University.
- Zikmund, W.R. (1997), "*Business Research Methods* (5th Ed.), Texas: The Dryden Press.

Appendix

Questionnaire

Dear Participant

This is to certify that Meher Neger, PhD Research Fellow, Department of Marketing, University of Dhaka, is conducting a study on the "Consumers' Attitude towards Brand Switching : A Study on Telecommunication Sector in Bangladesh". The findings of the study will help her to understand main features which influence consumers' attitude towards brand switching on telecommunication sector. This study is conducted as a partial fulfillment of PhD program at the Department of Marketing, University of Dhaka, Bangladesh. The information will only be used for academic purpose. Your cordial response in the survey is extremely important for the completion of the study smoothly.

Sincerely yours

Md. Zakir Hossain Bhuiyan, PhD
Professor & Supervisor
Department of Marketing
University of Dhaka, Bangladesh

Dear Participant

I am conducting an academic study on "Consumers' Attitude towards Brand Switching: A Study on Telecommunication Sector in Bangladesh". The findings of the study will help me to understand the main features those influence consumers' attitude towards brand switching on telecommunication sector.

Please read question carefully, express your opinions (tick or written form where its' necessary) and do not avoid any question. Your opinion in the survey is extremely important for the completion of the study smoothly.

Meher Neger
PhD Research Fellow
Department of Marketing
University of Dhaka, Bangladesh

(Questionnaire)

1. Do you have personal mobile phone? Yes No
2. What are the telecommunication service providing firms you can recall right now those are available at present in Bangladesh market?

i)
ii)
iii)
iv)
v)
vi)
vii)

3. What are the names of the operators that you currently used from the above telecommunication service providing firms?

i)
ii)
iii)
iv)

4. Please read carefully and write score for indicating very strongly believe to very strongly disbelieve with the each of the following statement related to each attribute that influence you to form the attitudes towards the mentioned firm's name (Grameenphone, Banglalink and Robi) which are selected for the study.

(+3 =Very strongly believe, +2 = strongly believe, +1 =believe, 0 = neither believe nor disbelieve,
-1 = disbelieve, -2 = strongly disbelieve, -3 =very strongly disbelieve).

Attributes (Intrinsic / Extrinsic)	Grameenphone	Banglalink	Robi
1. Network availability			
2. Service quality			
3. Service charge strategies			
4. Brand image			
5. Offered value			

5. Please read carefully and express your opinions about Grameenphone, Banglalink and Robi which provide the telecommunication service and encircle your feelings indicating extremely good to extremely bad with the each of the following attribute that influence you to form the attitudes towards the mentioned firm's name.

(1 = very bad, 2 = bad, 3 = neither good nor bad, 4 = good, 5 = very good)

Attributes (Intrinsic / Extrinsic)	Grameenphone	Banglalink	Robi
1. Network availability			
2. Service quality			
3. Service charge strategies			
4. Brand image			
5. Offered value			

6. Please read carefully and select to write down one of the following statement which describes the chance that you will receive the telecommunication service from the mentioned firm's for the next time.

Statement	Grameenphone	Banglalink	Robi
I definitely will receive it/I probably will receive it/I probably will not receive it/I definitely will not receive it.			

7. Please write down the answer that 'How likely are you to receive the telecommunication service at least for the next three months from the mentioned firm's name (Grameenphone, Banglalink and Robi) ?'

Statement	Grameenphone	Banglalink	Robi
Very likely/Likely Unlikely/Very unlikely			

8. Please read carefully and encircle indicating very important to not important with the each of the following statement related to each attribute that influence your attitudes towards the telecommunication sector.

(1 = unimportant, 2 = quite unimportant, 3 = neither important nor unimportant, 4 = important, 5 = very important).

Attributes (Internal / External)	Unimportant					Very Important
	1	2	3	4	5	
1. Network availability	1	2	3	4	5	
2. Service quality	1	2	3	4	5	
3. Service charge strategies	1	2	3	4	5	
4. Brand image	1	2	3	4	5	
5. Offered value	1	2	3	4	5	

9. Please read carefully and express your opinions about Grameenphone, Banglalink and Robi which

Provide the telecommunication service and encircle your overall evaluation indicating extremely good to extremely bad with the each of the following statement related to each attribute that influence your attitudes towards the mentioned firm's name.

(+3 = extremely good, +2 = very good, +1 = good, 0 = neither good nor bad, -1 = bad, -2 = very bad, -3 = extremely bad)

Attributes (Intrinsic / Extrinsic)	Grameenphone	Banglalink	Robi
1. Network Availability			
2. Service quality			
3. Service charge strategies			
4. Brand image			
5. Offered value			

10. Please read carefully and write score for indicating very strongly believe to very strongly disbelieve with the each of the following statement related to each attribute that influence your attitudes towards the mentioned firm's name (Grameenphone, Banglalink and Robi), which are selected for the study.

(1 = very strongly disbelieve, 2 = strongly disbelieve, 3 = disbelieve, 4 = neither believe nor disbelieve, 5 = believe, 6 = strongly believe, 7 = very strongly believe).

Attributes (Intrinsic / Extrinsic)	Grameenphone	Banglalink	Robi
1. Network Availability			
2. Service quality			
3. Service charge strategies			
4. Brand image			
5. Offered value			

Please read carefully and answer the following questions related to the influential factors of switching behavior among different brands of telecommunication sector in Bangladesh.

11. Are you ever changing your SIM? Yes No

12. Do you believe that “High promotional effort say strong advertisement of other telecommunication brands influence you to switch from the current brand”?

Yes No

13. Do you believe that “Huge offering of different packages of other telecommunication brands influence you to switch from the current brand”?

Yes No

14. Are you satisfied about the network coverage facility of telecommunication sectors in Bangladesh? Yes No

15. What is the satisfactory call rate of a brand for a SIM in taka per minute? -----

16. What is the satisfactory SMS charge of a brand for a SIM in taka per SMS? -----

17. Do you believe that few FnF number and high FnF tariff influence you to switch from one to other brand?

Yes No

18. Are you agree age of the respondents influenced you to switch from one to other telecommunication operator? Yes No

19. How many SIM do you use? Single SIM Dual SIM Multiple SIM

20. **Please read carefully and provide the right information for analyzing the switching behavior toward the telecommunication sector in Bangladesh. (Fill in the box)**

No. of voice in call of last 24 hours

	<i>GP</i>	<i>BL</i>	Robi	Others
GP				
BL				
Robi				
Others				

No. of voice out call of last 24 hours

	<i>GP</i>	<i>BL</i>	Robi	Others
GP				
BL				
Robi				
Others				

No. of SMS send of last 24 hours

	<i>GP</i>	<i>BL</i>	Robi	Others
GP				
BL				
Robi				
Others				

No. of SMS received of last 24 hours

	GP	BL	Robi	Others
GP				
BL				
Robi				
Others				

21. Please read carefully and provide the right information for analyzing the switching behavior toward the telecommunication sector in Bangladesh. (Fill in the box / Write where it is necessary)

Using status of different subscriber:

Used different subscriber					Number of Current Active SIM				
1st time	2nd time	3rd time	4th time	5th time	1	2	3	4	5

Please answer the questions accurately:

22. Are you want to switch from current to another SIM?

Yes No

23. If yes, which brand will be your next choice?

.....

24. Why would you choose the brand?

Personal Information (Please Tick / Write where it is necessary)

25. Age of the respondent..... Years.

26. Please mention your profession (Tick on one)

Student Universities Teacher Banker Businessman Corporate officer

Government employees Nongovernment employees Housewife

27. If you are a university student, please mention which year do you study at present?

1st year 2nd year 3rd year 4th year others

28. What is your/parents' monthly income?Tk.

29. Gender of the respondent Male Female

30. Marital status Single Married

31. Mobile Number (any one):

[Thank you very much for your active cooperation]