Comparison of Service Quality of Two Commercial Banks in Upper East Region of Ghana

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Abstract

This paper assesses the service quality delivered by two notable commercial banks and then compares their service quality so as to determine which of the two commercial banks is preferred by the customers. The SERVQUAL model was used to collect data from the banks' customers. In all a total of one hundred (100) customers who have bank accounts in the two banks under study were conveniently sampled so as to ensure fair comparison of the banks under study. The data collected from the two banks was keyed and analyzed using the Statistical Package for Social Science (SPSS) version 17.0. The results of the gap analysis carried out show that the customers rated the two banks (A and B) poorly on all the five dimensions of service quality (Tangibility, Reliability, Responsiveness, Empathy, and Assurance). The dimension that required the most urgent attention from bank A is Empathy while for bank B it is Responsiveness that required the most urgent attention. The overall service quality obtained for Banks A and B show that, although the customers are not satisfied with the two banks, they prefer Bank A to Bank B.

Keywords
Service Quality, Comparison, Competitive Advantage, Customers, Perception, Expectation

1. Introduction
Services are activities that require personal contact. They are also commodities that disappear in use, thus they cannot be stored. Every service has manufactured tangible elements. For example, banks provide statements, airlines provide tickets, and restaurants provide foods. Services usually have more intangible elements than manufactured goods. Other qualities of service include:

(a) *Intangibility:* There is no physical product

(b) *Perishability:* Since service is produced and consumed at the same time, it cannot be stored for later usage. This however does not hold for every service industry.

(c) *Heterogeneity:* Services range from simple to complex, from high-contact to low-contact, from fully customized to fully standardized, from personal to business services, etc.

(d) *Inseparability:* Production and consumption usually take place at the same time.

The intangible elements of a service (inseparability, perishability and heterogeneity) are the critical determinants influencing service quality perceived by a customer (Douglas and Connor, 2003; Parasunaman et al., 1985; Ladhair, 2008). Service is viewed differently by both the provider and the consumer. For the provider, service is seen as a process which contains elements of core delivery, service operation, personal attentiveness and interpersonal performance. Whereas the customer views it as part of life which consists of elements of core need, choice and emotional content which are present in different service outputs and encounters and affect each individual's experience differently. Service interaction involves interpersonal attentiveness from the service personnel who are to provide core services and this contributes to customer satisfaction with the service offered. The economic share of services currently accounts for more than half the sum of all gross national products (GNPs) worldwide (Akan, 1995). In today's market place, many service companies need to mobilize their internal energies in order to meet the challenges of a changing environment. One of these challenges includes customers' demand as the quality of service improves. Competition has compelled service organizations to constantly look for effective and sustainable ways to retain customers so as to remain in business. Strategic quality management in services is therefore improving in industry and this includes the banking sector (Soteriou and Stavrinides, 2000). However, service quality in banks was not always targeted when looking for the mediating factors towards financial performance (Mukherjee et al., 2002). Financial institutions often struggle to find or develop instruments to measure the quality of their services (Bahia and Nantel, 2000). Delivering quality services is an important marketing strategy (Parasunaman et al., 1991). To be able to meet the changing preferences of the customers and stay ahead of competitors, retail bankers are bound to provide quality and efficient services. Banks can enhance customer service by leveraging on technology, maintenance of efficient service delivery standards and business process re-engineering.

Therefore, the aim of this paper is to assess and compare the service quality delivered by two notable commercial banks from their customers' perspective. The two commercial banks are operating in Bolgatanga, upper east region of Ghana. The rest of the paper is organized as follows: section 2 deals with literature review while the methodologies adopted in the paper are covered in section 3. Results and discussions are covered in section 4 while the paper is concluded in section 5.

2. Literature review

Measuring service quality has been one of the most recurrent topics in management literature (Gronroos, 1984; Parasunaman et al., 1988; Cronin et al., 1992). This is because of the need to develop valid instruments for the systematic evaluation of firms' performance from the customer point of view, and the association between perceived service quality and other key organizational outcomes (Cronin et al, 2010), which has led to the development of models for measuring service quality (Chingang and Lukong, 2010).

Approaches to the measurement of service quality dates back to the 1970s when Martilla et al. (1977) proposed the Importance-Performance Analysis technique for measuring service quality. The importance-performance grid was used to determine which items needed urgent improvement or which resources were allocated improperly. Most recently however, the measurement of service quality is based on the use of market research questionnaires, which focuses on the relationship between customers' expectations of a service and their perception of the quality of provision. This relationship, known as perceived service quality was first introduced by Gronroos (1982). Gronroos (1982) suggested that the perceived quality of a given service is the result of an evaluation process since consumers make comparisons between services they expect and with perceptions of the services they receive. Hence, he concluded that the quality of service is dependent on two variables: expected service and perceived service.

In the 1980, large organizations became more interested in the development of service quality measures (Dedeke, 2003). Much of the research has focused on measuring service quality using the SERVQUAL instrument (Parasunaman et al., 1985; Parasunaman et al., 1988; Kang, 2006; Ladhair, 2008). The SERVQUAL conceptual model serves as a concise framework for understanding, measuring and improving service quality (Parasunaman et al., 1988). SERVQUAL model does not only help in learning the factors that play an important role to customer satisfaction but also provide directions for improvement. It is a simplified description of the actual situations. The SERVQUAL conceptual model helps managers to identify problems with service quality as well as help them improve the efficiency, profitability and overall performance of their firm (Seth and Deshmukh, 2005).

The SERVQUAL model was tested for reliability with five samples in different service industries. The variables displayed very low levels of correlation between each other in the five independent samples. This qualified them as independent or linear factors that can be used to assess service quality (Parasunaman et al., 1988). Cronin & Taylor (1992) and Buttle (1994) supported the fact that the SERVQUAL model is good for retailers to understand the service expectations and perceptions of customers and make improvements because of its reliability and validity. The SERVQUAL model has also been tested and/or adapted in a great number of studies conducted in various service settings, cultural contexts and geographic locations like the quality of service offered by a hospital (Babakus and Mangold, 1989), dental school patient clinic, business school placement center, tire store, and acute care hospital (Carman, 1990), pest control, dry cleaning, and fast food (Cronin and Taylor, 1992), discount and departmental stores (Finn and Lamb, 1991), and banking (Cronin and Taylor, 1992; Spreng and Singh, 1993;

Newman, 2001; Sharma and Mehta, 2004).

Akan (1995) used the SERVQUAL model in four stars hotels and found out that competence and courtesy combined with assurance were most important attributes influencing the perception of quality. Curry et al. (2002) used the SERVQUAL model to assess the quality of three physiotherapy services in Dundee, Scotland. Badri et al. (2005) carried out an assessment and application of the SERVQUAL model in measuring service quality in information technology center. Their findings showed that there was an inadequacy of dimensions for a perfect fit. On the other hand, based on their feedback, respondents felt that SERVQUAL is a useful indicator for IT center service quality in institutions of higher education. Negi (2009) used the SERVQUAL model to determine customer satisfaction through perceived quality in telecommunication industry and found out that reliability, empathy and network quality proved to be significantly effective in contributing to overall service quality and overall customer satisfaction with mobile services.

Kumar et al. (2009) also used the SERVQUAL model in a research to determine the relative importance of critical factors in delivering service quality of banks in Malaysia. In their findings they realized that there were four critical factors; Tangibility, Reliability, Convenience and Competence. They recommended that banks need to be more competent in delivering their services and fulfilling the assurance of customers and providing the banking services more conveniently (Kumar et al., 2009). Recently, Oyetunji and Bae (2013), applied the SERVQUAL model to assess and measure the service quality delivered by a telecommunication firm in the upper east region of Ghana.
In this paper, the SERVQUAL model is used to assess and compare the service quality delivered by two notable commercial banks operating in Bolgatanga, upper east region of Ghana

3. Materials and Methods

The followings are the materials and the methodologies adopted in this study:

3.1 Data Collection

The questionnaire, used to collect the data, was based on the SERVQUAL model and consists of 5 dimensions (Tangibility, Reliability, Responsiveness, Assurance and Empathy) which are sub divided into 22 statements/items, all aimed at measuring service quality. The questionnaire is divided into three parts namely; demographic, expectations, and perceptions parts. In the demographic part, the respondents were asked about their gender, age group, occupation, level of education, the period in which they have been customers and their switching intention (i.e. whether or not they will like to leave the banks). The second and the third part of the questionnaire comprises of 22 questions each aimed at finding the respondents' opinions pertaining to the expectations and perceptions of service quality respectively in the banks under study. In the questions under second and third parts, a five-point Likert Scale (where 1= strongly agree (excellent) and 5 = strongly disagree (poor)) was used to indicate the level of agreement or disagreement with any given statement. The respondents were given chance to independently and anonymously give answers that reflect their expectations and perceptions. They were asked to select the most appropriate number (scale) that corresponds to the extent to which they agree with a statement. A sample of the questionnaire is shown in Appendix 1. In all a total of one hundred (100) customers who have bank accounts in the two banks under study were conveniently sampled. This is to ensure fair comparison of the banks under study. Convenience sampling technique refers to a technique that goes for the sample that is available in the light of easy access (Bryman and Bell, 2007). Respondent's privacy was protected. So each customer was given two sets of questionnaires, one for each bank.

3.2 Data analysis

The gap, which is the difference between expectations and perceptions, determines customers' perception of service quality. The data collected from the two banks was keyed and analyzed using the Statistical Package for Social Science (SPSS) version 17.0. Thus, for each bank, the gap (perceptions – expectations) was computed for each item under each of the five dimensions of SERVQAUL. The mean value of the gap was computed for each of the five dimensions of SERVQAUL and also the overall mean value of the gap. Also, in order to describe the sampled data, the frequency distribution of the demographic variables was carried out. The results of the analysis are presented below.

4. Results and Discussion

The descriptive data of the respondents are as shown in Table 1. It is worth noting that, since the same customers of the two banks were sampled, the frequency distribution of the demographic variables (with the exceptions of the time spent as customers and the switching intention of the customers) are the same (Table 1). The sample has more males (70.0%) than females (30.0%). This was not deliberate since convenience sampling method was adopted. The age distribution of the respondents indicates that most of the respondents were in the young adult age and economically active group (26-45 years constituting about 78.0% of the sample (Table 1). The respondents were fairly distributed across major occupations (students, public servant and business persons). The educational level of respondents indicates that about 69.0% were in tertiary level. This is an indication that the majority of the respondents are informed and educated people.

It is observed that bank A has more long time (customers who have spent more than two years with the bank) customers (56.0%) than bank B (53.0%). Among the customers sampled, none joined bank B in the last six months (Table 1). However, it is observed that majority of the sampled customers have been with the two banks for more than two years. This indicates that they are in a better position to assess the service quality of the banks under study. When the respondents were asked "if they will like to switch to another network", about 42.0% of the respondents gave affirmative answer for bank A while about 67.0% of the respondents said yes for bank B (Table 1).

Table 1. Demographic Characteristics of the respondents of Banks A and B

Demographic Characteristics		**Bank A**		**Bank B**	
		Frequency	**Percent**	**Frequency**	**Percent**
Gender	Male	70	70.0	70	70.0
	Female	30	30.0	30	30.0
	Total	**100**	**100.0**	**100**	**100.0**
Age	≤ 25 years	15	15.0	15	15.0
	26-35 years	36	36.0	36	36.0
	36-45 years	42	42.0	42	42.0
	> 45 years	7	7.0	7	7.0
	Total	**100**	**100.0**	**100**	**100.0**
Occupation	Student	41	41.0	41	41.0
	Public Servant	32	32.0	32	32.0
	Business Persons	10	10.0	10	10.0
	Other Profession	17	17.0	17	17.0
	Total	**100**	**100.0**	**100**	**100.0**
Educational Level	SHS	22	22.0	22	22.0
	Tertiary	69	69.0	69	69.0
	Others	9	9.0	9	9.0
	Total	**100**	**100.0**	**100**	**100.0**
Time Spent as Customer	≤ 6 months	3	3.0	0	0.0
	7-12 months	2	2.0	1	1.0
	13-24 months	39	39.0	46	46.0
	> 24 months	56	56.0	53	53.0
	Total	**100**	**100.0**	**100**	**100.0**
Switching intention	Yes	42	42.0	67	67.0
	No	58	58.0	33	33.0
	Total	**100**	**100.0**	**100**	**100.0**

Table 2 show the results of the gap analysis (perception-expectation) carried out with respect to Bank A while that of Bank B is shown in Table 3. The frequency of responses to each scale (i.e. number of respondents that chose each scale) under each question (item) and under both perception and expectation for Banks A and B are also shown in Tables 2 and 3 respectively. The average value of the response for each item under both perception and expectation are also indicated for Banks A and B respectively in Tables 2 and 3. The average value under perception minus the average value under expectation gives the gap (service quality) for each item/question (Tables 2 and B). The service quality is considered “excellent”, if perception is greater than expectation; “good or adequate”, if perception is equal to expectation; and “bad, poor or deficient”, if perception is less than expectation.

The customers rated the two banks (A and B) poorly (negative values were recorded) on all the five dimensions of service quality (Tables 2 and 3). On Tangibility, Reliability, Responsiveness, Empathy, and Assurance, bank A scored -0.710, -0594, -0.948, -0.664, and -0.748 respectively (Table 2) while bank B scored -1.495, -1.488, -1.750, -1.460, -1.402, and -1.519 respectively (Table 3). It is evident from Table 2 that the dimension that required the most urgent attention from bank A is Empathy (-0.948) while for bank B it is Responsiveness (-1.745) that required the most urgent attention (Table 3). A closer look at Table 2 shows that under Empathy dimension, Bank A required the most urgent attention on item 14 (i.e. Bank A’s staff will instill confidence in customers.). For Bank B, under Responsiveness dimension, the item that required the most urgent attention is item 10 (i.e. Bank A will tell customers exactly when services will be performed) (Table 3). The overall service quality obtained for Banks A and B are -0.748 and -1.519 respectively (Tables 2 and 3). This means that generally speaking, although the customers are not satisfied with the two banks, they prefer Bank A to Bank B.

5. Conclusion

The SERVQUAL model was used to assess and compare the service quality delivered by two notable commercial banks operating in Bolgatanga, upper east region of Ghana. Data was collected from the same customers of the two banks using questionnaire which was based on the SERVQUAL model. The data was analyzed using the Statistical Package for Social Science (SPSS) version 17.0. The results of the analysis show that the customers rated the two banks poorly (negative values of service quality were recorded) on all the five dimensions of service quality. In order to stay competitive, both Banks needs to improve on their service quality especially in the identified areas. Bank B needs to be more responsive to its customers while Bank A needs to train its staff how to show empathy to their customers. The overall service quality obtained show that, although the customers are not satisfied with the two banks, they prefer Bank A to Bank B.

Table 2. Summary of service quality with respect to the five dimensions in Bank A

		PERCEPTIONS						**EXPECTATIONS**						
		FREQUENCY OF RESPONSES						**FREQUENCY OF RESPONSES**						
	statement	1	2	3	4	5	**Average**	1	2	3	4	5	**Average**	**P-E**
Tangibles	1	13	23	26	20	8	3.130	0	0	19	33	48	4.290	-1.160
	2	15	19	34	25	7	3.100	0	0	21	43	36	4.150	-1.050
	3	7	23	31	23	16	2.820	0	1	13	40	46	4.310	-1.490
	4	3	8	34	37	18	2.410	0	0	13	65	22	4.090	-1.680
								Average for Tangibles =						**-0.710**
Reliability	5	4	9	28	26	33	2.250	0	0	31	29	40	4.090	-1.840
	6	2	19	31	33	15	2.600	0	0	15	52	33	4.180	-1.580
	7	2	14	26	36	19	2.410	0	0	35	40	25	3.900	-1.490
	8	4	14	20	30	32	2.280	0	6	19	44	31	4.000	-1.720
	9	4	17	28	33	18	2.560	0	19	16	42	23	3.690	-1.130
								Average for Reliability =						**-0.594**
Responsiveness	10	8	18	22	30	22	2.600	0	0	8	58	34	4.260	-1.660
	11	4	13	24	40	19	2.430	0	1	10	59	30	4.180	-1.750
	12	6	15	27	41	11	2.640	0	1	23	42	34	4.080	-1.440
	13	4	10	27	34	25	2.340	0	1	30	40	29	3.970	-1.630
								Average for Responsiveness =						**-0.823**
Emp athy	14	3	16	26	22	33	2.340	0	6	5	46	43	4.650	-2.310
	15	11	17	27	36	9	2.850	0	0	4	56	40	4.360	-1.510
	16	4	12	40	28	16	2.600	0	0	9	59	32	4.230	-1.630

	17	5	18	30	35	12	2.690	0	6	8	49	37	4.170	-1.480
								Average for Empathy =						**-0.948**
Assurance	18	6	14	22	28	30	2.380	0	0	21	63	16	3.950	-1.570
	19	11	21	31	28	9	2.970	0	0	20	49	26	3.960	-0.990
	20	8	9	30	30	23	2.490	0	0	9	65	26	4.170	-1.680
	21	6	16	26	30	22	2.630	0	0	17	35	48	4.310	-1.680
	22	8	18	18	38	18	2.600	0	0	3	59	38	4.350	-1.750
								Average for Assurance =						**-0.664**
	Overall Average = -0.748													

Table 3. Summary of service quality with respect to the five dimensions in Bank B

		PERCEPTION						**EXPECTATION**						
		Frequency of Response					**Average**	**Frequency of Response**					**Average**	**(P – E)**
		1	2	3	4	5		1	2	3	4	5		
Tangibility	1	29	28	16	19	8	2.49	3	1	8	27	61	4.42	-1.93
	2	20	37	15	23	5	2.56	2	9	9	39	41	4.08	-1.75
	3	10	22	9	37	22	3.39	1	3	9	32	55	4.37	-0.98
	4	14	33	17	30	6	2.81	3	6	8	46	37	4.08	-1.32
	Average for Tangibility =													**-1.495**
Reliability	5	43	28	8	17	4	2.11	9	11	7	29	44	3.88	-1.76
	6	33	30	7	24	6	2.40	4	7	9	29	51	4.16	-1.75
	7	35	30	8	19	8	2.35	5	15	11	43	26	3.70	-1.35
	8	28	36	13	16	7	2.38	10	8	5	32	45	3.94	-1.54
	9	24	24	13	28	11	2.78	6	13	11	33	37	3.82	-1.04
	Average for Reliability =													**-1.488**
Responsiveness	10	28	22	17	24	9	2.64	4	6	9	38	43	4.10	-1.84
	11	44	23	12	17	4	2.14	7	9	10	31	43	3.94	-1.80
	12	31	36	10	17	6	2.31	6	7	5	33	49	4.12	-1.81
	13	43	22	8	15	12	2.31	7	11	7	39	36	3.86	-1.55
	Average for Responsiveness =													**-1.750**
Assurance	14	38	32	7	17	6	2.21	3	6	12	36	43	4.10	-1.88
	15	24	13	18	28	17	3.01	2	6	6	44	42	4.18	-1.18
	16	16	37	15	25	7	2.70	4	4	16	35	41	4.05	-1.41
	17	19	26	11	31	13	2.93	5	5	4	38	48	4.19	-1.37
	Average for Assurance =													**-1.460**
Em	18	32	22	19	18	9	2.50	4	5	6	43	42	4.14	-1.64

	19	23	21	17	19	20	2.92	9	3	5	40	43	4.05	-1.13
	20	33	25	12	24	6	2.45	8	12	13	38	29	3.68	-1.14
	21	37	20	18	17	8	2.39	7	5	7	33	48	4.10	-1.71
	22	27	28	20	18	7	2.50	3	13	10	39	35	3.90	-1.39
	Average for Empathy =													**-1.402**
	Overall Average = -1.519													

References

Akan, P., Dimensions of service quality: a study in Istanbul. *Managing Service Quality*, Vol. 5. no. 6, pp. 39–43, 1995.

Babakus, E. and Mangold, W. G., “Adapting the SERVQUAL Scale to Health Care Environment: An Empirical Assessment,” in Paul Bloom, Bart Weitz, Russ Winer, Robert E. Spekman, Harold H. Kassarjian, Vijay Mahajan, Debra L. Scammon, and Michael Leay, eds., AMA Summer Educators’ Proceedings: Enhancing Knowledge Development in Marketing, Chicago, IL: American Marketing Association, 195, 1989.

Badri, M. A., Abdulla, M. and Al-Madani, A., Service quality assessment and application of SERVQUAL, Vol. 22, no. 8, pp. 819-848, 2005.

Bahia, K., and Nantel, J., A reliable and valid measurement scale for Perceived Service Quality of Banks, *International Journal of Bank,* Vol. 18 No. 2, pp 84-91, 2000.

Buttle, F., SERVQUAL: review, critique, and research agenda. *European Journal of Marketing*, Vol. 30, no. 1, pp. 8-32, 1996.

Bryman, A. and Bell, E., *Business research methods*, 2nd edition. NewYork: Oxford University Press Inc., 2007.

Carman, J.M. “Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions”, *Journal of Retailing*, Vol. 66, no. 1, Spring, pp. 33-55, 1990.

Chingang, N. D. and Lukong, P. B., Using the SERVQUAL Model to assess service quality and customer satisfaction. *Umea School of Business* (Spring Semester 15 hp), 2010.

Cronin, J. T. and Taylor, S. A., “Measuring service quality: An examination and extension, Journal of Marketing, Vol. 56, no. 3, pp. 55-68, 1992.

Curry, A. and Sinclair, E., Assessing the quality of physiotherapy services using Servqual. *International Journal of Health Care Quality Assurance*, Vol. 15, no. 5, pp.197-205, 2002.

Dedeke, A., Service quality: A fulfillment–oriented and interactions–centered approach. Managing Service Quality, Vol.13, pp. 276-289, 2003.

Douglas, L. and Connor, R., Attitudes to service quality — The Expectation Gap, *Nutrition & Food Science, Vol. 33, no.* 4, pp. 165-172, 2003.

Finn, D. W. and Charles, W. L., "An Evaluation of the SERVQUAL Scales in a Retailing Setting." *Advances in Consumer Research,* edited by R. Holman and M. R. Soloman, 483-490. Provo, UT: Association for Consumer Research, 1991.

Gronroos, C., Strategic Management and Marketing in the Service Sector, Swedish School of Economics and Business Administration, Helsinki, Finland, 1982.

Gronroos, C., A service quality model and its marketing implications, European Journal of Marketing. Vol. 18, No. 4, pp. 36-44, 1984.

Kang, G.D., The hierarchical structure service quality: Integration of technical and functional quality. Managing Service Quality, Vol. 16, pp. 37-56, 2006.

Kumar, M., Kee, F.T. and Manshor, A.T., Determining the relative importance of critical factors in delivering service quality of banks; An application of dominance analysis in SERVQUAL model, *Managing Service Quality, Vol.* 19, no. 2, pp. 211-228, 2009.

Ladhair, R., Alternative measures of service quality: A review. Managing Service Quality, Vol. 18, pp. 65-86, 2008.

Martilla. J. A. and James, J. C., Importance-Performance analysis, Journal of Marketing, Vol. 41, no. 1, pp.77-79, 1977.

Mukherjee, A., Nath, P. and Pal, M. N., Performance benchmarking and strategic homogeneity of Indian banks. *International Journal of Bank Marketing. Vol.* 20, no. 3, pp. 122-139, 2002.

Negi, R., User perceived service quality of mobile communications: experience from Ethiopia. Int. J. Quality

Reliability Management, Vol. 26, no. 7, pp. 699- 711, 2009.
Newman, K., "Interrogating SERVQUAL: a critical assessment of service quality measurement in a high street retail bank", International Journal of Bank Marketing, Vol. 19, no. 3, pp. 126-139, 2001.
Oyetunji, E. O. and Bae, J. Assessing service quality in a telecommunication firm in Upper East region of Ghana, Advanced Materials Research, Trans Tech Publications Ltd., Switzerland *(in press)*.
Parasuraman,A., Zeithaml,V.A.and Berry,L.L. 'A Conceptual Model of Service Quality and its Implications for Future Research', *Journal of Marketing*, Vol. 49, no. 3, pp. 41-50, 1985.
Parasunaman, A., Berry L. And Zeithmal V., "SERVQUAL: A Multi-item Scale for Measuring Consumer Perceptions of Service Quality", Journal of Retailing, Vol. 64, no. 2, pp. 12-40, 1988.
Parasuraman,A., Berry,L.L. and, Zeithaml,V.A., 'Refinement and Re-assessment of the SERVQUAL Scale', *Journal of Retailing*, Vol. 67, pp. 420-450, 1991.
Soteriou, A. and Stavrinides, Y., An internal customer service quality data envelopment analysis model for bank branches. International Journal of Bank marketing, Vol. 18, no. 5, pp. 246–252, 2000.
Seth, N. and Deshmukh, S.G., Service quality models: a review. *International Journal of Quality and Reliability Management*, Vol. 22, no. 9, pp. 913-949, 2005.
Sharma and Mehta., "Expectations, performance evaluation, and consumers' perceptions of quality*", Journal of Marketing*, Vol. 57, pp. 18-34, 2004.
Spreng and Singh, "Analysing service quality in the hospitality industry using the SERVQUAL model", *Service Industries Journal*, Vol. 1, July, pp. 324-43, 1993.
Wong, A. and Sohal, A. An Examination of the Relationship Between Trust, Commitment and Relationship Quality, *International Journal of Retail and Distribution Management*, Vol. 30, no. 1, pp. 34-50, 2002.

Biography

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APPENDIX 1

QUESTIONNAIRE
UNIVERSITY FOR DEVELOPMENT STUDIES, NAVRONGO CAMPUS

A RESEARCH QUESIONNAIRE ON QUALITY SERVICE DELIVERY IN COMMERCIAL BANKS IN BOLGATANGA

This section seeks to know the demographical features about you. **Please tick (√) appropriately.**

Gender: Male ☐ Female ☐

Age Group: 20-29 ☐ 30-39 ☐
40-49 ☐ others ☐

Occupation: Student ☐ Public servant ☐
Business persons ☐ Other profession ☐

Educational level JHS ☐ SHS ☐
Tertiary ☐ Others, specify…………….

How long have you been customers of telecommunication firm?

Below year ☐ 1-2 years ☐
2-3years ☐ Above ☐

Do you have the intention of switching to a different Network? Yes ☐

No ☐

NB: This questionnaire is for research purpose only; all information from any individual will be treated confidential without disclosing the respondent's identity.

ID…………

EXPECTATIONS

This survey deals with your opinions of Commercial Bank. Please show the extent to which you think Commercial Bank should possess the following features. The interest here is a number that best shows your expectations about Commercial Bank offering the services.

Strongly Agree **Strongly Disagree**

Excellent	Very good	Good	Weak	Poor
1	2	3	4	5

Item	Tangibles	Score
E1	Commercial Bank will have modern looking equipment.	
E2	The physical facilities at Commercial Bank will be visually appealing.	
E3	Employees at Commercial Bank will be neat appearing.	
E4	Material and information associated with the service (e.g. promotional brochure) are visually appealing at the customer service counter.	
	Reliability	
E5	When Commercial Bank promise to do something by a certain time, they do.	
E6	When a customer has a problem, Commercial Bank's staff is sympathetic and reassuring.	
E7	Commercial Bank will perform the service right the first time.	
E8	Commercial Bank will provide the service at the time they promise to do so.	
E9	Commercial Bank will insist on error free records	
	Responsiveness	
E10	Commercial Bank will tell customers exactly when services will be performed.	
E11	Commercial Bank' staff will give prompt service to customers.	
E12	Commercial Bank' staff will always be willing to help customers.	
E13	Commercial Bank' staff will never be too busy to respond to customers' requests.	
	Assurance	
E14	The behavior of Commercial Bank's staff will instill confidence in customers.	
E15	Customers feel safe in conducting business with Commercial Bank.	
E16	Commercial Bank' staff will be consistently courteous with customers.	
E17	Commercial Bank' staff will have the knowledge to answer customers' questions.	
	Empathy	
E18	Commercial Bank will give customers individual attention.	
E19	Commercial Bank will have operating hours convenient to all their customers.	
E20	Commercial Bank will have employees who give customers personal attention.	
E21	Commercial Bank will have their customer's best interests at heart.	
E22	Commercial Bank' staff will understand the specific needs of their customers.	

PERCEPTIONS

The following statements relate to your feelings about Commercial Bank services. Please show the extent to which you believe Commercial Bank has the feature described in the statement. The interest here is a number that shows your perceptions about Commercial Bank services.

Strongly Agree **Strongly Disagree**

Excellent	Very good	Good	Weak	Poor
1	2	3	4	5

Item	**Tangibles**	Score
P1	Commercial Bank have modern looking equipment.	
P2	Commercial Bank’s physical facilities are visually appealing.	
P3	Commercial Bank’s reception desk employees are neat appearing.	
P4	Materials associated with the service (e.g. promotional brochure) are visually appealing at the customer service counter.	
	Reliability	
P5	When Commercial Bank promise to do something by a certain time, it does so.	
P6	When you have a problem, Commercial Bank staff is sympathetic and reassuring.	
P7	Commercial Bank performs the service right the first time.	
P8	Commercial Bank provides its service at the time it promises to do so.	
P9	Commercial Bank insists on error free records.	
	Responsiveness	
P10	Commercial Bank staff tells you exactly when services will be performed.	
P11	Commercial Bank staff gives you prompt service.	
P12	Commercial Bank staff is always willing to help you.	
P13	Commercial Bank staff is never too busy to respond to your request.	
	Assurance	
P14	The behavior of Commercial Bank staff is instills confidence in you.	
P15	You feel safe in conducting business with Commercial Bank.	
P16	Commercial Bank staff is consistently courteous with you.	
P17	Commercial Bank staff has the knowledge to answer your questions.	
	Empathy	
P18	Commercial Bank gives you individual attention.	
P19	Commercial Bank has operating hours convenient to you.	
P20	Commercial Bank has employees who give you personal attention.	
P21	Commercial Bank has your best interest at heart.	
P22	Commercial Bank staff understands your specific needs.	