Internship Report

Factors Influencing Customer Satisfaction in Grameenphone

Submitted To
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Date of Submission
November 29, 2018
Letter of transmittal

November 29, 2018
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Subject: Submission of Internship Report

Dear Sir,

Here I am submitting my Internship Report titled “Factors influencing customer satisfaction in Grameenphone”, which is required for the completion of the course BUS400. During my internship period in Grameenphone, I worked under the Digital department of Skitto, which is a concept of Grameenphone. Although I worked in the events and activations of Skitto but I came across people who were gradually getting dissatisfied with the services of Grameenphone. For such, I came up with the idea of doing a research analysis over SPSS which can provide a statistical analysis on the factors influencing customer satisfaction in Grameenphone.

I have put my best efforts to prepare this research report and tried to make it as flawless as possible. Yet if any flaws are found or doubts are raised while going through the report, I will be really happy to clarify them.

Sincerely

Aqib Wassy Deepta
ID -15304026
Acknowledgement

Firstly, I would like to thank Allah who has given me the mental strength and ability to complete my report within due time.

I would also like to thank my advisor, Mr. Ariful Ghani. He has always helped me to do the research in the right way and kept track of my work which always encouraged me to put my best efforts.

Next I would like to thank, Mr. Emran (Head of Skitto, Grameenphone) who has helped me immensely throughout the preparation of the report and guided me during the internship period.

I would also like express my sincere gratitude to Mr. Ishtiaque Hossain and all other employees of Skitto who have helped me during my work tenure and made my experience a memorable one.
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Executive Summary

In the telecommunication sector of Bangladesh, competition is getting immense. In order to retain customers, companies need to attract their customers finding new pathways. One of the biggest problems is that the change of mobile operator doesn’t cost much for which customers have the higher power to switching. Grameenphone has been the market leader in this sector for a long time. However, they have proved themselves in the market for their superior network and customer services which helped them creating a huge customer base.

Being the market leader of the telecom sector, the company needs to pay attention on certain factors which have positive influence over customer satisfaction. And as the market is emerging with the increase of competition, it is important to satisfy customers in order for their retention. For such, a statistical analysis has been conducted over SPSS in order to measure the factors which influence customer satisfaction in Grameenphone.

Primarily, a survey has been conducted based on the responses of which statistical analysis has been done over SPSS. The analysis includes missing data analysis, Mahalonobi’s distance analysis, Factor analysis, Reliability test, Validity test which includes both convergent validity test and discriminant validity test, and Regression analysis with the interpretation of the results found from the analyses. Lastly, based on the results, few recommendations have been suggested in addition to explaining the limitations of this study.
Industry and Organization Overview

**Brief description about the industry**

The telecommunication industry in Bangladesh has a fairly competitive market with competitive pricing strategies among the rivals in this industry which has led towards increasing market penetration rate every year. According to BTRC, this industry currently has six companies operating with Grameenphone being the market leader with 42% share of a total of 126.87 million. Although every year the number of subscribers are increasing but the market shares of the operators have remained relatively same.

![Chart 1: Market shares of mobile telecommunication companies in Bangladesh](image)

Chart 1: Market shares of mobile telecommunication companies in Bangladesh  
*Source: BTRC 2015*

Grameenphone being the market leader from the first has been dominating in this industry for quite a long time now. However, as Robi has acquired Airtel last year, they have been advancing with effective marketing strategy. Especially after the introduction of MNP (Mobile Number Portability) we have seen majority of the users requesting to shift their numbers to Robi. However, with the introduction to 4G internet services and broadband connections being widely available, people have shifted from mobile phone calls to phone calls over WhatsApp, Messenger, Viber, and IMO at a greater extent. For such, the call rates have been dropping significantly and a price war has been going for some time. But the government has interfered and fixed a base line below which none of the operators can fix a call rate. For all these advancements and regulations, operators are now focusing more on their internet services. It is noteworthy to share about the introduction of Skitto (the internet sim), a concept of Grameenphone, which has been functioning
well being the first mover with this idea. However, other operators are continuously coming up with attractive offers in order to gain more customers.

**Major Companies**

The telecommunication industry in Bangladesh includes fewer companies having high competitions among themselves. However, from the six companies operating currently in the market, Grameenphone, Robi, and Banglalink are the major ones. Although Airtel has been an attraction for the youth, but it has been acquired by Robi last year. Recently Grameenphone has reached a benchmark of 70 million subscribers. In addition to the 017 series of Grameenphone, they have introduced a new series of 013 numbers. Likewise, Banglalink is planning to introduce a 014 series in the market soon. And with this, the competition is supposed to increase for Grameenphone. However, Robi has been trying for a while to increase their market share by planning strategically. But it has proved tough for them to compete with the market leaders. Apart from this, all the three companies have advanced to being 4G in terms of network services. This step has of course upgraded the telecom industry of this country to a new level. With the addition of 4G, in duration of less than a year Grameenphone has reached a new milestone of 5 million active 4G users.

**Company Overview**

The largest telecommunications operator in Bangladesh in terms of revenue, coverage, and subscriber base, Grameenphone Ltd. Incorporated on October 10, 1996. Initially the company operated as a private limited company and converted to a public company on June 25, 2007. After becoming stock listed, from November 16, 2007 the company started trading at Dhaka and Chittagong Stock Exchanges (About Grameenphone, 2016). However, the company has its own shareholding structure which comprises of two sponsor shareholders, namely Telenor Mobile Communications AS (55.80%) and Grameen Telecom (34.20%) and the rest 10.00% shareholding includes General public and other institutions.

A country where telephony is a major driver of socioeconomic development, Grameenphone serves here both the rural and urban customers. In the local telecom market of Bangladesh,
Grameenphone has always been the pioneer in introducing new products and services as it envisions to provide the power of digital communication, enabling everyone to improve their lives, build societies and secure a better future for all.

Grameenphone Ltd. has always worked focusing the emotions of the customers. They have built their network nationwide and as of December 2017, the company’s network covered more than 99% of Bangladesh’s population with 2G services and more than 92% population with the high speed of 3G network (The Daily Star, 2018). In addition, they have launched the 4G services as they were awarded the license of 4G cellular mobile phone services on February 19, 2018 and has already bagged 5 million active 4G customers. The company so far has invested more than BDT 313 billion to build the strong infrastructure in Bangladesh. And it needs to be noted that the company is one of the highest taxpayers in the country and has contributed more than BDT 585 billion in direct and indirect taxes to the Government Exchequer since inception.

In addition to their brand building process, the company has reached a milestone of 70 million subscribers (The Daily Star, 2018). Moreover, the company has introduced its new series of 013 numbers which has already acquired a new set of customers. Apart from this, in this era of smartphones and internet, Grameenphone came up with the concept of an internet sim, Skitto for the first time in the market. Skitto sets its goals to reach the youth of the nation being the first one of its kind. Eventually, Skitto is building its customer base in the country and already has a base of more than 2 lakh subscribers. Being an internet sim, Skitto has been offering attractive internet packages throughout the year and has always brought the best internet package deals in the market.

**Internship Activity**

If we look 25 years back, not even 5% of the population could afford mobile phone but today even the lower class people of our society can afford smartphones. In an era where everything is getting digital and marketing is the process of reaching out to customers, I got the opportunity to work as an intern in the marketing department of the leading telecom of the country, Grameenphone Limited. To be more specific, I worked under the Digital Department of Skitto, Grameenphone Ltd.
Being an intern, it is important to learn besides working and I was lucky enough to get highly qualified mentors who were friendly enough to teach me at every phase of my journey. They had provided me the opportunity to express my opinion in terms of planning and have always welcomed ideas for their projects. However, the tasks/activities I completed during my internship at Grameenphone Ltd. has been explained below.

**Job Duties and Responsibilities**

i. Preparing list of call rates and internet packages of all the telecoms in the market  
ii. Thoroughly studying about Vimla and Giffgaff, two telecoms from Sweden and UK  
iii. Recommendations for Skitto after the study on Vimla and Giffgaff  
iv. Preparing presentation on PowerPoint for Vimla and Giffgaff  
v. SIM testing of 013 series Skitto numbers  
vi. Actively participating in meetings  
vii. Writing regular meeting minutes  
viii. Actively participating in planning the events of Skitto  
ix. Keeping track of the agency known as IMS, handling events and activations of Skitto  
x. Keeping regular updates about the Skitto events in Dhaka and Chittagong  
xi. Preparing captions/taglines/event names for the events of Skitto  
xii. Following up sales and engagement in the Skitto events and preparing the regular sales report  
xiii. Preparing and presenting a list of popular YouTube, Facebook, and Instagram pages for further engagement of Skitto  
xiv. Keeping track on the stock of gift items for the Skitto events  
xv. Preparing the possible list of places for arranging Skitto events  
xvi. Visiting the event venue  
xvii. Forwarding regular emails to Skitto employees and agency employees in order to successfully complete the daily requirements of Skitto events and activations

Apart from the above activities, I also needed to complete few other tasks which were given for once and were irregular in addition to the daily activities. However, I always maintained a healthy
relationship with the employees of Skitto and they also provided me the learning atmosphere which motivated me to take the extra step during the internship period. The learning outcomes from my internship at Skitto, Grameenphone Ltd. has been explained further.

**Learning Outcomes**

i. Working under pressure  
ii. Time management  
iii. Working with the people of agency  
iv. Maintaining multiple responsibilities at the same time  
v. Being patient  
vi. Learning about the corporate culture  
vii. Planning strategically  
viii. Learning about events and activations  
ix. Learning about the market place  
x. Learning about the drivers of customer attention

These were the major learnings from my internship period. However, it cannot be completely explained in words as the experience in Grameenphone Ltd. has been a booster and helped strengthening my personality to a greater level. Moreover, I came across new people and learned their ways of working in addition to the organizational culture Grameenphone Ltd. Lastly, all these learning outcomes will surely help me further in my career in terms of building effective strategies and implementing them successfully.
Introduction to Report

Background Information
If we look back in 1971, Bangladesh Telegraph and Telephone Department was reconstructed under the Ministry of Posts and Telecommunications. In 1975, it was again reconstructed as Bangladesh Telegraph and Telephone Board with the right to issue for telecom and wireless services. However, the market leader in the telecom industry of Bangladesh, Grameenphone got the cellular mobile Telephone license in 1996 (Rahman, 2017). In its journey of more than 20 years, the company has established the biggest customer base in Bangladesh. However, the local telecom operator Teletalk cellular mobile launched in 2004 and so far their business hasn’t been satisfactory even after proper investment. Another telecom operator Aktel, rebranded themselves to Robi Axiata Limited in 2010 and had merged with Airtel which previously acquired Warid Telecom in 2009. In addition, Banglalink has been establishing their customer base from the early stages but still unable to compete with the market leaders of this sector.

The telecommunication industry is emerging in Bangladesh and in 2014, all the 64 districts of the country was covered with 3G services by Teletalk, Grameenphone, Banglalink, and Robi. The country has been advancing for the beneficial of its people and the telecom industry is nowhere less. For such, on February 19, 2018 4G mobile services were introduced in the country for the first time. With the introduction of 4G services, the competition has increased in the market. And in this competitive market it becomes a challenge for the all-time market leaders to grow better. Of course there are underlying factors for which people prefer different telecom companies. However, some of the basic factors include about the network quality, pricing, brand value, and facilities provided by the company in order to ensure better customer experience.

Research Question
The research question that is driving this study is – “What are the factors influencing customer satisfaction in Grameenphone?”. 
Research Objectives

Objectives indicate the purpose of the study and what output the researchers are likely to achieve from the research. In this research paper, the main objective is to find out the current condition of customers of Grameenphone. In addition, depending upon the independent variables it is likely to find how closely these independent variables affect the dependent variable after proper analysis. This further helps to figure if there is any gap between the customer expectations and Grameenphone offerings.

Significance of the study

The significance of the study is much as it can help customers understand about the service quality of Grameenphone in the telecommunication sector. Apart from this, company officials can also understand their areas of improvement if needed. Furthermore, this research and findings can be used for further study in this topic.

Literature Review

Dr. Md. Hasebur Rahman said in his article that the opportunities that lie in the telecommunication market is endless and the increasing demand for mobile telephony systems is creating a worldwide market. He adds that the competition in this sector, forces has become intense and fort the survival of the companies’ it is very difficult to dominate in this sector, forces them to search for ways to attract and retain customers. For such, customer satisfaction is highly focused in the telecommunication market.

Moving on, the urgency of customer satisfaction has also been given attention in the article of Phuong Hong. Hong says that after conducting multiple regression analysis it has been found that Grameenphone’s network, pricing policy, brand value, value added services are found to be insignificant for affecting customer satisfaction. And for such the independent variables for this paper has been selected in order to test the extent to which it is true.

It is very often that customers switch to other operators in order to get low call rates, strong network and better customer experience. As mentioned in a study by Rahman M, a quantitative study in
Ghana shows that the basic reason for the change of mobile service operators is convenient pricing and network availability, which is highly followed by peer group influence and social reputation. However, an analysis on Malaysian big city dwellers found that Malaysian telecom customers prefer price to be the most important factor while using mobile service operators.

**Research Methodology**
For conducting the research, primary research activities were never enough. It was needed to conduct secondary research at first, which provided knowledge about the respective topic and helped understanding the different variables. This further helped in selecting variables which are actually affective. Apart from this, a survey was conducted which was a part of the primary research and the analysis was conducted on SPSS based on the responses received from respondents.

**Problem Identification**
In a telecommunication sector, it is obvious to face customer complaints regarding cellular network. Even though Grameenphone is covering all the districts in the country with 3G services in addition to their recent 4G services, but still it needs to be analyzed properly if there are any downfalls or not. Grameenphone as a brand has established all over the country. From rich to poor, everyone is well aware of the no.1 telecommunication company of the country. There are people who use Grameenphone for its brand value. But as this is an emerging market, so updating oneself is really necessary in order to survive.

One of the most important factors in this sector is the price. The call rates, internet package rates, SMS rates are ever changing. Price war is a common phenomenon where competitors try to lower their charges as much possible. However, often charging rates are overlooked if the company provides better customer experience. One of the key factors where GP lies ahead of their competitors is the GP Star facilities, which is well known to all as they have been providing services at many well know places. However, competitors never sit idle rather with their utmost efforts try to snatch new customers. For such, all these risk factors should be in the concern of the
company so that they can find the problems and improve themselves in the shortest possible time for ensuring better customer satisfaction.

**Model Development**

![Diagram](image)

Model: *Factors influencing customer satisfaction in Grameenphone*

The above model has been formulated in order to conduct the research. It is to be noted that, when the users of Grameenphone were asked primarily about the factors for which they were using Grameenphone, they answered positively about network, brand value, pricing, and GP Star facilities.

As we look into the model, there are 5 variables, where 4 are independent variables (Network, Brand Value, Pricing, GP Star Facilities) and 1 is dependent variable (Customer Satisfaction). We can form 4 hypotheses from here. The relationship between the independent variable “Network” and dependent variable “Customer Satisfaction” can be identified by hypothesis 1 or H1. In the same manner the individual relationship of other 3 independent variables with the dependent variable from H2, H3, and H4 can be identified. If in the outcome of the research, it is identified that the people participating in the survey, are satisfied on this 4 independent variables, then it can be said that the customers are entirely satisfied in the Grameenphone. Thus, for the outcome of the study, the dependent variable is dependent on the 4 given independent variables.
Hypothesis Formulation

Network
When we talk about telecommunication companies, the key factor working behind their success is the network. When the network is available all throughout the country, then customers will have higher chances to using the services of the respective company. Cellular network quality needs to be clear and better which will surely encourage customers towards the company. Thus, customer satisfaction is highly depended upon the network quality of the telecom company. Better the network better the customer satisfaction.

H1: Better Network positively affects customer satisfaction.

Brand Value
Customers not only look for network quality but they use the brand which will represent them. A huge number of people in our country are concerned about the brand they use. For such, brand value plays an important role in the customer satisfaction in the telecom industry. Nowadays brand value has become one of the key elements of customer satisfaction for which companies work in protecting their image in the market in addition to upgrading themselves to the next level. Therefore, good brand value has an impact on customer satisfaction.

H2: Good Brand Value positively affects customer satisfaction.

Pricing
Convenient pricing is one the prime factors on which customers mostly depend after considering network quality. In case of a telecom company, the call rates, SMS rates, and internet packages are needed to be fixed carefully. For such, market analysis is needed to be done where the price changes in the competitors list are to be followed carefully. Customers if find better deals in the competitor’s package, are likely to shift. For such, convenient pricing is required for better customer satisfaction.

H3: Convenient pricing positively affects customer satisfaction.
**GP Star Facilities**

Companies in order to ensure better customer experience provides facilities to their customers which help them retain customers for a long time. In the telecommunication sector, Grameenphone’s GP Star Facilities for a specific group of customers, categorized upon their usage rate and duration of usage has created an impact. GP Star Facilities are found in some of the best places of the country and this helps ensuring better customer experience. Being the market leader for a long time, the company has been offering attractive offers for their Star customers. Therefore, customers are likely to get highly satisfied being able to enjoy such offers.

H4: GP Star Facilities positively affects customer satisfaction.

**Name of the Factors**

In order to find the customer satisfaction level in Grameenphone, a model based on 4 independent variables has been developed. These are Network, Brand Value, Price, and GP Star Facilities. In the research model, the dependent variable is ‘Customer Satisfaction’ which is related to the independent variables. In the research it will be shown how closely, the independent variables are related to the dependent variable, i.e. if the customers are satisfied with the services of Grameenphone or not. For such, it is needed to collect responses of the survey based on these 5 variables. At the end of the study if is found that customers are satisfied on these four individual variables, then there remains higher possibility that customers are entirely satisfied with Grameenphone.

**Items of variables**

Items chosen for the independent variable ‘CN’ which is Network are

CN1 – Role of cellular network

CN2 – Availability of Grameenphone network

CN3 – Improvement of network quality

CN4 – Network quality satisfaction
Items chosen for the independent variable ‘BV’ which is Brand Value are

BV1 – Level of satisfaction of Grameenphone’s Brand Value
BV2 – Level of usage due to Brand Value
BV3 – Brand Value protecting individual’s image
BV4 – Brand Value describing individual’s personality

Items chosen for the independent variable ‘P’ which is Price are

P1 – Experience worth the price
P2 – Internet package rate
P3 – Call rates
P4 – Role of price in customer satisfaction

Items chosen for the independent variable ‘GPS’ which is GP Star Facilities are

GPS1 – GP Star motivating usage
GPS2 – Best offerings in the market
GPS3 – Level of usefulness of GP Star Facilities
GPS4 – Improvement of GP Star Facilities

Items chosen for the dependent variable ‘S’ which is Satisfaction are

S1 – Level of satisfaction with Grameenphone
S2 – Level of customer experience

Here Five-Points Likert Scales has been used to measure each item where a numerical value 1 means Highly Satisfied/Highly Agree/Extremely Important, 2 means Satisfied/Agree/Important, 3 means Neutral, 4 means Dissatisfied/Disagree/Unimportant, and 5 means Highly Dissatisfied/Highly Disagree/Extremely Unimportant.
Data Analysis

Missing Data Analysis

To successfully conduct the analysis, at first, the missing data analysis was done. As in the online survey form it was mandatory to respond all the questions, so there was no missing data.

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\(^a\) Count, Percent, Low, High
Outlier Test

Afterwards, Mahalanobi’s distance test was conducted but there was no outlier. It was understood as none of the values in the Probability column (in the chart below) were less than .001.

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<td>2.00</td>
<td>46.00</td>
<td>.91</td>
</tr>
<tr>
<td>5</td>
<td>9.00</td>
<td>9.00</td>
<td>11.00</td>
<td>7.00</td>
<td>9.00</td>
<td>45.00</td>
<td>.91</td>
</tr>
<tr>
<td>2</td>
<td>7.00</td>
<td>16.00</td>
<td>15.00</td>
<td>9.00</td>
<td>4.00</td>
<td>50.00</td>
<td>.91</td>
</tr>
<tr>
<td>2</td>
<td>8.00</td>
<td>9.00</td>
<td>11.00</td>
<td>7.00</td>
<td>4.00</td>
<td>39.00</td>
<td>.91</td>
</tr>
<tr>
<td>1</td>
<td>9.00</td>
<td>8.00</td>
<td>8.00</td>
<td>12.00</td>
<td>2.00</td>
<td>39.00</td>
<td>.91</td>
</tr>
<tr>
<td>1</td>
<td>8.00</td>
<td>11.00</td>
<td>6.00</td>
<td>12.00</td>
<td>2.00</td>
<td>39.00</td>
<td>.91</td>
</tr>
<tr>
<td>2</td>
<td>9.00</td>
<td>12.00</td>
<td>8.00</td>
<td>11.00</td>
<td>4.00</td>
<td>44.00</td>
<td>.91</td>
</tr>
</tbody>
</table>

_Mahalonobi’s distance to conduct Outlier Test_

Factor Analysis

Moving on, factor analysis was conducted. Initially factor analysis was conducted with varimax rotation to examine, to what extent the selected measures loaded on expected constructs. The results of KMO and Bartlett’s test, Rotated Component Matrix, Reliability, Validity, and Regression under varimax and promax were compared. Comparing both the cases it was found that results under varimax rotation were more acceptable. Therefore, results from the varimax rotation has been shown in this paper.
At first, KMO and Bartlett’s Test was conducted. And as we can see from the table, the test resulted significant as the value is .000.

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.605</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>302.227</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>Df</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
</tr>
</tbody>
</table>

In addition, in the communalities chart we can also see that all the values are more than 0.5 for which it is satisfactory. It should be noted that the extraction method was Principal Component Analysis.

<table>
<thead>
<tr>
<th>Communalities</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>1</td>
<td>0.715</td>
</tr>
<tr>
<td>P2</td>
<td>1</td>
<td>0.82</td>
</tr>
<tr>
<td>P3</td>
<td>1</td>
<td>0.743</td>
</tr>
<tr>
<td>S1</td>
<td>1</td>
<td>0.967</td>
</tr>
<tr>
<td>S2</td>
<td>1</td>
<td>0.969</td>
</tr>
<tr>
<td>BV2</td>
<td>1</td>
<td>0.831</td>
</tr>
<tr>
<td>BV4</td>
<td>1</td>
<td>0.785</td>
</tr>
<tr>
<td>GPS1</td>
<td>1</td>
<td>0.782</td>
</tr>
<tr>
<td>GPS3</td>
<td>1</td>
<td>0.779</td>
</tr>
<tr>
<td>CN2</td>
<td>1</td>
<td>0.909</td>
</tr>
</tbody>
</table>

Before conducting the rotated component matrix it is essential to have a look at the chart below titled “Total Variance Explained”. Here, if the cumulative % is 60% or greater, then it is to be proceeded towards Rotated Component Matrix/Pattern Matrix. Here the value is 83.005% which is satisfactory for which the research proceeded towards conducting Rotated Component Matrix.
Afterwards, the Rotated Component Matrix was conducted and as we can see that all the values are more than 0.5 for which all the factors are relevant.
Reliability Analysis

At first, the reliability among P1, P2 and P3 were checked. As we can see from the result shown in the table below; relationship among P1, P2 and P3 is very reliable. Because, according to Hair Et Al, 2007 in an exploratory research, Cronbach Alpha minimum 0.7 is reliable.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>0.826</td>
</tr>
</tbody>
</table>

Afterwards, the reliability between S1 and S2 was checked. As we can see from the result shown in the table below; the relationship between S1 and S2 is highly reliable.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>0.995</td>
</tr>
</tbody>
</table>

Moving on, the reliability between BV2 and BV4 was measured. But in this case as the value is just below 0.7, so the relationship between BV2 and BV4 is not reliable.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>0.654</td>
</tr>
</tbody>
</table>

Lastly, the reliability between GPS1 and GPS3 was checked. And in this case too, as the value of Cronbach’s Alpha is less than 0.7, so the relationship between GPS1 and GPS3 is not reliable at all.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>0.530</td>
</tr>
</tbody>
</table>
As the number of items selected from the variable Network, is only CN2, so we are unable to conduct reliability test for the independent variable CN which is Network.

Validity Test

Convergent Validity Test

Afterwards, the validity test was conducted. Here the Convergent validity test was conducted and the result came out satisfactory. The table have been attached below:

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>S1</th>
<th>S2</th>
<th>BV2</th>
<th>BV4</th>
<th>GPS1</th>
<th>GPS3</th>
<th>CN2</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2 Pearson Correlation</td>
<td></td>
<td>0.650**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3 Pearson Correlation</td>
<td></td>
<td>0.549**</td>
<td>0.646**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1 Pearson Correlation</td>
<td></td>
<td>0.244</td>
<td>0.288</td>
<td>0.118</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2 Pearson Correlation</td>
<td></td>
<td>0.250</td>
<td>0.302</td>
<td>0.117</td>
<td>0.991*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BV2 Pearson Correlation</td>
<td></td>
<td>0.136</td>
<td>0.186</td>
<td>0.048</td>
<td>-0.240</td>
<td>-0.236</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BV4 Pearson Correlation</td>
<td></td>
<td>0.099</td>
<td>0.044</td>
<td>0.238</td>
<td>-0.262</td>
<td>-0.273</td>
<td>0.487*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPS1 Pearson Correlation</td>
<td></td>
<td>-0.100</td>
<td>-0.193</td>
<td>-0.144</td>
<td>-0.023</td>
<td>-0.057</td>
<td>0.063</td>
<td>0.141</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>GPS3 Pearson Correlation</td>
<td></td>
<td>0.173</td>
<td>0.064</td>
<td>0.233</td>
<td>-0.116</td>
<td>-0.116</td>
<td>0.063</td>
<td>0.222</td>
<td>0.361*</td>
<td>1</td>
</tr>
<tr>
<td>CN2 Pearson Correlation</td>
<td></td>
<td>0.387*</td>
<td>0.387*</td>
<td>0.312*</td>
<td>0.343*</td>
<td>0.377*</td>
<td>-0.128</td>
<td>-0.013</td>
<td>-0.070</td>
<td>0.081</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

As we see in the above table that the relationship between the items of the different variables are statistically significant for which this result is acceptable.

Discriminant Validity Test

Afterwards, the Discriminant Validity Test was conducted and the results were positive as shown in the table below:

<table>
<thead>
<tr>
<th>Price</th>
<th>Square</th>
<th>Satisfaction</th>
<th>Brand Value</th>
<th>GP Star Facilities</th>
<th>Network</th>
<th>Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.813</td>
<td>0.66097</td>
<td>0.955</td>
<td>0.866</td>
<td>0.74996</td>
<td>0.822</td>
<td>0.67568</td>
</tr>
<tr>
<td>0.866</td>
<td>0.74996</td>
<td>0.948</td>
<td>0.8987</td>
<td>0.8</td>
<td>0.813</td>
<td>0.66097</td>
</tr>
<tr>
<td>0.835</td>
<td>0.69723</td>
<td>0.948</td>
<td>0.64</td>
<td>0.64</td>
<td>0.877</td>
<td>0.76913</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUM</th>
<th>2.10815</th>
<th>1.81073</th>
<th>1.38996</th>
<th>1.33665</th>
<th>0.76913</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>0.70272</td>
<td>0.90536</td>
<td>0.69498</td>
<td>0.66833</td>
<td>0.76913</td>
</tr>
</tbody>
</table>
In the discriminant validity test, it is essential for the average variance extracted to be greater than 0.50 for getting accepted statistically. It refers to the extent to which the construct is actually differing from one another empirically. In the above table we see that the average variance extracted value of the items of respected variables are greater than 0.50 for which this result is statistically acceptable.

**Regression Analysis**

Lastly, Regression analysis has been conducted. The tables have been provided below:

<table>
<thead>
<tr>
<th>Variables Entered/Removeda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>a. Dependent Variable: SSSS</td>
</tr>
<tr>
<td>b. All requested variables entered.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>a. Predictors: (Constant), GPS, P, CN, BV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVAa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>a. Dependent Variable: S</td>
</tr>
<tr>
<td>b. Predictors: (Constant), GPS, P, CN, BV</td>
</tr>
</tbody>
</table>
From the above table we can see that ANOVA is completely significant as the value is slightly greater than .000. However, as we move towards the Coefficients table, we see that CN (Network) and P (Price) are statistically significant as their level of significance is less than 0.050. On the other hand, the value of BV (Brand Value) and GPS (GP Star Facilities) are greater than 0.050 for which it is not statistically significant. From here, we can say that H1 and H3 are true for this research. Therefore, the two independent variables Network and Price have an influence over customer satisfaction.

Result

In order to test the model for customer satisfaction, multiple regression analysis was used with the four independent variables. The entire model would be significant if the F-statistics (p<0.000). The regression model explained 16.9% of the variation of the dependable variable Customer Satisfaction, which is indicated by the adjusted R square value. From the overall analysis as we came to a conclusion that only two factors are having significant effect on customer satisfaction. These are Network and Price. Therefore, the hypothesis 1 and hypothesis 3 are statistically significant, which explains that from the research conducted, Network and Price has positive impact on customer satisfaction. Further study can be conducted regarding the rest two hypotheses since those two are not statistically significant. The independent variables are Network, Brand Value, Price, and GP Star Facilities, and their respective values are: Network has b = 0.335, p = 0.19; Brand Value has b = -0.209, p = 0.163; Price has b = 0.266, p = 0.48; and GP Star Facilities
have $b = -0.194, p = 0.168$. From these values, Network and Price are statistically significant both having value less than 0.050. Lastly, the standardized Beta values suggest that Network has the biggest impact on customer satisfaction having greater Beta value.

**Limitation and Further Study**

For conducting a survey for a research it is mandatory to have at least 50 respondents. However, one of the biggest limitations of the research was the sample size. If the sample size would have been around 100 then it might have helped in coming up with even better results. In addition, the biased answers of customers are uncontrollable. Yet, I have tried my best to collect the most accurate results. Although the diversity ratio in terms of gender and profession were maintained yet, here is a chance of improvement during further study.

Apart from these, one of the major limitations could be during conducting the research analysis. If it was possible to dedicate some more time for conducting the Rotated Component Matrix, the results could have been better. Furthermore, the survey questions could be a limitation too. Maybe the survey questions can be modified in order to get better answers from customers’ end.

**Recommendation**

The four independent variables chosen for the research purpose are few key factors towards customer satisfaction in Grameenphone. As a part of recommendation, if we have a look at the survey analysis, we can better understand about the possible places of concern for Grameenphone.

From the survey over 50 respondents 54% of them somehow agrees with the fact that Grameenphone needs to improve their network quality. Although Grameenphone is available all throughout the country but there have been quality issues with the network of Grameenphone. Recently, customers have been facing problems regarding network downfalls of which competitors are trying to take an advantage.
Although the number of respondents in the survey was less, still such an issue should be carefully handled from the company. It is to be noted that customer satisfaction is required for a company to flourish. And for a telecom company, good network quality is the first and foremost demand to be fulfilled. Therefore, it is highly recommended to the company to work with their network quality as it is one of the key factors to customer satisfaction.

In addition to the network quality, the company should also focus on how to better help customers with an outstanding experience. This issue came into being because of the following query:

GP Star is undoubtedly one of the biggest offers any telecom company has to offer. They have been the pioneer to introducing such facilities for better customer experience. However, 46% of the respondents agreed to the fact that GP Star Facilities should be improved. Here could be two
possible things. Firstly, the respondents are over demanding, which of course shouldn’t be a major concern for the company. Secondly, as GP Star Facilities are based on the monthly usage rates and duration of usage, maybe a portion of customers could not avail the service even after meeting the targets of becoming a STAR customer. However, since a good portion of customers have issues, so the it should be a concern for the company as customers are to be kept happy. Often customers remain unaware of the offers the company is providing, for such cases, the company can look forward to reaching their customers in a better way.

From the research I have conducted, these are the possible recommendations. As I had divided the questions based on the variables, it has been found that majority of the customers are not having major issues regarding brand value and pricing.

Conclusion

“Satisfied customer is the best source of advertisement” – G.S. Alag, keeping this quote in mind a company should never forget it’s the customers who run the company. If the customer base turns to zero, the company won’t be able to do business anymore. For such, it has been a wonderful opportunity to conduct a statistical analysis on the factors influencing customer satisfaction in Grameenphone. This paper can better help the company officials understand about the possible problems they might need to face. However, at present they must focus in improving their network quality in addition to providing better customer experience by improving GP Star Facilities to an extent. Customers are always the drivers of a business, so customer satisfaction must be ensured in order to dominate the market.

Apart from this, in order to statistically measure the influence of Brand Value and Price further research could be done with a new set of data collection. Moreover, the statistical outputs from the overall analysis of the survey data collected might not be accurate and actual. The prime reason is the sample participating in the survey. It is tough to collect the right sample from the population in order to better understand about their experiences with the company. However, for further research the sample size can be increased and the samples could be chosen more precisely which can further help in analyzing the topic.
It is the customers who run the company for which companies need to work with the preferences of the customer. This will lead a company towards progression having bigger customer base. For such, this paper can be helpful in understanding the customer perspectives of Grameenphone users at least to an extent. The points where further study can be efficiently conducted have also been mentioned. To conclude, it is important to note that, during my internship period I came across Grameenphone customers who were unhappy with the recent experiences. This fact motivated me in conducting a statistical analysis on the factors influencing customer satisfaction in Grameenphone.
References


Appendix
Survey Questionnaire
General Question

1. Gender
   a. Male
   b. Female

2. Profession
   a. Student
   b. Businessman
   c. Service Holder
   d. House-Wife

3. Monthly Income
   a. Below Tk.10,000
   b. Tk.10,000-Tk.20,000
   c. Tk.20,000-Tk.40,000
   d. Tk.40,000-Tk.80,000
   e. Above Tk.80,000

4. I have been using Grameenphone for
   a. Less than 2 years
   b. 2-4 years
   c. 4-6 years
   d. 6-8 years
   e. More than 8 years

Network

1. The role of cellular network in terms of using SIM card is
   a. Extremely Important
   b. Important
   c. Neutral
   d. Unimportant
   e. Extremely Unimportant
2. Grameenphone network is available at all places
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree

3. The network quality of Grameenphone needs to be improved
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree

4. With the network quality of Grameenphone I am
   a. Highly Satisfied
   b. Satisfied
   c. Neutral
   d. Dissatisfied
   e. Highly Dissatisfied

**Brand Value**

1. The brand value of Grameenphone is
   a. Highly Satisfying
   b. Satisfying
   c. Neutral
   d. Dissatisfying
   e. Highly Dissatisfying

2. I use Grameenphone because of its brand value
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree
3. The brand value helps protect my image  
   a. Highly Agree  
   b. Agree  
   c. Neutral  
   d. Disagree  
   e. Highly Disagree  

4. The brand value of Grameenphone describes my personality  
   a. Highly Agree  
   b. Agree  
   c. Neutral  
   d. Disagree  
   e. Highly Disagree  

**Pricing**  

1. The experience Grameenphone provides is worth the price  
   a. Highly Agree  
   b. Agree  
   c. Neutral  
   d. Disagree  
   e. Highly Disagree  

2. In terms of price, the internet packages of Grameenphone is  
   a. Highly Satisfying  
   b. Satisfying  
   c. Neutral  
   d. Dissatisfying  
   e. Highly Dissatisfying  

3. In terms of price, the call rates of Grameenphone is convincing  
   a. Highly Agree  
   b. Agree  
   c. Neutral  
   d. Disagree  
   e. Highly Agree
4. Price plays an important role behind customer satisfaction in telecom industry
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree

**GP Star Facilities**

1. GP Star facilities motivates me in using Grameenphone
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree

2. GP Star facilities are the best offerings any telecommunication company providing
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree

3. GP Star facilities have been highly helpful in my journey with Grameenphone
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree

4. GP Star facilities should be improved
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree
Customer Satisfaction

1. I am highly satisfied with Grameenphone
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree

2. Grameenphone provides the best customer experience
   a. Highly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Highly Disagree