

Application of SERVQUAL Model in Customer Service of Mobile Operators: A Study from the Context of Bangladesh

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Abstract

This study tried to explore the dimensions of service quality (SERVQUAL) on the perceived performance of the mobile phone users in the customer service of Bangladesh. Challenges are increasing rapidly in business environment. In last few years the mobile telecom market in Bangladesh has witnessed a substantial growth and rapid changes globally as well as domestically. One of the key challenges of this market is how they satisfy and retain their customers and also manage service quality, which holds a significant importance to customer satisfaction and their perceived performance. When this perceived performance fails to meet the expectation then a gap has been created between them. SERVQUAL model is a widely accepted approach to measure the difference between customer's expectation and perception. Although there are five gaps in the service quality concept, this paper has attempted to concentrate on the most important one, reality gap analysis. The data were collected through a questionnaire survey in which a customer's responded to a series of questions based on four key dimensions –tangibles, reliability, responsiveness and empathy. Four hypotheses were taken on the fact that there is a gap existing between expectation and perception in this dimension and all hypotheses are proved significant and they all are accepted after conducting Paired T test. Therefore it is better to conclude that the Customer Care Centers of Bangladesh are not performing up to the satisfaction of the customers and they need to take corrective steps to minimize these gaps as early as possible. The study concludes with some recommendations to improve the satisfaction of the customer.

Keywords: SERVQUAL, Customer Service, Mobile, Gap, Service Quality.

1. Introduction

Many service organizations have embraced relationship marketing with its focus on maximizing customer lifetime value. In order to gain more profit share and to be distinctive in the market place the service providers are taking different initiatives and customer care center is one of the common and important initiative. And in the Customer care center customer service has become an important component in this process. Hence, managers are keenly interested in the effect of service changes on customer experience and satisfaction. If customer's experiences are not satisfactory, the relationship is likely to be very short. Customer service is shaping in different ways in order to provide a better service experience to the customer. Everybody has been offering gratuitous and blindly obvious advice on how to improve the customer experience for years.

As the environment of Businesses is getting stiff day by day, companies are paying more concentration on the customers. And to be more responsive to the customers, companies have come out with the idea called "Customer Service" which has become the strength for some of the companies. By the term Customer Care Center, it means the point of contact for the customers of a particular company. Generally in Customer Care connects customers with the right individual who responds to the various problems that the customer is facing and also provide various information and help along with possible solution to the problems. Moreover successful companies pay more concentration on the Customer Care Center for the purpose of providing a better service experience to its consumer.

2. Literature Review

Service quality is always being considered as one of the important attribute for service providers. Findings about service quality assist service providers to initiate development program to mitigate gap and formulate future planning. To measure the service quality from consumers perspective now a day's one of the top prioritize construct of study by service providers. Service quality is an indispensable factor for customer satisfaction, cost reduction, customer loyalty, customer relationship and retention, profitability and so on. According to Lewis (1989), a critical dimension of competitiveness is service quality. Stonebraker and Leong (1994) defined quality in the way that a total system is required for product or service quality, which can identify requirement of the customers, can design product/service as per those requirements and can establish a service delivery or production to produce in conformance with the specifications. Brown and Bitner (2007) implied that due to competition and rapid development of service quality, developed and developing countries both has made it significant for companies to evaluate and measure the quality of service encounters. Berry et al. (1988) described quality has become a significant differentiator and the most powerful competitive weapon which all the service organizations want to possess. Many have suggested that quality results from a comparison of perceived performance with expected performance based on the so-called "disconfirmation theory". Indeed, this notion was the basis for the SERVQUAL model, which views service quality as the gap between the expected level of service and customer perceptions of the level received. Berry, Parasuraman and Zeithaml (1988) are the creators of this instrument which is for the measurement of customer perceptions of service quality.

SERVQUAL model elaborated by Parasuraman et al., (1985), service quality as the discrepancy between a customer's expectations of service offering and the customer's perceptions of the service received. If what is perceived exceeds the expectations then customers think quality to be high and if what is perceived below the expectation then customers think quality to be low. The researchers developed ten general dimensions named- tangibles, reliability responsiveness, competence, courtesy, credibility, security, access, communications, and understanding which are evaluated in SERVQUAL. This model was revised later by Parasuraman et al. (1993) based on the result of an empirical study on five service companies, including a telecommunication company too. They noticed that some of the ten dimensions were correlated. They refined it and finalized the instrument composed of five dimensions include reliability, responsiveness assurance, empathy, and tangibles. Many researches quoted these five elements to be the most important dimensions to the buyers.

a. Tangibles: According to Philip Kotler (1999); Bitner, M. J., and Zeithaml, V. A. (2003), the appearance of physical facilities, equipment, personnel, and communication material of an organization is the tangibles. Gilbert A. Churchill, Jr. & J. Paul peter (1999) added that customer look for quality in the equipment, facilities, and communication materials used to provide the service

b. Reliability: According to Philip Kotler (1999); Bitner, M. J., and Zeithaml, V. A. (2003) the ability to perform the promised service dependably and accurately is the reliability. Gilbert A. Churchill, Jr. & J. Paul peter (1999) added that customers want performance to be consistent and dependable.

c. Responsiveness: According to Philip Kotler (1999); Bitner, M. J., and Zeithaml, V. A. (2003) responsiveness is the willingness to help customers and provide prompt service. Gilbert A. Churchill, Jr. & J. Paul peter (1999) added that customer must see service provider as ready and willing to perform.

d. Assurance: According to Philip Kotler (1999); Bitner, M. J., and Zeithaml, V. A. (2003), assurance means the knowledge and courtesy of employees and their ability to convey trust and confidence.

f. Empathy: According to Philip Kotler (1999); Bitner, M. J., and Zeithaml, V. A. (2003) empathy means the provision of caring, individualized attention to the customer. The service quality model of Parasuraman et al. (1985) identified five key gaps that can cause problems in service delivery. These gaps are:

i. Research gap: between customer expectations and management's perception of those expectations

ii. Planning and design gap: – between management's perception of what the customer wants and the designed capabilities of the system that management develops to provide the service.

iii. Implementation gap: between what the service system is designed to provide and what it actually provides.

iv. Communication gap— between what the service system provides and what the customer is told it provides.

v. Reality gap— between customers' service expectations and their perception of that service.

A company should always pay attention to the customer perceptions and expectations. If there is a difference between customer expectations and perceptions, there is a gap and in practice, it does not matter whether the gap is based on facts or feelings, but how the customer perceives service matters stated by Friday and Cotts (1995). Heskett et al. (1994) claim that quality of service equals delivered service quality minus service expected. Quality of service is seen to be similar to customer satisfaction. So five distinct criteria of service quality have been identified, that can be measured as the perceived performance in mobile market, which are: tangibles reliability, responsiveness, assurance and empathy. For this study, 'The Reality Gap' was taken to find out customer service expectation and perception of the service in Customer care center of mobile operators.

Mobile industry of Bangladesh is growing rapidly with increasing the population. Currently 6 mobile operators (GP, Banglalink, Robi, Airtel, Citycell and Teletalk) are in Bangladesh with 82.4 million (Note 1) subscriber base. Mobile penetration is approximately 55%.

< Insert Table 1 >

Customer service can be provided through physical outlet or call center. Customer care center or call center is an integral part and department for any service providers. Customer care center means an interaction point where customers receive product related service for their query, requests and complaints physically or over the call. Call centers offer a wide range of services which are given below:

Customer acquisition: It is one of the effective services offered by call centers. The aim of this scheme is not only to generate customers but also to allow consumers to contact a representative to make a purchase. Basically, a business nominates a call center to conduct marketing services on behalf of them and the customer care center does some of these.

Customer care: Customer care is one of the common services offered by the call centre. When a customer buys any product or service from a particular company, they are advised to contact the customer care division of the call centre. Many companies in the western world outsource their customer support facility. This in effect reduces the operations cost of hiring new workforce so the company better off.

Direct response: It is one of the important services offered by the call centre to the business. During product advertisement, companies mention a phone number for the customers. When any call is initiated to this number, the call center provides adequate information to make an informed purchase decision.

Business to business: It is a potential call centre solution for any company to generate business-to-business sales. The role of the call centers in this regard is to reduce cost and provide resources for a business to beef up its revenue.

Call centers or customer care centers have now permeated everyday life and become increasingly difficult to avoid. In a call center environment customer interacts only using telephone, thus allowing the service to be delivered anywhere in the world. The role of call centers is to act as the door" between the customer and the organization so that the relationship is positively managed. The quality of these transactions is critical to the success of the organization because when a customer contacts a call center they already have a range of preconceived service expectations such as the call being answered promptly by a courteous Customer Manager who has full knowledge of the products or services. Gilmore, A. (2001) points out those customers' expectations of the service may relate to both tangible dimensions such as reliability standards or intangibles such as feelings or perceptions. In a service environment, such as a call center, both tangible and intangible aspects of service quality need to be addressed by coaches if service quality, from the customer's perspective, is to be achieved by the call center.

All mobile operators in Bangladesh have their own customer service center. Grameenphone was the first company in Bangladesh to set up a 24-hour call centre in 1999 and today it has the largest call centre in the

country. GP call centre has both automated and human-agent interactions with its customers for 24 hours round the year. Call centre hotline is running through Computer Telephony Integration (CTI) and Interactive Voice Response (IVR) system. All the operators are incessantly focusing on customer service since it is an indispensable tool for customer acquisition and retention. Bangladesh Telecommunication Regulatory Commission (BTRC) has just reduced the price of bandwidth for call centers which is a big opportunities for mobile operators to expand their operations to provide better and quality customer services. Customers whether happy with the current services of mobile operators or not, this study was focused to find out through service gap analysis.

3. Relative Constructs of this Study

In order to find out the service gap through research questions following hypothesis have been developed.

H₁: There is a difference between customer expectation and perception in terms of tangible dimension in Customer care center of Bangladesh.

H₂: There is a difference between customer expectation and perception in terms of reliability dimension in Customer care center of Bangladesh.

H₃: There is a difference between customer expectation and perception in terms of responsiveness dimension in Customer care center of Bangladesh.

H₄: There is a difference between customer expectation and perception in terms of empathy dimension in Customer care center of Bangladesh.

4. Methodology

Based on the SERVQUAL model, 20 questionnaires were developed. The model included questions covering four dimensions of the service which are tangibility, responsiveness, reliability and empathy. The dimensions were divided into two segments which are expectations and perceptions. A Likert scale was used to question the respondents on the five point scale. The respondents were asked to rate on the scale between Strongly Agree and Strongly Disagree. The questionnaire was pre-tested in order to maintain proper wording, length and sequencing of the questions. The data were collected from the university students of the Dhaka city, Bangladesh who are using mobile phones of different operators. To select the sample, non-probabilistic sampling method i.e. convenient sampling was used. A sample size of 100 students was used to conduct the research. At first the students were asked whether they have received any service from the customer care center or call center of mobile operators.

5. Data Analysis & Findings

Firstly, Reliability and internal consistency of the multi item scales for each of the constructs were measured using Cronbach Coefficient Alpha. Reliability refers to the consistency, stability and repeatability of a data collection method. The minimally acceptable reliability for primary research should be in the range of point five to point six stated by Nunnally (1967). Based on the assessment a total of 20 items measuring the constructs were ready to use for doing mean average. Coefficient alpha values were computed for each construct separately which ranged from point 0.6319 to 0.8171.

< Insert Table 2 >

Once the reliability analysis was done then a mean value of the expectation and perception of each dimension was calculated which were then compared using paired t-test to find out the service gap.

< Insert Table 3 >

5.1. Hypothesis Testing

In this section hypothesis based on the SERVQUAL model were being analyzed.

< Insert Table 4>

First hypothesis was H_1 , there is a difference between customer expectation and perception in terms of tangible dimension in Customer care center of Bangladesh. According to the results in table 4, the observed T in the scale of $P < 0.05$ is significant, so differences can be seen between the expectations and perceptions of the respondents related to the tangible dimension. So H_1 is accepted.

< Insert Table 5>

Second hypothesis was H_2 , there is a difference between customer expectation and perception in terms of reliability dimension in Customer care center of Bangladesh. According to the results in table 5, the observed T in the scale of $P < 0.05$ is significant, so differences can be seen between the expectations and perceptions of the respondents related to the Reliability dimension. So H_2 is accepted.

< Insert Table 6>

Third hypothesis was H_3 , there is a difference between customer expectation and perception in terms of responsiveness dimension in Customer care center of Bangladesh. According to the results in table 6, the observed T in the scale of $P < 0.05$ is significant, so differences can be seen between the expectations and perceptions of the respondents related to the Responsiveness dimension. So H_3 is accepted.

< Insert Table 7>

Fourth and last hypothesis was H_4 , There is a difference between customer expectation and perception in terms of empathy dimension in Customer care center of Bangladesh. According to the results in table 7, the observed T in the scale of $P < 0.05$ is significant, so differences can be seen between the expectations and perceptions of the respondents related to the Empathy dimension. So H_4 is accepted.

5.2 Comparison of Gaps

< Insert Table 8>

From the above table it can infer that the customers are very much unhappy. So it can be concluded that a significant shortfall in meeting customer expectation across all service dimension. Customers are more dissatisfied about the Empathy and Reliability aspect of the Customer Care Center as the service gap in this dimensions are -0.7555 and -0.7774. As the reliability dimension indicates the ability of the customer care staffs to deliver promised service and according to the result they fail to do so. And Empathy indicated that they fail to understand the customer's specific needs, so the service experience in customer care center is not very pleasant for the subscribers of the mobile phone industry of Bangladesh.

5.3 Limitation

The study had some limitation also. Firstly the study used convenient sample more specifically the university students of Dhaka city, Bangladesh and many arguments in favor and against the convenience sampling method. Several authors have enumerated the dangerous of using student samples in research (Beltramini 1983; Oakes 1972). There are also other dimension existing for service quality so further research can be conducted to measure those dimension.

6. Conclusion & Recommendation

From the analysis done it was seen that in all the dimensions there were significant differences. This means there was service gap in all the four dimensions. Empathy dimension has the highest gap with a gap score of -0.7774. On the other hand, tangible dimension has the lowest gap with a score of -0.6222 Therefore, it could be inferred from the findings that the customers are not getting the services as they are expecting.

The following recommendation may help the mobile phone companies to improve their service. As they have problems in Reliability and empathy more so these needs to addressed effectively

- They should try to keep their promises to the customers.
- They should show their sincere interest in solving the problems of the patients.
- Their focus should be on providing the service accurately at the first time.
- Their reputation should be such that their service has error-free track records.

References

- Beltramini, R. F. (1983), "Student Surrogates in Consumer Research", *Journal of the Academy of Marketing Science* **11**(4): 438-443.
- Berry, L.L., Parasuraman, A. and Zeithaml, V.A. (1988), "The service quality puzzle", *Business Horizons*, September-October, pp. 35-43.
- Bitner, M. J., & Zeithaml, V. A. (2003). *Service marketing*, third edition. New Delhi: Tata McGraw Hill.
- Brown, S.W. & Bitner, M.J. (2007). Mandating a service revolution for marketing. in Lush, R.F. & Vargo, S.L. (Eds). *The Service-Dominant Logic of Marketing: Dialog, Debate and Directions* (pp. 393-405). Armonk, NY: M.E. Sharp.
- Friday, S., and Cotts, D. G. (1995). *The Facility Management: A Marketing and Customer Service Approach*. Wiley & Sons.
- Gilbert A. Churchill, Jr. and J. Paul Peter. (1999) *Marketing: creating value for customers*, Tata McGraw Hill.
- Gilmore, A. (2001) 'Call Centre Management: is service quality a priority', *Managing Service Quality*, vol. 11, no. 3 pp. 153-159.
- Heskett, J.L., Jones, T.O., Loveman, G.W., Sasser, W.E., & Schlesinger, L.A. (1994). Putting the service profit chain to work, *Harvard Business Review*, Mar-Apr, 164-174.
- Kotler, P. (1999). *Marketing Management*, millennium edition. India: Prentice-Hall.
- Lewis, B.R. (1989). Quality in Service Sector –A Review. *International Journal of Brand Marketing*, 7(5), 4-12.
- Nunnally, J. C. (1967), *Psychometric theory*, Tata McGraw-Hill Education.
- Oakes, W. (1972), "External validity and the use of real people as subjects", *American Psychologist* **27**(10): 959-962.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research, *Journal of Marketing*, Vol. 49, p.41-50.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1993). Research note: more on improving service quality measurement. *Journal of Retailing*, 69(1), 140-147.
- Stonebraker, P.W., Leong, G.K. (1994) "Operations Strategy: Focusing Competitive Excellence".

Notes

1. http://www.btrc.gov.bd/newsandevents/mobile_phone_subscribers/mobile_phone_subscribers_october_2011.php

Table 1: Subscriber Base of Mobile Operators in Bangladesh

Operators	Active Subscribers in Million
Grameen Phone Ltd. (GP)	35.691
Orascom Telecom Bangladesh Limited (Banglalink)	22.681
Robi Axiata Limited (Robi)	15.555

Airtel Bangladesh Limited (Airtel)	5.570
Pacific Bangladesh Telecom Limited (Citycell)	1.736
Teletalk Bangladesh Ltd. (Teletalk)	1.207
Total	82.442

* As per BTRC, October 2011.

Table 2: Reliability Analysis

Dimension	Number of Items	Alpha Values
Tangible Expectation	2	.7632
Tangible Perception	2	.6683
Reliability Expectation	3	.7256
Reliability Perception	3	.7758
Responsiveness Expectation	2	.7677
Responsiveness Perception	2	.7650
Empathy Expectation	2	.7783
Empathy Perception	2	.6319
Service Experience	2	.8171
Total	20	

Table 3: Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	TAN.EXP-TAN.PER	.6222	.7320	.1091	.4023	.8421	5.702	99	.000
Pair 2	RELI.EXP-RELI.PER	.7556	.9250	.1379	.4777	1.0334	5.480	99	.000
Pair 3	RESP.EXP-RESP.PER	.6556	1.1717	.1747	.3035	1.0076	3.753	99	.001
Pair 4	EMP.EXP - EMP.PER	.7778	1.0529	.1570	.4615	1.0941	4.955	99	.000

Table 4: Hypothesis Testing for Tangible Dimensions

	Mean	S	t	P
Expectations (E)	4.2222	.5493	5.702	.000
Perceptions (P)	3.6000	.5600		
Gap Score (P-E)	-0.6222			

Table 5: Hypothesis Testing for Reliability Dimensions

	Mean	S	t	P
Expectations (E)	3.9481	.6434	5.480	.000
Perceptions (P)	3.1926	.7159		
Gap Score (P-E)	-0.7555			

Table 6: Hypothesis Testing for Responsiveness Dimensions

	Mean	S	T	P
Expectations (E)	3.8778	.7163	3.753	.001
Perceptions (P)	3.2222	.7874		
Gap Score (P-E)	-0.6556			

Table 7: Hypothesis Testing for Empathy Dimensions

	Mean	S	t	P
Expectations (E)	3.9333	.7119	4.955	.000
Perceptions (P)	3.1556	.6642		
Gap Score (P-E)	-0.7774			

Table 8: Service GAP Analysis

Dimension	Gap Score
Tangible	-0.6222
Reliability	-0.7555
Responsiveness	-0.6556
Empathy	-0.7774
Total Gap	-2.8107
Average Gap	.702675

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