

# **C**CRM PRACTICES OVER MOBILE TELECOM INDUSTRY IN BANGLADESH AND ITS IMPACT

## Submitted to

Md Sayeed Alam.

Assistant Professor, Department of Business

Administration,

East West University, Dhaka

### Submitted by

Sayeda Taskeen .

ID: 2005-2-10-087

Department of Business Administration

East West University



East West University, Dhaka ·21 August, 2009.

43, Mohakhali C/A, Dhaka-1212 21 June 2009



Sayeda Taskeen Id: 2005-2-10-087 Department of Business Administration East West University

Dear Taskeen,

At your earliest convenience, will you please undertake a study about "eCRM practices over mobile telecom industry in Bangladesh and its impact". Will you specially highlight on their way to provide their service and the satisfaction rate of their customer after getting the service. Please have the report to me by 21 August 2009 if at all possible because it is your project paper and the semester will end within this date.

Sincerely

Md Sayeed Alam
Assistant Professor
Business Administration Department
East West University

43, C/A Mohakhali.

Dhaka.

21August 2009

Md Sayeed Alam
Assistant Professor
Business Administration Department
East West University

Dear Sir,

As it is project work, I have to submit a report about my findings. So I made a report about "eCRM practices over mobile telecom industry in Bangladesh and its impact". I try to highlight on their way to provide their service and the satisfaction rate of their customer after getting the service.

If you have any questions after you read the report, please call me.

Sincerely

Sayeda Taskeen

Id: 2005-2-10-087

Department of Business Administration

East West University

# Acknowledgement:

First of all, I thank all mighty Allah, who have provided me the brilliant opportunity to build and complete this report successfully.

I would like to thank our senior brothers and friends who have helped us by giving valuable advice and experiences.

I would also like to thank to lab administrator for providing guidelines and information.

I would like to thank the authority of different mobile telecom company because I have taken a lot of information from them. In this regard I am extremely grateful to Md. Ashiqur Rahman, Deputy Manager, Customer Service Department of **GrameenPhone**.

I also thank Mr. Nafij Rahman, officer, marketing department of **Banglalink** and Rumi Ahmed, Care line officer of Banglalink. Who provided me with all the supportive materials for completing the task properly.

Above all, I cannot refrain myself from giving heartfelt thanks to Md Sayeed Alam, Assistant Professor for his insisting on the brevity of the report. He helped me determine the objective of the report and guided me through to get to the end. The format prescribed by him is pretty user friendly and the new concept of digital project is really amazing.

# Executive Summary:

Customer Relationship Management is an infrastructure that enables the delineation of an increase in customer value and the correct means by which to motivate valuable customers to remain loyal-indeed, to buy again. Customer Relationship Management is an enterprise-wide mindset, mantra and set of business process and policies that are designed to acquire, retain and service customer.

The influence of mobile telecommunication is multi faceted. It has become an indispensable part of urban life. Certainly nowadays mobile telecommunication services serve not only for traditional communication purposes but also as a new channel for existing entertainment and new types of entertainment. Mobile phone network is not appearing with dynamic features as per demand of the situation rather they are trying to be more traditional with modern technology. The service providers of this industry are now fighting for the existing customers in the same market instead of developing new market and new innovative products.

So it is now very important issue for the mobile operators company to retain their present customer. Because the market growth rate for this particular industry are very dawdling now.

For this reasons the companies focusing their Customer Relationship Management strategy through which they mainly retain their present customer.

In this research I find out how they companies provide their post purchase service to their customer as well as what is their customer opinion about their service.

Through this findings I try to pin point which factor are more important to achieve the higher customer satisfaction. And how the companies increase their customer satisfaction rate.

Table of Contents	
Article	Page No.
1. Acknowledgement	Page- 4
2. Executive Summary	Page- 5
3. Origin of the Report	Page- 8
4. Objective	Page- 8
5. Scope	Page- 8
6. Methodology	Page- 9
7. Limitations	Page- 10
8. Report Preview	Page- 10
9. Literature Review	
✓ What is CRM and eCRM?	Page- 11 to 12
✓ Business Prospect with CRM	Page- 12 to 13
✓ Vision Of CRM	Page- 13
✓ Present Situation of CRM	Page- 13
✓ The Effect of CRM Applications on Customer Knowledge	Page- 14
✓ The Effect of CRM Applications on Customer Satisfaction	Page- 14 to 15
✓ Functional CRM	Page- 15
✓ Strategy and Objective of CRM	Page- 15 to 16
✓ Benefit of CRM	Page- 17 to 18
✓ Conclusion of Literature Preview	Page- 18 to 19
10. CRM and eCRM Practices in Bangladesh among Different Industry	Page- 19 to 22
11. Analysis Part	
✓ Frequency Analysis	Page- 24 to 25
✓ Hypothesis Testing	Page- 26 to 29
✓ Regression Equation	Page- 30 to 33
✓ Global Test	Page- 34 to 35
✓ Individual Test	Page- 35 to 42
✓ Correlation	Page- 43 to 45
12. Recommendations	Page- 45 to 46
13. Conclusion	Page- 47
14. Appendixes	Page- 48 to 52
15. Bibliography	Page- 53

Table of Illustration	
Article	Page No.
Figure- 1.1 Profession	Page- 24
Figure- 1.2 Operator Line use By Respondents	Page- 25
Figure- 1.3 Approximate Age	Page- 25
Table- 1.1 One Sample t Test for Network.	Page- 27
Table- 1.2 One Sample t Test for Call Rate.	Page- 27
Table- 1.3 One Sample t Test for Extra Services.	Page- 28
Table- 1.4 One Sample t Test for Customer care.	Page- 28
Table- 1.5 One Sample t Test for New Promotion.	Page- 29
Table- 1.6 One Sample t Test for Distribution.	Page- 29
Table- 2.1 Coefficients, t-value & significant Value	Page-30
Table- 2.2 Model Summaries	Page- 33
Table- 3.1 ANOVA TABLE	Page- 34
Table- 3.2 Coefficients, t-value & significant Value	Page- 37
Table- 3.3 Coefficients, t-value & significant Value	Page- 42
Table- 4.1 Correlation Matrixes	Page- 43
Table- 4.2 Relationships between Dependent and Independent Variables	Page- 44

# Origin of the Report:

As I doing project work so I have to submit report about my project. So as per my course instructor instruction I submit my report which contain about "eCRM practices over mobile telecom industry in Bangladesh and its impact".

I choose this topic because at present time, we know the most growing industry in our country is mobile telecom industry. And the companies in this industry fight each other really hard to attract more customers. And here customer relation management plays a vital role. Because its help the companies to retain their present customer long time. Which make them more profitable. Cause we know retain the present customer is less costly then attract new customer. And maintain the customer relationship they used many types of web based tool. Those web based tools called eCRM.



Basically in this project I will try to find out answers of two basic questions:

- 1. How the companies provide the service?
- 2. What is the satisfaction rate of customers to getting the service from the company end?

By correlate those question we can generate some understandings of Customer relationship management will help shed light on what is important to the customer and also suggest the important factors, on which the companies need to furnish more emphasize.

Scope:

In the report I have tried to discuss the eCRM impact which mobile telecom companies use to retain and attract their customer. And how they provide the service by using this. And finally we try to make some correlation between these two things.



The report was largely involved in accumulation of information from the personal interviews. Here, we also collect information from published materials like different books, journals and **the companies'** official website which creates a special image of this report.

The report that we are submitting, in our point of view, we are mainly analyzing the customer satisfaction rate while they get the service from the company end. And we use SPSS to analyze our collected data.

# Sample Size:

Sampling Frame is a list which contains the particulars about the items of a Population. If a probability sample is to be taken, a sampling frame is required. It is necessary for the Researcher to select required samples from the population.

For my research purpose I go for sampling rather than choose the whole population. Because currently around 5 crore people in Bangladesh using mobile phone. And they use several Operators' line. So it is very costly if we go for population survey. Another thing is timeliness due to the larger size of population total time involved in the case of census is significantly take huge time. And for the reason of large population size many of them are not traceable due in traveling, disease, death, mental abnormality, prisoners etc.

And finally the main important reason for sampling is the amount of non-sampling error in the case of census is much higher than the total amount of sampling and non-sampling error committed in the case of a sample survey.

The degree of errors has a relationship with reliability. If error decreases than the reliability increase sampling decreases both the sampling and non-sampling error. So, it enhances the reliability of information.

Here I go for random sampling technique because here all item of population have an equal opportunity to be included in the sample. And also here the population size is extremely large so I think if we select sample by following simple random sampling technique then it will be more reliable than other sampling technique.

And finally I choose 60 samples by using simple random sampling technique.



In preparing the report I had face several difficulties for gathering appropriate information and other related issues. It would have been helpful for me to analyze the entire scenario if I could discuss the issues with a good number of subscribers of **different companies**. But it is not possible at all for the time limitation. Despite these limitations I tried our best to collect necessary data and information that have been analyzed in the subsequent section. I did not get adequate books from our library for preparing the report.

# Report Preview:

According to the report I tried to present some important information about the vital roles of Customer Relationship Management which is now a day's completely depends on various web based tools. Especially I try to mention how they handle their respective customer based on their needs and wants.





# Literature Review:

## What is CRM and eCRM?

According to Wilson (2002) CRM is a concept that enables an organization to tailor specific products or services to each individual customer according to his or her need. In the most advanced scenario, CRM may be used to create a personalized, customized, one-to-one experience that will give the individual customer a sense of being cared for, thus opening up new marketing opportunities based on the preferences, previous behavior and history of the customer (ibid). Fayerman (2002) said that CRM as a customer-focused business strategy that aims to increase customer satisfaction and customer loyalty by offering a more responsive and customized services to each customer.

A new term for taking care of customers via the Internet, eCRM, is recently applied by some organizational and academic communities (Ragins & Greco, 2003). eCRM refers to electronic customer relationship management or, more simply, CRM that is Web-based (Dyche,2001). eCRM can also be defined "as the use of the Internet and IT applications to manage customer relationships" (Chaffey D., 2002).

There is a lot of debate over whether eCRM is a real designation or just a marketing ploy by CRM organizations and academics trying to distinguish themselves in the rapidly increasing morass of CRM pretenders (Greenberg, 2001). Again he went ahead to say that, eCRM is CRM and CRM must become eCRM (ibid).

In the attempt to define the term eCRM, most web-based authors use the term CRM and eCRM interchangeably.

CRM is an infrastructure that enables the delineation of an increase in customer value, and the correct means by which to motivate valuable

customers to remain loyal-indeed, to buy again (Dyche, 2001p.4) CRM is an enterprise-wide mindset, mantra, and set of business processes and policies that are designed to acquire, retain and service customers.

According to Galbreath and Rogers (1999), CRM is relatively a new management concept, a new approach to managing customers, currently sweeping through business worldwide and its especially finding audience in the professional service sector. Freeman 2004 noted that, services comprises of about 80% of US economy and above 50% of every country's economy. Again he further adds that, world trade in services now approaches \$ 1 trillion per year and continue to grow even more. Canel, Rosen and Anderson (2000), stated that, the services industries in developed countries have been continuously increasing. They went ahead to say that, in the US alone, during the past 15 years, the nongoods- producing sector, that is the service sector of non- agricultural labor force rose 52%. This further makes it interesting to study the objectives of CRM initiatives and the type of benefits to service companies.

# Business Prospect with CRM:

While retaining customer loyalty has been a sales and marketing principle for quite a long time, Customer Relationship Management (CRM) is actually a tremendous step forward in creating a system that can provide a means for retaining individual loyalty in a world of about 6 billion population (Croteau & Li, 2001). Greenberg (2001) stated that in order to understand CRM, you must also understand the changing nature of the customer because customers are not what they used to be. Khalifa and Liu (2001) noted that, a survey of more than 1,600 businesses and IT professionals conducted by the Data Warehouse Institute, found that, some of the respondents have CRM project budgets of over \$ 10 million. This finding indicates that CRM is very important for organizations.

The Cap Gemini further added that, the average total investment in CRM of 300 U.S and European companies was \$ 3.1 million. More than 69% of the companies surveyed spent less than \$ 5 million and more than 13% of the companies spent over \$10 million (Sterne, 2000). This finding also indicates that a great number of companies spend great amount of their budget on CRM and therefore in our opinion we believe that it is important for service companies to know the objectives of their CRM initiatives and the type of benefits these organizations intend to derive from them.

A survey of 300 companies conducted at a CRM Conference concluded that CRM is not a cheap, easy, or fast solution (ibid). Mooney (2000) further added that, more than two-thirds of CRM projects end up in failure. However, he went further to say that, the successful third could obtain up to 75% return on investment (ibid).

### Vision Of CRM:

While strategies, processes and technology may vary from company to company, the goal of implementing CRM initiatives is roughly the same for all: to build the most profitable relationships possible with customers. To achieve that goal, one of the most important things your company must do is getting the right information to the right place at the right time as efficiently as possible- a concept any fulfillment company should understand and be positioned to support.

Full-service fulfillment companies can help you create, manage and deliver your marketing and sales communications in the most cost effective, timely manner. Additionally, better vendors will share your business vision and provide solutions to help you implement customer centric programs.

### Present Situation of CRM:

On average, businesses lose 15 percent to 20 percent of their customer base each year, and half of their customers within five years of acquisition. Given that it costs five to ten times more to acquire a new customer than to sell to an existing one2 (and takes an average of seven years to make a net profit from an individual customer), it's no wonder, companies are investing heavily in customer relationship management. According to Forrester companies spent some \$12 billion on CRM software, consulting and systems integration in 2005 alone.

Even as they continue to purchase CRM solutions, many businesses have expressed disappointment in their results. Only 10 percent of business and technology executives surveyed by Forrester felt CRM delivered the benefits they expected.

Only 14 percent reported that their CRM applications had improved enduser productivity. And a recent Gartner Group study predicted that 50 percent of CRM initiatives implemented in 2006 will be viewed as failures from the customer perspective.

## The Effect of CRM Applications on Customer Knowledge:

A primary motivation for a firm to implement CRM applications is to track customer behavior to gain insight into customer tastes and evolving needs. By organizing and using this information, firms can design and develop better products and services (Davenport, Harris, and Kohli 2001; Nambisan 2002). Davenport and Klahr (1998) argue that customer knowledge has certain attributes that make it one of the most complex types of knowledge. For example, customer knowledge may be derived from multiple sources and media and may have many contextual meanings. Customer knowledge is also dynamic, and it changes rapidly. Customer relationship management applications facilitate organizational learning about customers by enabling firms to analyze purchase behavior across transactions through different channels and customer touch points.

Customer relationship management applications help firms gather and use customer knowledge through two mechanisms. First, CRM applications enable customer contact employees to record relevant information about each customer transaction. After this information is captured, it can be processed and converted into customer knowledge on the basis of information-processing rules and organizational policies. Customer knowledge captured across service encounters can then be made available for all future transactions, enabling employees to respond to any customer need in a contextual manner.

Firms can also use customer knowledge to profile customers and identify their latent needs on the basis of similarities between their purchase behaviors and those of other customers. Second, firms can share their accumulated customer knowledge with customers to enable those customers to serve themselves by defining the service and its delivery to suit their needs (Prahalad, Ramaswamy, and Krishnan 2000). The process of customer self-selection of service features provides additional opportunities for firms to learn about their customers' evolving needs and to deepen their customer knowledge.

## The Effect of CRM Applications on Customer Satisfaction:

Customer satisfaction has significant implications for the economic performance of firms (Bolton, Lemon, and Verhoef 2004). For example, customer satisfaction has been found to have a negative impact on customer complaints and a positive impact on customer loyalty and usage behavir (Bolton 1998; Fornell 1992). Increased customer loyalty may increase usage levels (Bolton, Kannan, and Bramlett (2000), secure future revenues (Rust, Moorman, and

Dickson2002), and minimize the likelihood of customer defection (Anderson and Sullivan 1993; Mithas, Jones, and Mitchell 2002).

Customer satisfaction may also reduce costs related to warranties, complaints, defective goods, and field service costs (Fornell 1992). Finally, in a recent study, Anderson, Fornell, and Mazvancheryl (2004) find a strong relationship between customer satisfaction and Tobin's q (asa measure of shareholder value) after controlling for fixed, random, and unobservable factors.

Customer relationship management applications are likely to have an effect on customer satisfaction for at least three reasons. First, CRM applications enable firms to customize their offerings for each customer. By accumulating information across customer interactions and processing this information to discover hidden patterns, CRM applications help firms customize their offerings to suit the individual tastes of their customers. Customized offerings enhance the perceived quality of products and services from a customer's viewpoint. Because perceived quality is a determinant of customer satisfaction, it follows that CRM applications indirectly affect customer satisfaction through their effect on perceived quality.

### Functional CRM:

Until recently most CRM software has focused on simplifying the organization and management of customer information. Such software, called operational CRM, has focused on creating a customer database that presents a consistent picture of the customer's relationship with the company and providing that information in specific application such as sales force automation and customer service in which the company touches the customer.

### Strategy and Objective of CRM:

According to Gray and Byun (2001) more than 57% of chief executives in a survey with 191 respondents believe that the major objective and strategy of CRM initiatives is customer satisfaction and retention. Keen (2000) states that one of the strategies and objectives of CRM and eCRM is that companies provide consistent and up-to-date customer catalog, order and inventory data across all their sales channels: web, call center and all physical points of presence. According to Chye and Gerry (2002), one strategy of CRM initiatives is to change the organization into becoming customer-centric with a major focus on customer profitability as compare to line profitability. Again they lamented that, the understanding gained from CRM enable companies or

organizations to estimate the profitability of individual accounts. They further add that, organizations are then able to differentiate their customers properly with respect to their profitability. Organizations can then build predictive churn models to retain their best customers by identifying symptoms of dissatisfaction and churning, making sure that the customers who generate profit are retained (ibid).

Peppers (1999) summarize the following as the basic strategies and objectives of CRM initiatives:

<u>Customer Identification</u>: The organization must be able to identify the customer via marketing channels, interactions and transactions for a period of time in order to provide value to the customer by serving his or her need at the right time with a right product or service.

<u>Customer Differentiation:</u> Every customer has his or her own needs and demands and therefore from the organization's point of view, customers have their own lifetime value.

Customer Interaction: One of the most important objectives of CRM by an organization is to keep track of customer behavior and needs over time. This is because, from a CRM point of view, the customer's long-term profitability and relationship to the company is very important. This is the reason why a company should continue to learn about its customers and in a continuous manner.

Personalization: This can be defined as treating each customer differently or uniquely and that is the motto or a major objective of CRM. Through the process of personalization, the organization can increase customer loyalty.

According to Stone (2000) there are two main objectives that influence the need for CRM technologies to support the completion of CRM strategies and initiatives. These are according to Stone (2000) as follows:

- The need for a higher quality in CRM in order to meet the needs of the customers. CRM systems according to Stone (2000) are increasingly being used to arrange companies' resources in a proper order.
- The need for greater productivity in CRM. CRM systems are giving the possibility to automate work previously done by hand (ibid).

According to Thompson (2004) the main strategies and objectives of CRM initiatives are:

- To acquire customers
- To grow profitable customer relationships
- To retain profitable customers
- To create competitive advantage (ibid)

According to Gray and Byun (2001) the following are the main benefits of CRM. They went on to say that, for an organization to get all these benefits, sales, marketing and service functions must work together:

- \* To improve the company's ability to retain and acquire customers
- To maximize the lifetime value of each customer
- To improve service without increasing cost of service.

Again they argue that, proper identification of the customer helps sales force to do cross selling. They further add that, this is through clean data about the customer and a single customer view. Furthermore, they say that, understanding the customer through differentiation can lead to cost effective marketing campaign, it could also reduce something like for example direct mailing cost. Also, they argue that customer satisfaction and loyalty through interaction could also lead to cost effective customer service. Moreover, they argue that, customer satisfaction and loyalty through personalization can also lead to lower cost of acquisition and retention of customer and thereby maximizing share of wallet. (Gray and Byun 2001)

Crosby (2002) argues that, by using customer information wisely to deliver what the customer needs, companies will create long-term, collaborative relationships with the customers.

He further states that, this will bring many benefits since long-term customers are less costly to serve and smooth-running relationships are less resource intensive (ibid). A survey of more than 500 executives in six industries, communication, chemicals, pharmaceuticals, electronics/high-tech, forest products and retail, believe that 10% improvement of overall CRM capabilities can add up to \$35 million benefits to a \$1 billion business unit. (Gray and Byun 2001). CRM is a very big tool that contributes so much to profit indicated by Newell (2000). Furthermore he stated organizations could transform the customer data into. Knowledge and then use that knowledge to build relationships it would then create loyalty and thereby creating profit (ibid). Turban et al. (2000) suggest that increasing customer satisfaction increases customer loyalty. Swift (2001 pp. 28) argues that organizations can get a lot of benefits from CRM initiatives. He goes on to say that, these benefits could be found in these areas:

#### Higher customer retention and loyalty:

The customer retention will increase when customers stay longer, buy more and buy more frequently. The customers take more initiatives that increase bounding relationship, and as a result the customer loyalty increases.

#### Increased customer profitability:

The customer profitability will increase when the customer wallet-share increases, the up-selling goes up as well as cross-selling and follow up sales and also more referrals come with higher customer satisfaction among existing customers.

#### Evaluation of Customer profitability:

When the organization gets to know which customers are profitable and which ones that might become profitable in future, that is the potential profitable customers and those who will never become profitable. This is a very important area because the key to any successful business is to acquire and focus on those customers who bring profit, when you get them, you do not want to leave them.

#### · Reduced cost of sales:

The costs regarding selling are reduced due to the fact that existing customers are usually more responsive. In addition, with better knowledge of channels and distributors, the relationships become more effective, as well as costs for marketing campaigns are reduced.

#### Lower cost of recruiting customers:

When the cost of recruiting new customers reduce or go down, there will be savings to be made on marketing, mailing, contact, follow-up, fulfilling, service and many more.

• No need to recruit so many customers to preserve a steady volume of business: When the number of long-term customers increases and consequently the need to recruit many new customers will decrease (ibid).

Bose (2002) argues that, most organizations can use CRM, however he goes on to say that, there are some organizations that are more likely to get more benefits from CRM than others. Furthermore he states that, those are the companies that accumulate a huge customer data when doing business and whose customer needs are differentiated. On the other hand, Bose (2002) says that, companies that rarely have any contact with their customers have a higher customer turn over and identical customer needs are likely to get less benefit from CRM (ibid).

### Conclusion of Literature Preview:

From the previous discussion we know that Customer Relationship Management (CRM) is all about retain the present customer so they are satisfy to use particular company's product and do not get the interest to use other products which offer by another companies. Because we know retain the present customer is less costly then attract new customer about my product. But through CRM we

also try to attract the new customers who have the willingness to use my product. And we use Customer Relation Management more effectively if we apply some web based tools and other software which are collectively known as eCRM.

# CRM and eCRM Practices in Bangladesh among Different Industry:

Customer relationship management (CRM) consists of the processes a company uses to track and organize its contacts with its current and prospective Customer. CRM is mainly the information about customers and customer interactions can be entered, stored and accessed by employees in different company departments. Typical CRM goals are to improve services provided to customers, and to use customer contact information for targeted marketing.

In Bangladesh from past few years Customer Relationship Management play a vital role among different industry. It will increase the total profitability of the industry. It is largely use in our Telecom and Banking Industry. In Telecom and Banking industry every company has rich customer service division. From there they monitor their customer relationship strategy.

From the outside, customers interacting with a company perceive the business as a single entity, despite often interacting with a number of employees in different roles and departments. CRM is a combination of policies, processes, and strategies implemented by an organization to unify its customer interactions and provide a means to track customer information. It involves the use of technology in attracting new and profitable customers, while forming tighter bonds with existing ones. Bangladesh's cell phone carriers are GrameenPhone, majority owned by Norway's Telenor (TEL.OL); Egyptian Orascom Telecom's (ORTE.CA) Banglalink; AKTEL, majority owned by Telekom Malaysia International (TLMM.KL); CityCell, a joint venture between Pacific Bangladesh Telecom Limited and Singapore's SingTel (STEL.SI); Warid Telecom of the United Arab Emirates and state-run Teletalk.

Grameenphone leads the market with nearly 20 million subscribers followed by Banglalink with more than 10 million. Mobile phone services are an important contributor to the cash-strapped nation's economy. The sector directly employs more than 15,000 and indirectly creates jobs for 650,000, the ADB said. And the total investment is \$3.4 up to June 2008 by the mobile companies in Bangladesh.

These companies are trying to provide the quality customer service to its customer. They ensure that the customer services and related functions within the company at all times are aligned with and support the realization of the company's business objectives. Another thing is that every company has their call center under their customer service division. And basically they run 70% of their customer retention and attract new customer operation from there. Customer give the ring in call center to know about the product attributes, different value added services which are provided by the operator, or whether they face any problem regarding to use their connection.

In other case from call center many outbound calls are generating to attract the customer for their different offers. For example in telecom sector may be some outbound call are generating for attract the customer to use their internet service or to knock the customer either he know the different kinds of new offer or not. As well as in banking sector the same things happen.

And those companies who are presently use the customer relationship policy they utilize it by the help of information technology or eCRM. They use different kind of web based tools and other software to provide the service more efficiently. And that software adds extra value for example many banks in our country provide the service through which we can transfer our money from one account to another account over the phone.

We see that now a day's several industry in our country are trying to provide the best customer services to retain the present customer and attract the potential customer. Because we know today increasing the sales is not only the main thing to maximize the profit of the company. Retain the present customer is also important.

Since attract the new customer is more costly then retain the present customer. And for this reason the companies give more emphasize to their customer service division. So they can provide the better customer service and build up a good relation with the customer and many cases they are successful to retain their present customers and attract new customer by using their own Customer Relationship strategy. Telenor Mobil is giving a high priority to Customer Relationship Management (CRM). The purpose of the CRM-efforts is to enable Telenor Mobil to attract, develop and retain the most valuable customers and to differentiate service and communications according to the needs and value of the customers. The CRM-department develops strategies and concepts for building customer relations, customer satisfaction, customer interactivity, customer education and developing the use of services. Developing the use of cost-efficient, interactive, electronic channels of communication is given a high priority.

The CRM-department is working closely with the management, business-managers, marketers and customer interfaces to supply knowledge of CRM into the business processes and to coordinate the standard and content of the customer's experience of Telenor Mobil across channels and points of contact.

Developing customer programs with a high degree of interactivity with the customers, based on segmentation and personalization of the content of the interactions, is a main focus. The customer program Mobilbonus was launched June 2001. Mobilbonus-members earn bonus-points on traffic, which can be exchanged for services from Telenor Mobil. Mobilbonus is mainly a web-concept, giving the members the opportunity to check the bonus-balance, collect information and exchange bonus-points on web. Mobilbonus is a main tool to establish strong and positive customer relations, create a display-window and a sales channel for services from Telenor Mobil and to develop the use of new, interactive channels of communication.

Customer Service back-up office, however, is still located at Alauddin Tower, Building 8, Gulshan - 2, for smoother business operation. Five dedicated teams are now working from Nitol Niloy with the aim of providing top-notch customer service 24-hours a day, throughout the year.

The Inbound Call Management Center serves all Grameenphone customers who call 121 - the single hotline for customer service. Highly-skilled call center professionals are waiting by the phones to help customers and respond to their queries or complaints Moreover, to cater to all classes of customers, the Inbound Call Management Center offers services in Bangla, English and 6 other local dialects, e.g. Chittagong, Barisal, Sylhet, Khulna, Rajshahi and Noakhali.

Direct Communication is another touch point for customer services. The wing deals with all sorts of written communication from customers. Response may be in the form of a reply to a customer's query, online customer service through "Chatting" on net over Grahak Katha online:

https://grahakkathaonline.grameenphone.com/webchat/chatLogin.aspx

Or as proactive communication with the internal and external customers by sending Newsletters, E-mails, etc. Inform your friends and family members to write us for customer services at Customer Service, Direct Communication, Nitol Niloy Tower, Plot No. 42 & 69, Nikunja - 2, North C/A, Airport Road, Dhaka-1229; or send us a fax at +88 02 9882948-51 or e-mail us at:

insta.service@grameenphone.com.

The Outbound Call Management Center consists of a dedicated team, proactively communicating over phone with customers, based on the Life Cycle of the customers, regarding Grameenphone services: such as Welcome calls, EDGE selling, FNF selling and Customer Relationship Management- and Retention-based campaigns. The Customer Mangers, trained with specialized telephony skills, are delighted with the positive response they are getting when providing Grameenphone customers with relevant information on

Grameenphone products and services. These managers are also informing customers of the benefits we offer with our various offers and services and the details of how to avail those benefits.

Channel Support provides support services to all Point of Sales (POS), Grameenphone Center Franchisees (GPCF), Grameenphone Service Desks (GPSD), along with Community Information Centers (CIC), through GPSDs, around the country. Two hotlines: 155 and 477 are dedicated to provide services free of cost to ensure customer service within the shortest possible time. Retailers get instant support from the 155 hotline regarding any FlexiLoad-related query, complaint and request. On the other hand, Customer Managers working at GPSDs and GPCFs can access hotline 477 to get all the system support and other relevant support for instant customer services at the frontline.

The Knowledge & Development wing is actually a customer service support center, providing the necessary and relevant support to all its operational units. The unit facilitates employment, performance appraisal, resource development - starting from induction training for new employees to various functional, soft-skills, behavioral, managerial training, knowledge sharing & quiz sessions, and workshops, etc. The wing provides inputs and assistance for management planning, reporting, development initiatives, e.g. study, analysis and business process improvement; quality assurance; activity and project follow-up activities, with an aim to ensure operational excellence; and customer satisfaction, benchmarked with local and foreign operators' best practices.

As an interface between Grameenphone and its subscribers, Customer Service is thus playing the ambassadorial role. We, the members of 'Customer Service' are providing services for customer retention, striving to enhance the Grameenphone-customer relationship and running forward to reach the service of excellence. Do knock on us whenever you need any assistance regarding any after-sales service. Customer Service is waiting to hear from you and is committed to provide the best service.



Analysis Part

# Frequency Analysis:

In our Sample size we see that various professionals' background people like govt. service holder or the various private companies' executive. And their cumulative percentage is 91.7. They are the majority people who call the hotline number.

And after then 38.4% people call their respective operators hotline number for their various problem and quarries who are student.

One thing we saw from personal interview that students are call the hotline number for difference value added service like friends and family number, welcome tune, balance transfer etc. And in maximum case they use the prepaid line.

But the professional personnel call for the core service like billing information, their bill delivery date etc. And most of the case they use the post paid number. Here one interesting I want to mention that the mobile operator companies make the deal with different corporate house to use their corporate line. So they can enjoy the facility of Closed User Group.

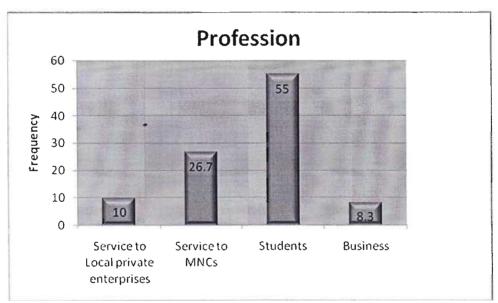


Figure: 1.1

Another interesting matter is previously I said that we choose our sample randomly but again here the majority portion of the people use Grameenphone SIM. So it again prove that Grameenphone is the undoubtedly the market leader in mobile telecom Industry. The below chart can more specify describe the situation:

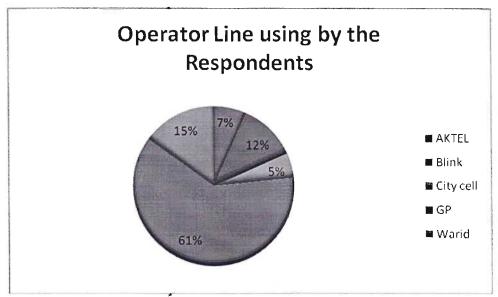


Figure: 1.2

Another thing is from my analysis we can see that 60% people who are in 15-20 age range they call the respective operators customer care number most of the time. And then 20-30 and 30-40 age range people call the customer care number most of the time and their cumulative percentage is 44. The call get from other age range people like below 20 or above 40 is comparatively low than them.

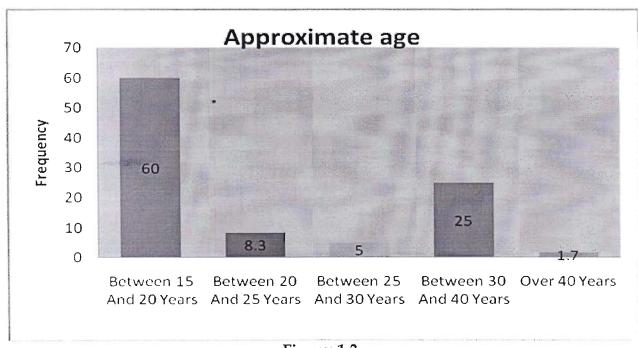


Figure: 1.3

# Hypothesis Testing:

I have conducted a sample survey of 60 respondents who call their particular operator hotline number. And the data were analyzed with the SPSS software. The analysis contains some statistical procedure and "hypothesis testing" is one of those.

We have calculated the coefficients of the analysis and also the correlation between them. To come to a perfect decision we need to place several hypothetical testing of some important factors. Some are not possible to find out the hypothesis testing because of the questions limitations.

#### The factors are:

- ✓ Network
- ✓ Call rate
- ✓ Extra services
- ✓ Customer care
- ✓ New promotion
- ✓ Distribution.

### Some important notes:

 $H_o = Null Hypothesis$ 

 $H_1$  = Alternate Hypothesis

 $\alpha$  = Alpha (denoting significance level)

#### For Network:

 $H_0$ : Network is good

 $H_1$ : Network is not good

Level of significance,  $\alpha = 0.05$ 

Table: 1.1 One Sample t Test for Network.

	t-test for Equality of Means					
	t df Sig. (2-tailed) Mean Difference					
Network	1.786	49	.080	.500		

Source: Survey Data

(With 95% significance value): After running the analysis, the significance value for Problem is resolve from the company end is .080; which is greater than confidence interval  $\alpha$  = 0.05. So, null hypothesis is rejected and alternate hypothesis is accepted.

That is: Network.

#### For Call rate:

 $H_0$ : Call rate is high.

 $H_1$ : Call rate is not high.

Level of significance,  $\alpha = 0.05$ 

Table: 1.2 One Sample t Test Call rate is high.

	t-test for Equality of Means					
	t df Sig. (2-tailed) Mean Difference					
Call rate is high	.608	49	.546	.060		

Source: Survey Data

(With 95% significance value): After running the analysis, the significance value for call rate is .060; which is more than confidence interval  $\alpha = 0.05$ . So, null hypothesis is rejected and alternate hypothesis is accepted. That is: It was take long time to reach Customer Manager while you call in hotline no.

#### For Extra services:

 $H_0$ : Extra services are more.

 $H_1$ : Extra services are not more.

Level of significance,  $\alpha = 0.05$ 

Table: 1.3 One Sample t Test for Extra services is more.

	t-test for Equality of Means						
	t df Sig. (2-tailed) Mean Difference						
Extra services is more	152	49	.880	.360			

Source: Survey Data

(With 95% significance value): After running the analysis, the significance value for extra services is .880; which is greater than confidence interval  $\alpha$  = 0.05. So, null hypothesis is rejected and alternate hypothesis is accepted.

That is: Extra services.

#### For Customer care:

 $H_0$ : Customer care is good

 $H_1$ : Customer care is not good

Level of significance,  $\alpha = 0.05$ 

Table: 1.4 One Sample t Test for Customer care.

	t-test for Equality of Means						
	t df Sig. (2-tailed) Mean Difference						
Customer care	.820	49	.416	.220			

Source: Survey Data

(With 95% significance value): After running the analysis, the significance value for Customer care is .416; which is more than confidence interval  $\alpha = 0.05$ . So, null hypothesis is rejected and alternate hypothesis is accepted.

That is: Customer Care.

#### For New promotions:

 $H_0$ : Have new promotion  $H_1$ : No new promotion

Til. No new promotion

Level of significance,  $\alpha = 0.05$ 

Table: 1.5 One Sample t Test for new promotion.

	t-test for Equality of Means							
	t	t df Sig. (2-tailed) Mean Difference						
New promotion	1.945	49	.057	1.020				

Source: Survey Data

(With 95% significance value): After running the analysis, the significance value for New promotion is .057; which is greater than confidence interval  $\alpha = 0.05$ . So, null hypothesis is rejected and alternate hypothesis is accepted.

That is: New Promotion.

#### For Distribution:

 $H_0$ : Distribution is available

 $H_1$ : Distribution is not available

Level of significance,  $\alpha = 0.05$ 

Table: 1.6 One Sample t Test for Distribution.

	t-test for Equality of Means							
	ŧ	t df Sig. (2-tailed) Mean Difference						
Distribution	-2.374	49	.021	1.020				

Source: Survey Data

(With 95% significance value): After running the analysis, the significance value for Distribution is .021; which is less than confidence interval  $\alpha = 0.05$ . So, null hypothesis is accepted and alternate hypothesis is rejected.

That is: Distribution.



SPSS statistical system generated the output shown below:

Table: 2.1 Coefficients, t-value & significant Value

Model			ndaraized ficients	Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
	(Constant)	2.970	.435		6.822	.000
	Network	.142	.079	.279	1.786	.080
	Call rate	.030	.050	.083	.608	.546
	Extra service	012	.078	021	152	.880
	Customer care	.067	.081	.131	.820	.416
	Distribution  Company can solve the problem	201	.085	390	-2.374	.021
		.366	.178	.349	2.051	.047
	Service quality is good	316	.160	261	-1.981	.055
	Waiting time is more  Customer care  manager is customer  focus	.537	.190	.363	2.828	.007
		.298	.110	.320	2.700	.010
	Call rate for customer care is more	.040	.154	.033	.263	.794

Source: Survey Data.

We know the general from of a multiple regression equation with independent variables up to k is:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + \dots + b_k X_k$$

Here,

Coefficient of Network,

 $b_1 = .009$ 

Coefficient of Call rate,

 $b_2 = .220$ 

Coefficient of Extra service,

 $b_3 = .014$ 

Coefficient of Customer care,

 $b_4 = -.299$ 

Coefficient of Distribution,

 $b_5 = 0.144$ 

Coefficient of Company can solve the problem,

 $b_6 = .366$ 

Coefficient of Service quality is good,

 $b_7 = -.316$ 

Coefficient of Waiting time is more,

 $b_8 = .537$ 

Coefficient of Customer care manager is customer focus,

 $b_9 = .298$ 

Coefficient of Call rate for customer care is more,

 $b_{10} = 0.040$ 

Coefficient for constant (You are satisfied for the overall service.), a = -.167

So the determined regression equation is:

$$Y_{Overall\ Customer\ Satisfaction} = -.167 + 0.009X_1 + 0.220X_2 + .014X_3 - 0.299X_4 + 0.144X_5 + .366X_6 - .316X_7 + .537X_8 + .298X_9 + .040X_{10}$$



- 1. .009 (i.e. b<sub>1</sub>) means if Network, increase in 1 unit, Customer Satisfaction will be increase by .009 holding  $X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9$  and  $X_{10}$  constant.
- 2. .220 (i.e. b<sub>1</sub>) means if Call rate, increase in 1 unit, Customer Satisfaction will be increase by .220 holding  $X_1, X_2, X_4, X_5, X_6, X_7, X_8, X_9$  and  $X_{10}$  constant.
- 3. .014 (i.e.  $b_1$ ) means if Extra service, increase in 1 unit, Customer Satisfaction will be increase by .014 holding  $X_1, X_2, X_4, X_5, X_6, X_7, X_8, X_9$  and  $X_{10}$  constant.
- 4. -.299 (i.e.  $b_1$ ) means if Customer care, increase in 1 unit, Customer Satisfaction will be decrease by -.299 holding  $X_L X_2$ ,  $X_3$ ,  $X_5$ ,  $X_6$ ,  $X_7$ ,  $X_8$ ,  $X_9$  and  $X_{10}$  constant.
- 5. .144 (i.e.  $b_1$ ) means if Distribution, increase in 1 unit, Customer Satisfaction will be increase by .144 holding  $X_{l_1}X_{l_2}X_{l_3}X_{l_4}X_{l_6}X_{l_7}X_{l_8}X_{l_9}$  and  $X_{l_9}$  constant.
- 6. .366 (i.e.  $b_1$ ) means if Company can solve the problem, increase in 1 unit, Customer Satisfaction will be increase by .366 holding  $X_{l_1}X_{l_2}$ ,  $X_{l_3}$ ,  $X_{l_4}$ ,  $X_{l_5}$ ,  $X_{l_7}$ ,  $X_{l_8}$ ,  $X_{l_9}$  and  $X_{l_9}$  constant.
- 7. -.316 (i.e.  $b_1$ ) means if Service quality is good, increase in 1 unit, Customer Satisfaction will be decrease by -.316 holding  $X_{I_1} X_{2_1} X_{3_2} X_{4_3} X_{4_5} X_{6_5} X_{8_5} X_{9}$  and  $X_{10}$  constant.
- 8. .537 (i.e.  $b_1$ ) means if Waiting time is more, increase in 1 unit, Customer Satisfaction will be increase by .537 holding  $X_{l_1}$ ,  $X_{2_1}$ ,  $X_{3_1}$ ,  $X_{4_2}$ ,  $X_{5_3}$ ,  $X_{6_1}$ ,  $X_{7_2}$ ,  $X_{9}$  and  $X_{10}$  constant.
- 9. .298 (i.e. b<sub>1</sub>) means if Customer care manager is customer focus, increase in 1 unit, Customer Satisfaction will be increase by .298 holding  $X_{l_1}X_{l_2}, X_{l_3}, X_{l_4}X_{l_5}, X_{l_6}, X_{l_7}$   $X_{l_8}$  and  $X_{l_9}$  constant.
- 10. 040 (i.e.  $b_1$ ) means if Call rate for customer care is more, increase in 1 unit, Customer Satisfaction will be increase by .040 holding  $X_{l_1}X_{l_2}$ ,  $X_{l_3}$ ,  $X_{l_4}$ ,  $X_{l_5}$ ,  $X_{l_6}$ ,  $X_{l_7}$ ,  $X_{l_8}$  and  $X_{l_9}$  constant.

Table: 2.2 Model Summaries

			Adjusted R	Std. Error of
Model	R	R Square	Square	the Estimate
1	.375(a)	.140	.043	.42820

Source: Survey Data.

Predictors: (Constant), Network, Call rate, Extra service, Customer care, Distribution, Company can solve the problem, Service quality is good, Waiting time is more, Customer care manager is customer focus, and Call rate for customer care is more

So, the determined  $\mathbb{R}^2$  value (Coefficient of Determination) is .584 or 58.4%

#### Interpretation:

So finally we say that 58.4% of the total variation in the dependent variable (I.e. Overall Customer Satisfaction) is explained or accounted for by the ten independent variables.

#### Independent Variables:

(Network, Call rate, Extra service, Customer care, Distribution, Company can solve the problem, Service quality is good, Waiting time is more, Customer care manager is customer focus, Call rate for customer care is more.).

# GLOBAL TEST:

We state the null an alternate hypothesis

 $H_0$ :  $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = \beta_8 = \beta_9 = \beta_{10} = 0$ 

 $H_1$ : Not all the I'd are the same.

Level of significance,  $\alpha = 0.05$ 

*F* statistic will to be used.

#### Decision:

SPSS statistical system generated the output shown below:

**TABLE: 3.1 ANOVA TABLE** 

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regressi on	1.586	6	.264	1.441	.217(a)
	Residual	9.718	53	.183		
	Total	11.303	59			

Source: Survey Data.

- a. Predictors: (Constant), Network, Call rate, Extra service, Customer care, Distribution, Company can solve the problem, Service quality is good, Waiting time is more, Customer care manager is customer focus, and Call rate for customer care is more.
- b. Dependent Variable: Overall Customer Satisfaction.

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. .000) <  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is rejected. And  $H_1$  is accepted.

That is, 'Not all the  $\beta$ 's are the same'.

That is, the regression equation is valid.

That is the independent variables (Network, Call rate, Extra service, Customer care, Distribution, Company can solve the problem, Service quality is good, Waiting time is more, Customer care manager is customer focus, Call rate for customer care is more.) have the capability to estimate the Overall Customer Satisfaction (Y).

# INDIVIDUAL TEST:

We state the Null and Alternate hypothesis

For Network.

 $H_0$  :  $\beta_1 = 0$ 

 $H_1$  :  $\beta_2 \neq 0$ 

For Call rate.

 $H_0$  :  $\beta_2 = 0$ 

 $H_1$  :  $\beta_2 \neq 0$ 

For Extra service

 $H_0$  :  $\beta_3 = 0$ 

 $H_1$  :  $\beta_3 \neq 0$ 

For Customer Care

 $H_0$  :  $\beta_4 = 0$ 

 $H_1$ :  $\beta_4 \neq 0$ 

For New Promotion

 $H_0$  :  $\beta_5 = 0$ 

 $H_1$  :  $\beta_5 \neq 0$ 

For Distribution

 $H_0$  :  $\beta_6 = 0$  $H_1$  :  $\beta_6 \neq 0$ 

For Company can solve the problem

 $H_0$  :  $\beta_7 = 0$ 

 $H_1$  :  $\beta_7 \neq 0$ 

For Service quality is not good

 $H_0$  :  $\beta_8 = 0$  $H_1$  :  $\beta_8 \neq 0$ 

For Waiting time is more

 $H_0$  :  $\beta_9 = 0$  $H_1$  :  $\beta_9 \neq 0$ 

For Customer care manager is customer focus

 $H_0$  :  $\beta_{10} = 0$  $H_1$  :  $\beta_{10} \neq 0$ 

Level of significance,  $\alpha = 0.05$ 

t statistic is to be used



SPSS statistical system generated the output shown below:

Table: 3.2 Coefficients, t-value & significant Value

Model		Unstandaraized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
	(Constant)	2.970	.435		6.822	.000
	Network	.142	.079	.279	1.786	.080
	Call rate	.030	.050	.083	.608	.546
	Extra service	012	.078	021	152	.880
	Customer care	.067	.081	.131	.820	.416
	Distribution	201	.085	390	-2.374	.021
	Company can solve the problem	.366	.178	.349	2.051	.047
	Service quality is good	316	.160	261	-1.981	.055
	Waiting time is more	.537	.190	.363	2.828	.007
	Customer care manager is customer focus	.298	.110	.320	2.700	.010
	Call rate for customer care is more	.040	.154	.033	.263	.794

Source: Survey Data

### For Network:

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. 0.949) >  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_1$  is rejected and  $H_0$  is accepted  $\dot{}$ 

That is  $\beta_1 = 0$ .

That is the Network is resolve from the company end is not a good estimator and has not the capability of estimating overall customer satisfaction.

So, It was take short time to reach Customer Manager while you call in hotline no. should be deleted from the analysis.

### For Call rate:

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. 0.071) >  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is accepted

That is  $\beta_2 = 0$ .

That is call rate while you call in other no is not a good estimator and has not the capability of estimating overall customer satisfaction

So, It was take short time to reach Customer Manager while you call in hotline no should be deleted from the analysis.

### For Extra service:

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. .905) >  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is accepted

That is  $\beta_3 = 0$ .

That extra services increase day by day is not a good estimator and has not the capability of estimating overall customer satisfaction

So, before implementing extra services the costs are increase day by day should be deleted from the analysis.

# For Customer care ( sim replacement, bill payment etc):

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. .038) <  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is rejected and  $H_1$  is accepted

That is  $\beta_4 \neq 0$ .

That is Customer care ( sim replacement, bill payment etc) is a good estimator and has the capability of estimating Overall Customer Satisfaction.

### For Distribution (prepaid and post paid billing option)):

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. .494) >  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is accepted

That is  $\beta_5 = 0$ .

That Distribution (prepaid and post paid billing option) is not a good estimator and has not the capability of estimating overall customer satisfaction.

So, Distribution ( prepaid and post paid billing option) should be deleted from the analysis.

### For Company can solve the problem:

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. 0.047) <  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is rejected and  $H_1$  is accepted

That is  $\beta_6 \neq 0$ .

That is company can solve the problem brings some positive result is a good estimator and has the capability of estimating Overall Customer Satisfaction.

## For Service quality is good:

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. .055) >  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is accepted

That is 
$$\beta_7 = 0$$
.

That is service quality of Customer Manager is fine is not a good estimator and has not the capability of estimating Overall Customer Satisfaction.

So, service quality of Customer Manager should be deleted from the analysis.

## For Waiting time is more:

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. 0.007) <  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is rejected and  $H_1$  is accepted

That is 
$$\beta_8 \neq 0$$
.

That is waiting time is more is not a good estimator and has the capability of estimating Overall Customer Satisfaction.

#### For call rate for customer care is more:

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. .010) <  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is rejected and  $H_1$  is accepted .

That is  $\beta_9 \neq 0$ .

That is Cost of Call rate for hotline no is suitable is a good estimator and has the capability of estimating Overall Customer Satisfaction.

### For customer care manager is customer focused:

Since p-value or Sig. value that is Probability of accepting null hypothesis (i.e. .794) >  $\alpha$  value that is probability of rejecting null hypothesis (i.e. 0.05);  $H_0$  is accepted

That is  $\beta_{10} = 0$ .

That is customer care manager is customer focused is not a good estimator and has not the capability of estimating Overall Customer Satisfaction.

So, Length of the conversation is good enough should be deleted from the analysis.

According to the test result, I consider deleting Network, Call rate, Distribution (prepaid and post paid billing option), service quality is good, customer care manager is customer focused are independent variables.



SPSS statistical system generated the output after rerunning the regression analysis with only the significant independent variables in the equation shown below.

TABLE: 3.3 Coefficients, t-value & significant Value

				Standardiz		
		Unstan	ıdardized	ed		
Model		Coeffic	cients	Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	2.970	.435		6.822	.000
	Network	.142 .079		.279	1.786	.080
	Call rate	.030	.050	.083	.608	.546
	Extra service	012	.078	021	152	.880
	Customer care	.067	.081	.131	.820	.416

Source: Survey Data.

So the new regression equation is follows:

 $Y_{Overall\ Customer\ Satisfaction} = 2.970 + .142X_4 + .030X_6 - .012X_8 + .067X_9$ 

# Correlation:

**Table: 4.1 Correlation Matrixes** 

						Extra	Customer	New		
Makingli	Ļ		Networ	rk	Call rate	service	care	promotion		<u>Distribution</u>
Network		arson rrelation		1	132	.067	.326(*)	096		.422(**)
	Sig. (2-				.315	.613	.011	.466		.001
Call rate	N Pe	arson		60	60	60	60	60		60
odii rato	Co	rrelation	13		1	.101	.223	.187		.189
	Sig N	ı. (2-tailed)	.31			.441	.087	.152		.149
Extra service		arson		30	60	60	60	60		60
	Co	rrelation	.06		.101	1	.370(**)	.143		.122
	Sig	ı. (2-tailed)	.61	13 30	.441 60	60	.004	.275		.354
Customer care	Pe	arson	.326(		.223	.370(**)		1		60
		rrelation j. (2-tailed)	.020		.087		1	.282(*)		.438(**)
	N	j. (Z-talled)		30	60	.004	60	.029		.000 60
New promotion		arson rrelation	09	96	.187	.143	.282(*)	1		.364(**)
		j. (2-tailed)	.46	36	.152	.275	.029			.004
Distribution	Ν		6	60	60	60	60	60		60
Distribution		arson rrelation	.422(*	**)	.189	.122	.438(**)	.364(**)		1
Sig. (2-tail		. (2-tailed)	.00		.149	.354	.000	.004		
	N		(	30	60	60	60	60		60
			-	С	company an solve the problem	Service quality is good	Waiting time is more	Custome care manager i customei focus	is	Call rate for customer care is more
Company can sol	ve	Pearson Corr	elation		1	.374(**)	097		/*\	.051
the problem		Sig. (2-tailed)				.003	.460		29	.699
		N			60	60	60		60	60.
Service quality is good		Pearson Corr	elation		.374(**)	1	.061	.2	49	270(*)
9000		Sig. (2-tailed)			.003		.645	.0:	55	.037
Moiting time is		N Degree Com			60	60	60		60	60
Waiting time is more		Pearson Corr	elation		097	.061	1	1	70	124
		Sig. (2-tailed)			.460	.645			93	.344
Customer care		N Pearson Corre	elation		60	60	60	1	60	60
manager is customer focus		r carson con	Ciation		.283(*)	.249	170		1	069
		Sig. (2-tailed)			.029	.055	.193			.600
Call rate for		N Pearson Corre	elation		60	60	60		60	60
customer care is more		. 6413011 0011	GIGUOTI		.051	270(*)	124	0	69	1
		Sig. (2-tailed)			.699	.037	.344		00	
		_N			60	60	60		60	60

Source: Survey Data

Table: 4.2 Relationships between Dependent and Independent Variables

Dependent Variables	<u>Independent Variables</u>
Overall Satisfaction:	Call rate =132
Overall Satisfaction:	Extra Service= .067
Overall Satisfaction:	Customer Care= .326
Overall Satisfaction:	New Promotion =096
Overall Satisfaction:	Distribution = .422
Overall Satisfaction:	Service quality is good = .374
Overall Satisfaction:	Waiting time is more =097
Overall Satisfaction:	Customer care manager is more focus = .283
Overall Satisfaction:	Call rate for customer care is more = .051

Source: Survey Data

# Discussions:

- 1. Overall Satisfaction has a weak negative (i.e. -.132) correlation with the call rate.
- 2. Overall Satisfaction has a weak positive (i.e. .067) correlation with extra service.
- 3. Overall Satisfaction has a weak positive (i.e. .326) correlation with Customer Care.
- 4. Overall Satisfaction has a weak negative (i.e. -.096) correlation with New promotion.
- 5. Overall Satisfaction has a weak positive (i.e. .422) correlation with Distribution.
- 6. Overall Satisfaction has a moderate positive (i.e. .374) correlation with The service quality is good.
- 7. Overall Satisfaction has a weak negative (i.e. -.097) correlation with waiting time is more.

- 8. Overall Satisfaction has a weak positive (i.e. .283) correlation with customer care manager is more focus.
- 9. Overall Satisfaction has a weak positive (i.e. .051) correlation with Call rate for customer care is more.

# Recommendations:

From the statistical analysis we see that customers overall satisfaction will decrease if Cost of waiting time increase day by that means when customer call their respective operator's hotline number that time they reach the customer manager after waiting long time. For example if the customer call their particular operator's hotline number in any time except mid night then they have to wait 3 to 4 minutes to reach the customer manager. So the mobile telecom companies need to expand their facility like increase the no. of employee and use up to date technology so the rate of drop call decrease and customer reach the customer manager right after they call.

One more important point is, from my analysis I identify that most of the subscriber of different operators think that the Call rate for hotline number is not suitable. They think this is very much costly for them when they call their customer care number. Because every operator charges for calling their hotline number per minute 1 taka or more than 1 taka. And in addition they have to wait more than 3-4 minutes to reach the customer manager. Which create a negative impact on customer mind. Because for solve a single problem they have to spend 6 to 7 taka. So the mobile operator companies suppose to reduce their call rate for their hotline or customer service number. But they have to reduce it up to an optimum level. Because if they reduce the call rate at minimum level then ultimately the call pressure increase dynamically. Then also Cost of waiting time increase substantially.

Another reason of customer overall satisfaction decrease is take long time to solve the problem. That means when the customer give the complain about their line and other value added service, the mobile operator company take long time to solve their problem. For example overcharging, friends and family number correction, missed call alert problem.

Then the companies take 72 hours from customer to solve that particular problem. To achieve the higher customer rate they need to reduce the time gap. And this can be possible when they use high technological software which has higher analytical capability.

I also want to mention one more things there are some other factors which are directly involve with customer satisfaction rate. These points are Service attitude of Customer Manager and The solution or outcome of the conversation bring some positive result. The service quality also depends on the key person who deals with the customer over the phone. So the companies need to trained their employees such a way that they serve each customer as their first customer. And try to increase their analytical power so they can understand the customer problem within a very short time.

And other important factor like length of the conversation, understanding capability of Customer Manager, positive behavior from Customer Manager end are acting as a vital role to maintain the company's overall customer satisfaction rate. So companies must create more efficiency to maintain the customer satisfaction.



Customer relationship management (CRM) is a set of strategies, processes, and associated technology enablers designed to improve the interactions and engagement of customers. It involves not only the use of these systems, but also corporate cultural transformation and ongoing programs with the appropriate organizational framework.

Customer service and support is the main CRM areas. It helps the companies to retain their present customer, and make a strong bondage with the customer which make more profit for the company. In Bangladesh the mobile telecom companies first introduce customer relation management in broad perspective. And they are successful because they provide the service through their different eCRM tools. For this reason customer get the service instantly. They do not need to go customer service center.

But here one important thing is the telecom companies need to increase their number of employees in their call center and also they need to introduce new technology which has higher analytical power. By this they can increase their customer satisfaction rate more and more.





# Frequency Table

# Level of Education

		Frequen cy	Percent	Valid Percent	Cumulati ve Percent
Valid	Below SSC	1	1.7	1.7	1.7
	SSC	2	3.3	3.3	5.0
	HSC	10	16.7	16.7	21.7
	Gradu ate	36	60.0	60.0	81.7
	Master s	11	18.3	18.3	100.0
	Total	60	100.0	100.0	

# Profession

		Frequen		Valid	Cumulati
		cy	Percent	Percent	ve Percent
Valid	Service to Local private enterprise s	6	10.0	10.0	10.0
	Service to MNCs	. 16	26.7	26.7	36.7
	Students	33	55.0	55.0	91.7
	<b>Business</b>	5	8.3	8.3	100.0
	Total	60	100.0	100.0	

Please check the box which is closest to your or your family's monthly income

		Frequen cy	Percent	Valid Percent	Cumulati ve Percent
Valid	5000- 10000	4	6.7	6.7	6.7

10000- 15000	6	10.0	10.0	16.7
15000- 20000	5	8.3	8.3	25.0
20000- 30000	10	16.7	16.7	41.7
30000+	35	58.3	58.3	100.0
Total	6 <b>0</b>	100.0	100.0	

# Your approximate age

		Frequen		Valid	Cumulati
		cy	Percent	Percent	ve Percent
Valid	Between 15				
	And 20	36	60.0	60.0	60.0
	Years	1			
	Between 20	T T			
	And 25	5	8.3	8.3	68.3
	Years				
	Between 25				
	And 30	3	5.0	5.0	73.3
	Years				
	Between 30				
	<b>And 40</b>	15	25.0	25.0	98.3
1	Years				
	Over 40	1	1 77	1 17	100.0
	Years	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

# Gender

		Frequen		Valid	Cumulati
		cy	Percent	Percent	ve Percent
Valid	Male	42	70.0	70.0	70.0
	Fema le	18	30.0	30.0	100.0
	Total	60	100.0	100.0	

Major operator line you are using (arrange according to English alphabet):

		Frequen		Valid	Cumulati
	_	сy	Percent	Percent	ve Percent
Valid	AKT EL	4	6.7	6.7	6.7
	Blink	7	11.7	11.7	18.3
	City cell	3	5.0	5.0	23.3
	GP	37	61.7	61.7	85.0
	Wari d	9	. 15.0	15.0	100.0
	Total	60	100.0	100.0	

For any mobile service related services do you call in your respective operator hotline no

		Frequen		Valid	Cumulati
		сy	Percent	Percent	ve Percent
Vali	No	37	61.7	61.7	61.7
d	Yes	23	38.3	38.3	100.0
	Tota l	60	100.0	100.0	

From which sources you know your respective operators hotline no

		Frequen cy	Percent	Valid Percent	Cumulati ve Percent
Valid	Word of mouth Newspap	23	38.3	38.3	38.3
	er advertise ment	16	26.7	26.7	65.0
	TV advertise ment	14	23.3	23.3	88.3
	Brochure	2	3.3	3.3	91.7
	Websites	. 5	8.3	8.3	100.0
	Total	60	100.0	100.0	

### **Survey Questionnaire**

As a part of our academic requirement I am supposed to prepare a report on eCRM practice on mobile telecom company in Bangladesh. In this report I need to conduct a survey. I can assure you that the data collected through these questionnaires will be used practically for academic purpose.

1. Lev	el of Ed	ucation:										
	1. B Masters		SC	2. \$	SSC	3	. HSC	_	_4. Gr	aduate		5.
2. Pro	fession:											
	2.	Service Students			enterpr	rises						
3. Ple	ase che	ck the b	ox which	n is clos	est to y	our or	your f	amily's n	nonthi	y incom	e:	
	☐ Less than 5000 ☐ 15000-20000			□ 5000-10000 □20000-30000			□ 10000-15000 □30000+					
4. Yo	ur appro	ximate :	age:									
	☐ Betw	een 20		Years	🗆 Ве	tween	25 An	d 20 Yea d 30 Yea				
5. Ple	ease che	ck one:	□ Male	☐ Fen	nale							
6. Ma	ijor oper	ator line	you are	using (	arrange	e acco	rding t	o English	n alpha	abet):		
	☐ AKT	EL	☐ Blinl	<	☐ Cit	y cell		I GP		□ Wari	d	
7. Fo	r any mo	obile ser	vice rela	ited ser	vices d	o you	call in y	your resp	ective	e operate	or hotlii	ne no?
	☐ Yes		□ No									
8. Fro	om whicl	h source	es you kr	now you	ır respe	ective (	operato	ors hotlin	e no:			
	•	Newsp			nent			- - -				
9.	What	are	the	main	reaso	ons	you	have	to	call	for	operato

### 10. How you rated your operator services:

Variables	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Network	1	2	3	4	5
Call rate	1	2	3	4	5
Extra service (doctor, music etc)	1	2	3	4	5
Customer care (sim replacement, bill payment etc)	1	2	3	4	5
New promotion (new offer etc)	1	2	3	4	5
Distribution (prepaid and post paid billing option)	1	2	3	4	5

11. Special focus on Customer hotline In the following a few statements are being presented the way of service provided by the different telecom companies and customer satisfaction rate @ FIVE point scales ranging from strongly disagree (1) to strongly agree (5). Please depict your position by putting a mark on the scales in accordance of your agreement with the statements:

Statements		Strongly Disagree (1)	Disagre e (2)	Neutral (3)	Agree (4) Strongly Agree (5)	
1.	Company can solve the problem	1	2	3	4	5
2.	Service quality is good	1	2	3	4	5
3.	Waiting time is more	1	2	3	4	5
4.	Customer care manager is customer focus	1	2	3	4	5
5.	Call rate for customer care is more	1	2	3	4	5



# Bibliography:

# Texts:

- Customer Relationship Management: Getting It Right by Judith W. Kincaid
  - Published by HP Books and Prentice Hall PTR. ISBN: 0-13-035211-X
- The CRM Handbook Author(s): Jill Dyché, Publisher and Imprint: Addison Wesley Professional, Date of Publication: August 09, 2001, Edition: First

# Website:

- 1. <a href="http://www.twocrows.com/crm-dm.pdf">http://www.twocrows.com/crm-dm.pdf</a>
- 2. <a href="http://download.microsoft.com/download/7/d/d/7ddd3708-86f1-4eb8-812e-61a9e3be0dd3/GP\_FieldService.pdf">http://download.microsoft.com/download/7/d/d/7ddd3708-86f1-4eb8-812e-61a9e3be0dd3/GP\_FieldService.pdf</a>
- 3. <a href="http://www.eccouncil.org/docs/CRM.pdf">http://www.eccouncil.org/docs/CRM.pdf</a>
- 4. http://epubl.luth.se/1653-0187/2005/03/LTU-PB-EX-0503-SE.pdf
- 5. <a href="http://www.cs.uwaterloo.ca/~apidduck/CS330/W04/Seminars/jenkins.pdf">http://www.cs.uwaterloo.ca/~apidduck/CS330/W04/Seminars/jenkins.pdf</a>
- 6. <a href="http://www.ironmountain.com/fulfillment/Infotrak\_48.pdf">http://www.ironmountain.com/fulfillment/Infotrak\_48.pdf</a>
- 7. <a href="http://www.google.com/search?hl=en&q=planning+customer+relations-hip+management+pdf&btnG=Search">http://www.google.com/search?hl=en&q=planning+customer+relations-hip+management+pdf&btnG=Search</a>
- 8. <a href="http://groups.haas.berkeley.edu/fcsuit/PDF-papers/CRM%20paper.pdf">http://groups.haas.berkeley.edu/fcsuit/PDF-papers/CRM%20paper.pdf</a>
- 9. <a href="http://terpconnect.umd.edu/~smithas/mithascrmcs2005.pdf">http://terpconnect.umd.edu/~smithas/mithascrmcs2005.pdf</a>
- 10. http://www.dtc.umn.edu/ddmc/resources/crm.pdf
- 11. http://www.vtt.fi/inf/julkaisut/muut/2004/ebrf2003.pdf
- 12. <a href="http://www.sap.com/solutions/businesssuite/crm/pdf/AnalyticalCRM">http://www.sap.com/solutions/businesssuite/crm/pdf/AnalyticalCRM</a> \_50046585.pdf
- 13. <a href="http://74.125.95.132/search?q=cache:sDEDhFff8kAJ:www.mis.nsysu.edu.">http://74.125.95.132/search?q=cache:sDEDhFff8kAJ:www.mis.nsysu.edu.</a>
  <a href="http://recommons.nsysu.edu.">tw/~syhwang/AcceptedPaper/ConferencePDFs/PAKDD02.pdf+analytical+customer+relationship+management&hl=en&ct=clnk&cd=4">http://recommons.nsysu.edu.</a>