

Customer Satisfaction With Internet Banking Service Quality In The Ghanaian Banking Industry

Simon Gyasi Nimako, Nana Kwame Gyamfi, Abdil Mumuni Moro Wandaogou.

Abstract: This paper empirically examines Customer Satisfaction (CS) with internet banking service quality (IBSQ) in the Ghanaian banking industry. The study was a cross-sectional survey that employed the use self-administered questionnaire to collect primary data from a sample of 200 respondents of two banks through personal contact. The findings are that customers of Merchant Bank, Ghana (MBG) are more satisfied with the IBSQ than those of Ghana Commercial Bank (GCB). Moreover, income influenced the satisfaction of customers for IBSQ generally. It was found that, generally, customers of the two banks are dissatisfied with the promptness of responses to customer request, the ability to be guided online to resolve problems, offering of preferentially lower fees/ rates and charges, and reasonability of the transaction fee for online banking transactions, but are less satisfied with the quickness of web pages loading when using online banking transactions. Theoretical and managerial implications of the findings have been discussed, and limitations are noted. The paper contributes to the literature in area of customer satisfaction in electronic banking.

Index Terms: banking industry, Customer Satisfaction, Ghana, internet banking, internet banking quality, service quality.

1 INTRODUCTION

The use of information and communications technologies (ICTs) have changed the way of conducting business transactions and meeting the growing demands of customers for most organizations. The use of ICTs has brought in new products, service market opportunities and developing more information systems that are business oriented and support management processes such as planning, controlling and co-ordination [1], [2]. One of the areas ICT has gained growing significance is in the banking sector where financial institutions seek to be more competitive, increase customer base, reduce transaction costs, improve the quality and timeliness of response, enhance opportunities for advertising and branding, facilitate self-service and service customization, and improve customer communication and customer relationship management [3]. Banking started in Ghana in 1894 by the establishment of the Bank of British West Africa until 1957 [4]. According to the Ghana Banking Survey (GBS), currently there are 25 universal banks licensed and over 250 other financial institutions that operate in Ghana [5], two of which are the banks under study. The banking sector is one of the three facets of the financial services industry in Ghana that offers several banking services, such as acceptance of deposits, granting of credit facilities, and management of loans, among others. Few new products were introduced to the market in 2008.

According to the GBS [5], in response to competitive pressure in the banking industry, banks continued to make significant investments in upgrading information technology platforms by automating and centralising various back office activities to enhance the quality of service delivery to their customers. In 2008, some banks including Ghana Commercial Bank (GCB) upgraded their banking application software. In response to the increasing role of ICT in banks' service delivery, Bank of Ghana published guidelines on branchless banking in August 2008 to allow collaboration between banks, telecommunication companies and merchants to provide greater access to banking and financial services to the wider public. Also in 2008, a common electronic platform (the e-zwich) was established to further develop the payment and settlement system by making it possible to link all banking institutions with a biometric smartcard as a vehicle for inclusion of all segments of the population. In Ghana, most banks are now offering electronic banking services with various levels of sophistication [6], [7], [8]. For example, while some banks have adopted internet banking for communicating to customer on regarding bank statements, other banks use internet banking services to allow customers to access their bank accounts and perform other banking transactions [6], [8]. In Ghana, banks like United Bank for Africa, Merchant Bank Ghana, ECOBANK Ghana, Barclays Bank Ghana, Ghana Commercial Bank, among others, provide customers with a wide range of electronic products and transactions, some of which allow customers to receive their monthly bank statements via e-mail, online checking of accounts balance, online transfer of funds, the use of electronic cash systems, among others. In an era of mature and intense competitive pressures, many firms are focusing their efforts on maintaining a satisfied customer base. It is a common assertion among management and marketing theorists that service quality is essential to business success [9], [10], [11], [12], [13]. Firms that provide superior service quality as measured by CS also experience higher economic returns than competitors that are not so service-oriented [14]. This is particularly true in the financial services sector where deregulation has created an environment that allows consumers considerable choice in satisfying their financial needs. In response, many financial institutions are directing their strategies towards increasing CS and loyalty through improved service quality [14]. The state of

- *Simon Gyasi Nimako is currently pursuing PhD in Marketing at the Accra Institute of Technology, Ghana. Tel: +233 261713782; email: sim.ekommerce@gmail.com*
- *Nana Kwame Gyamfi is currently pursuing post-graduate degree in Computer Science, Tel:+ 233 244412426. emeritusbrains@gmail.com*
- *Abdil Mumuni Moro Wandaogou holds a master's degree in Marketing and e-Commerce from Lulea University of Technology, Sweden.*

CS with internet banking service quality has not received much attention in the literature. In recent times many of studies have looked at CS with IBSQ in different industry context in different countries [15], [16], [17], [18], [19], [20], [21], [22], [23], [24]. With the exception of few studies conducted in electronic banking context in Ghana [6], [8], there is very limited empirical work in the area of customer satisfaction in the banking industry in general and in the internet banking service quality (IBSQ) in Ghana in particular. Therefore, there is the need to examine CS in internet banking industry in Ghana in order to provide feedback to management for effective management strategy and to contribute to the literature by furthering our understanding of the state of CS in developing country, Sub-Sahara Africa context. This could drive more research work in future in this area. Therefore, the main question of this study is: How satisfied are customers with the internet banking service quality in Ghanaian banking industry (GBI)? The main purpose of this study is to evaluate CS with internet banking service quality in Ghanaian banking industry, using the cases of Ghana Commercial Bank (GCB) and Merchant Bank of Ghana (MBG). Specifically, the objectives for this paper are:

1. To evaluate customer satisfaction/dissatisfaction of internet banking service quality in Ghana Commercial Bank and Merchant Bank of Ghana.
2. To determine whether satisfaction ratings with internet banking service quality are influenced by customer demographic variables (Gender, age, education, income and marital status).

2 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Internet Banking Service Quality (IBSQ)

Internet banking could be conceptualized within the context of electronic banking. Though it has been variously defined, according to [17], electronic banking is the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as personal computer and mobile phone with browser or desktop software, telephone or digital television. Electronic banking, therefore, could be categorized into PC banking, Internet banking, TV-based banking, and Telephone-based banking. It is a construct that consists of several distribution channels. Internet banking is the situation where "customers can access their bank account via the internet using a PC or mobile phone and web-browser" [25, p. 2]. Many past studies have developed various models for understanding relevant e-service quality dimensions relevant to internet banking. Joseph et al. [26] propose six dimensions of online banking service quality including: convenience/accuracy, feedback/complaint management, efficiency, queue management, accessibility and customization. Zeithaml et al. [27] contend that attributes of internet service quality include: access, ease of navigation, efficiency, flexibility, reliability, personalization, security, responsiveness, assurance, site aesthetics and price knowledge. Jun and Cai [22], in a study of online banking, found that web site design, information, ease of use, access, courtesy, responsiveness, and reliability are significant dimensions that determine service quality. Yoo and Donthu [23] propose four dimensions, termed SITEQUAL, that include ease of use, aesthetics design, processing speed and security.

The empirical work of [24] was conducted in an emerging economy of Taiwan Internet banking sector, they developed and validated a five dimension internet banking service quality model that has 17-item measurement scale for measuring the service quality in internet banking. The dimensions were based on e-service quality model of [16]. The emerged dimensions for the internet banking service quality context are: web design, customer service, assurance, preferential treatment and information provision. First is Web design: This dimension covers the design of the web site and includes items like web content layout, content updating, navigability, and user-friendliness. These are consistent with findings of previous studies [29], [30], [31]. Second is Customer Service: Customer service has been recognized as an important element for enhancing service quality in online shopping and banking [28]. Elements in customer service dimension have been noted in many previous studies [32], [33]. This dimension has to do with service reliability, customer sensitivity, personalized service, and fast response to complaints that have been described as responsiveness to customer needs and complaints [34]. Third is Assurance: many previous have demonstrated that assurance is one of the critical elements of online banking service quality [23], [33]. The assurance dimension describes impressions by the service providers that convey a sense of security and credibility [34]. Security and privacy are related items that affect the confidence to adopt online banking services [35]. Fourth is Preferential treatment: This is related to the added value of using internet banking services. Where customers perceive that the incentive of online banking is attractive then they would be more willing to use internet banking. Fifth is Information provision: Information provision has become one of the key elements of online service quality as customer would need the right information that enables them complete online banking transactions successfully [36]. In this study, internet banking service quality is, thus, conceptualized as a construct with five dimensions that were identified in the empirical work of [36].

2.2 Customer Satisfaction (CS)

CS has become a major area of marketing that has received considerable publications from practitioners and scholars in the last two decades. "Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's performance (outcome) in relation to his or her expectation." [37 p.144]. CS has been recognized as an important element that drives customer retention, loyalty and post-purchase behavior of customers [9], [37], [38]. It is well documented that the measurement of CS regarding the service quality of firms is a necessary means by which organizations delve into the minds of its customers for useful feedback that could form the basis for effective marketing strategy [37], [39], [40]. Since firms exist to satisfy customers by meeting their requirements, it is crucial for banks that offer internet banking services to periodically and consistently measure the satisfaction of their customers. As customers use the banking internet services, it might be that they are not satisfied, to some extent, with certain dimensions of the service quality. For this reason this study examines CS with various service quality dimensions. While some authors perceive satisfaction as a cumulative and others view it as transactional. Transactional-specific perspective, CS is based on a one time, specific post-purchase evaluative judgement of a service encounter [41]. On the other hand, in the cumulative

CS perspective, CS is conceptualised as an overall customer evaluation of a product or service based on purchase and consumption experiences over a time period [42]. It is argued that since cumulative satisfaction is based on a series of purchase and consumption experiences, it is more useful and reliable as a diagnostic and predictive tool than the transaction perspective that is based on a one-time purchase and consumption experience. Therefore, the study conceptualises CS as cumulative measured from the last twelve months of being an internet banking customer. Danaher and Haddrell [43] studied a comparison of several scales simultaneously on the same respondents. They concluded that the disconfirmation scale is a preferred method in measuring CS, and that a five-point disconfirmation scale would be an improvement over the three-point scale if high predictive validity is essential. They however noted that one setback of the five-point disconfirmation scale could be its use in telephone surveys, where respondents might have to be continually reminded of five rather than three scale points. In this study, since personal contact was to be used and high predictive validity was a major concern, a five-point disconfirmation scale was adopted from much better expected to much worse than expected. Therefore, overall CS and CS with various dimensions of internet banking service quality would be measured using five-point disconfirmation scales.

2.3 Conceptual Framework for the Study

In this study, based on a thorough review of literature, the conceptual model presented in Figure 1. It depicts the dimensions of IBSQ for which CS was measured. The conceptual framework for this study adopts the IBSQ dimensions proposed in the model of IBSQ in [24].

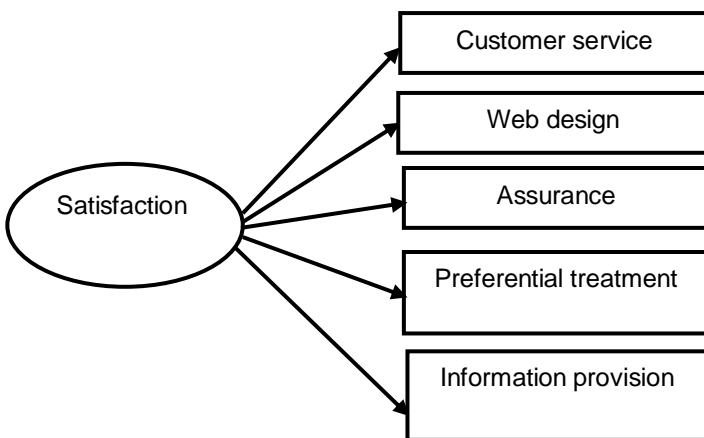


Fig. 4 Conceptual Framework for the study

This model was adopted for three reasons. First, the model was based on extensive literature review. Second, it was based on research in an emerging economy context, which is similar to the emerging economy of Ghana. Third, the dimensions in the model are validated empirically as applicable to internet banking context and not just general e-service quality context.

3 METHODOLOGY

3.2 Population and Research context

The target population consists of internet banking customers of GCB and MBG who have used internet banking for at least the past twelve months. The Merchant Bank Ghana Limited (MBG) is a universal Bank in Ghana that is committed to providing quality financial products and services to their customers across their chosen market and maintaining their place as a leading and preferred financial institution in Ghana. The Bank provides a comprehensive range of banking services to its customers and clients, using its worldwide network of correspondent banks and their agencies. The range of MBG's banking services includes: Domestic and International Banking Operations for Corporate Customers, Small & Medium Enterprises (SMEs) and, High Net-worth Individuals; Treasury Services, Money and Capital Market Operations, Hire Purchase and Leasing Services; and Foreign Remittances. Ghana Commercial Bank Ltd. (GCB) started in 1953 as the Bank of the Gold Coast to provide banking services to the emerging nation for socio-economic development. The Bank was to provide special attention to Ghanaian traders, business people and farmers who could not elicit support from the expatriate banks. In 1957, when Ghana attained independence, Bank of Ghana was established as the Central Bank while the Bank of the Gold Coast was renamed Ghana Commercial Bank to focus solely on commercial banking services. Since then GCB branches have been opened across the length and breadth of the nation tapping the potential of the 10 regions that make Ghana. GCB provides a wide range of products and services for the benefit to its customers. From the traditional products of the Current/Savings Accounts, GCB now offers specialized products and services, loans and overdrafts, as well as investment products. GCB has taken advantage of an enhanced information technology system, to introduce Internet Banking (Commernet Plus), Royal Banking, Smart Pay (Fee Payments), KudiNkosuo, GCB Inland Express Money Transfer, International Money Remittance Payments, GCBKidistar Account and MasterCard. The main motivation for the choice of GCB and MBG centers on their unique differences in operational focus with similar internet banking platform. The two banks are both government-owned banking institutions that have fundamentally different focus in banking. While GCB is mainly into tradition banking products (e.g. savings/current account) with little aspect of investment banking service, MBG is typically into investment banking products (e.g. Funds/Portfolio Management, Money Market Operations, Investor Search & Joint Venture Arrangement) as well as other specialist services (e.g. Registrar Services, and Corporate Finance & Advisory Services). It would be interesting to study how these two are able to meet customers' needs and wants through the use of internet banking platform and compare the results for both managerial and theoretical implications.

3.3 Sampling

A convenient sample size of 200 respondents from each company was used, 100 from each sub-group. In selecting the 200 respondents, a purposive sampling method was used to consciously select customers who meet the criteria of having used internet banking services for the past twelve months.

3.4 Data Collection Instrument

A self-administered structured questionnaire was developed based on the literature reviewed to gain insight into customers' satisfaction with internet banking service quality in GCB and MBG. The self-administered questionnaire contained three sections. Section one contained bio data of respondents – gender, age, education, income and marital status. Section two focused on CS and section three contained mainly five dimensions with 17 items for internet banking service quality dimensions developed by Ho and Lin (2010). Overall satisfaction with the internet banking service quality was measured by asking respondents to rate their satisfaction with internet banking service quality using a disconfirmation scale: Much worse than expected (1), worse than expected (2), equal to expectation (3), better than expected (4) and much better than expected (5). In all, (17) items asked about satisfaction with five dimensions of internet banking service quality adapted from Ho and Lin (2010), and were asked to rate their overall CS with internet banking service quality. Five (5) items related to the respondents' characteristics in one section. Though items of the questionnaire had been pre-tested and validated in previous studies [16], [24], the Cronbach alpha reliability value yielded a composite alpha of 0.880 for the entire scale. This value is above the recommended 0.70 [44], therefore, the items in the measurement scale are considered to possess high-internal consistency and reliability.

4 DATA ANALYSIS

Data were analysed using SPSS 16.0 for windows. Given that all parametric assumptions were met, One-Way ANOVA was used to determine differences in satisfaction among demographic sub-groups while in the case of unmet parametric assumptions, Kruskal-Wallis ANOVA was used to determine the differences in satisfaction with IBSQ between the two banks. The following section and sub-sections explains results of the data analysis beginning with the respondents' characteristics.

4.1 Respondents' Characteristics

The characteristics of the respondents, in terms of gender, 51.8% of the respondents were males and 48.2% were females. 12.9% of the respondents were below 25 years and 38.1% were between 25 and 35 years, and 30.2% between 36 and 45 years respectively, while 16.5% and 2.2% were between 46 and 55 years and 56 years and above respectively. This implies that majority of them were in the economically active population (25 – 45 years). All respondents were educated with majority of them, 79.1% having tertiary education, while 7.9% had Senior High School (SHS) and 12.9% had post-SHS education. In terms of monthly income, few of them, 2.9% earned below GH¢100, 33.1% earned between GH¢101 to ¢500, while 27.3% and 18.7% earned between GH¢501 to GH¢1000 and GH¢1001 – 1500 respectively. 18% of them earned above GH¢1500. 64.7% of the respondents were married, 31.7% were single and 3.6% had other marital status. Finally, 55% of the respondents belonged to GCB while the rest 44.6 belonged to MBG

4.2 Influence of Demographic Variables on Satisfaction

The results in Table 1 indicate that, generally, differences in satisfaction of internet banking service quality significantly differs among only income groups, but not significantly according to

gender, education and marital status. Specifically, according to income groups, the results show that higher income groups who earn monthly incomes above GH¢ 500 and 1500 are more satisfied than those in the lower income groups, below GH¢ 500.

4.3 Overall Satisfaction with IBSQ in GCB and MBG

Since the scale response are categories in nature, a Kruskal Wallis one-way-analysis of variable was used to determine whether any significant difference in the rating of CS/dissatisfaction with the internet banking service quality (IBSQ) of the two banks. The results of the analysis are summarized in Table 2. Table 2 indicates that, 10.4% of the respondents described their overall satisfaction with the internet banking service quality for GCB as worse than expected, 63.6% of them rated their overall satisfaction as equal to expectation while 26.0% rated it as much better than expected. For MBG, Table 2 indicates that, 1.6% of the respondents described their overall satisfaction as much worse than expected, 11.3% rated it as worse than expected, 58.1% rated it as equal to expectation, 19.4% rated it as better than expected, while 9.7% rated it as much better than expected. The table further indicates that with mean overall satisfaction of 2.84 for GCB and 3.24 for MBG respectively, the chi-square value is 10.008 with degree of freedom of 1, which results in a smaller p-value of 0.002 that is lower than the significance level ($p < 0.05$). The meaning of this is that there is a significant difference in the overall CS of the two banks regarding their internet banking service quality. Therefore, using the significance of the means, it could be deduced with 95% confidence that customers of MBG are more satisfied than those of GCB.

4.4 Satisfaction with Dimensions of IBSQ

For the purpose of describing CS for each dimension item within and between the cases, ratings of much worse than expected (1) and worse than expected (2) are described as dissatisfaction, while ratings of equal to (3), better than (4) and much better than expected (5) are added and described as satisfaction.

TABLE 1
INFLUENCE OF DEMOGRAPHIC VARIABLES ON SATISFACTION

| Variable | ANOVA | | | |
|-----------------------|-------|---------|----|--------|
| | Mean | F-Value | Df | Sign.* |
| Gender | | | | |
| Male | 3.069 | 0.628 | 1 | 0.429 |
| Female | 2.970 | | | |
| Age | | | | |
| Below 25 | 2.833 | 0.841 | 4 | 0.501 |
| 25-35 | 3.113 | | | |
| 36-45 | 2.929 | | | |
| 46-55 | 3.087 | | | |
| 56+ | 3.333 | | | |
| Education | | | | |
| SHS | 2.812 | 2.441 | 1 | 0.91 |
| Post SHS | 2.722 | | | |
| Tertiary | 3.091 | | | |
| Income (GH¢) | | | | |
| Below 100 | 2.500 | 2.997 | 4 | 0.021* |
| 101-500 | 2.847 | | | |
| 501-1000 | 3.000 | | | |
| 1001-1500 | 3.077 | | | |
| Above 1500 | 3.400 | | | |
| Marital status | | | | |
| Married | 3.111 | 1.927 | 2 | 0.150 |
| Single | 2.863 | | | |
| Other | 2.800 | | | |

Note: *p< 0.05

4.4.1 Within case analysis for GCB

Table 3 shows the CS with IBSQ for GCB. For GCB, satisfaction with ease of completing of online transactions (WD1) is could be described as high since only 13% indicated that they were not satisfied while the rest (87%) maintained that they are satisfied. For ease logging on bank's online portal (WD2), only 16.9% were dissatisfied the rest (83.1%) were satisfied, so satisfaction could be described as high for this dimension. For ease of understanding which button to be clicked for the next step (WD3), only 13% were dissatisfied while majority (87%) were satisfied, so customers could be said to be more satisfied for this item. Regarding, the ability of the internet portal in helping customer to complete a transaction quickly (WD4) 22.10% of customers were dissatisfied while 77.90% were satisfied, therefore customers appear to be more satisfied with this dimension item than dissatisfied.

TABLE 2
DIFFERENCES IN SATISFACTION IN GCB AND MBG

| Overall Satisfaction | GCB | | MBG | |
|---------------------------|-------------|--------|-------------|--------|
| | Mean = 2.84 | | Mean = 3.24 | |
| | No. | % | No. | % |
| Much worse than expected | - | - | 1 | 1.6 |
| Worse than expected | 20 | 26 | 7 | 11.3 |
| Equal to expectation | 49 | 63.6 | 36 | 58.1 |
| Better than expected | 8 | 10.4 | 12 | 19.4 |
| Much better than expected | - | - | 6 | 9.7 |
| Total | 77 | 100 | 62 | 100 |
| Chi-Square Tests | | | | |
| Pearson Chi-Square | | Value | Df | Sign. |
| Likelihood Ratio | | 14.599 | 4 | 0.006* |
| (Kruskal Wal. ANOVA) | | 17.410 | 4 | 0.002* |
| | | 10.008 | 1 | 0.002* |

Note: *p< 0.05

For customer service factor (CS1), being sufficiency of and real time financial information provided by the internet banking portal site, 15.60% of the respondents were dissatisfied while 84.40% were satisfied, which could be described as high satisfaction for this item. Regarding the validity of the hyperlinks on the bank's portal (CS2), customers were more satisfied since only 11.70% of them were dissatisfied while 88.30% were satisfied. For the quickness of the Web page on bank's portal site loading (CS3), customers were more dissatisfied than satisfied since 78.00% were dissatisfied while only 22.00% were satisfied. For the ability of the bank's banking portal to perform service correctly at the first time (CS4), more customers were satisfied (81.80%) than dissatisfied (18.20%). For prompt reception of responses to customer request (CS5), customers were more dissatisfied (84.50%) than they were satisfied (15.50%). Then for the last customer service factor, being the internet banking system's ability to guide customer to resolve problems (CS6), more customers were dissatisfied (84.50%) than satisfied (15.50%). Regarding the assurance factor which is the reliability and credibility of transactions on the banking portal (AS1) received less dissatisfaction rating (15.60%) than satisfaction rating (84.40%). For protection/security of customer transaction data by the banking portal site (AS2), more of the customers were satisfied (92.20%) than dissatisfied (7.80%). For AS3, which is feeling of relief of customer to transact on internet banking, more customers were satisfied (98.70%) than dissatisfied (1.30%).

TABLE 3
SATISFACTION WITH IBSQ IN GCB
n = 77

| Code | Internet Banking Service Quality | Dissat. | Sat. | Remark |
|-------------------------------|--|---------|--------|----------------|
| Web design | | | | |
| WD1 | Easy completion of online transactions. | 13% | 87% | More satisfied |
| WD2 | Easy logging on online portal. | 16.90% | 83.10% | More satisfied |
| WD3 | Easy understanding which button to be clicked for the next step. | 13% | 87% | More satisfied |
| WD4 | Helping customer to complete a transaction quickly. | 22.10% | 77.90% | More satisfied |
| Customer service | | | | |
| CS1 | Sufficient and real time financial information provided. | 15.60% | 84.40% | More satisfied |
| CS2 | Validity of the hyperlinks on the bank's portal. | 11.70% | 88.30% | More satisfied |
| CS3 | Quickness of the Web page on bank's portal site loading. | 78.00% | 22.00% | Not satisfied |
| CS4 | Banking portal to perform service correctly at the first time. | 18.20% | 81.80% | More satisfied |
| CS5 | Prompt reception of responses to customer request. | 84.50% | 15.50% | Not satisfied |
| CS6 | ability to guide customer to resolve problems | 84.50% | 15.50% | Not satisfied |
| Assurance | | | | |
| AS1 | Reliability and credibility of transactions... | 15.60% | 84.40% | More satisfied |
| AS2 | Protection/security of customer transaction data... | 7.80% | 92.20% | More satisfied |
| AS3 | Feeling of relief of customer to transact on internet banking | 1.30% | 98.70% | More satisfied |
| Preferential treatment | | | | |
| PT1 | Offering preferentially lower fees/ rates and charges | 68.80% | 31.20% | Not satisfied |
| PT2 | Reasonability of the transaction fee for this banking portal site. | 89.60% | 10.40% | Not satisfied |
| Information provision | | | | |
| IP1 | Complete and sufficiency of the information... | 2.60% | 97.40% | More satisfied |
| IP2 | Accuracy of the online transaction process of the bank. | 1.30% | 98.70% | More satisfied |

Sat. – satisfied, Dissat. – Dissatisfied

Moreover, for the first preferential treatment dimension which is offering preferentially lower fees/ rates and charges (PT1) more customer were dissatisfied (68.80%) than satisfied (31.20%). For reasonability of the transaction fee for this banking portal site (PT2), apparently more customers were dissatisfied (89.60%) than satisfied (10.40%). Finally, for both information provision dimensions which are the provision of complete and sufficiency of the information the internet banking portal provides (IP1) and accuracy of the online transaction process of

the bank (IP2), customer were more satisfied (97.40% and 98.70% respectively) than dissatisfied (2.60% and 1.30%) respectively. Significantly, it could be deduced from the discussion summarized in Table 8 that, out of the 17 dimension items, more customers of GCB were dissatisfied with five dimension items while most of the respondents are satisfied with the rest of the 12 dimension items. Out of the five dimension items that customers are dissatisfied, three are related to customer service:

1. Quickness of the Web page on bank's portal site loading;
2. Prompt reception of responses to customer request;
3. Internet banking system's ability to guide customer to resolve problems;

And two are related to the two items of preferential treatment:

1. Offering preferentially lower fees/ rates and charges
2. Reasonability of the transaction fee for this banking portal site.

4.4.2 Within case analysis for MBG

Table 4 shows the CS with IBSQ for MBG. For MBG, for all the 17-dimension items, most customers were satisfied than dissatisfied. However, for five dimension items, between 30% and 40% of customers were dissatisfied, which needs to be noted by management of the bank. These five dimensions included three items related to customer service, which are:

1. Quickness of the Web page on bank's portal site loading;
2. Prompt reception of responses to customer request;
3. Internet banking system's ability to guide customer to resolve problems;

And two are related to the two items of preferential treatment:

1. Offering preferentially lower fees/ rates and charges
2. Reasonability of the transaction fee for this banking portal site.

4.4.3 Cross case analysis for the two banks

Comparing CS with internet banking service quality in the two banks, some significant patterns could be drawn. First of all, on their similarities, most customers of both banks indicated that they were satisfied with all four web design factors, all information provision items, and all three assurance items of the internet banking service quality provided. Secondly, the five factors that received considerable dissatisfaction ratings (between 30% and 40%) for MBG, were the same factors that customers were dissatisfied for GCB. On the differences in satisfaction for the 17 dimensions items of internet banking service quality, the customers were typically dissatisfied with five dimension items and satisfied with 12 items for GCB, while for MBG, the customers were typically satisfied with all the dimension items. Thus, customers of the two banks exhibit similar characteristics regarding their satisfaction and dissatisfaction with the dimensions of internet banking service quality.

TABLE 4
SATISFACTION WITH IBSQ IN MBG
n = 62

| Code | Internet Banking Service Quality | Disat. | Sat. | Remark |
|-------------------------------|--|--------|-------|----------------|
| Web design | | | | |
| WD1 | Easy completion of online transactions. | 8.1% | 91.9% | More satisfied |
| WD2 | Easy logging on online portal. | 11.3% | 88.7% | More satisfied |
| WD3 | Easy understanding which button to be clicked for the next step. | 8.1% | 91.9% | More satisfied |
| WD4 | Helping customer to complete a transaction quickly. | 11.3% | 88.7% | More satisfied |
| Customer service | | | | |
| CS1 | Sufficient and real time financial information provided ... | 9.7% | 90.3% | More satisfied |
| CS2 | Validity of the hyperlinks on the bank's portal. | 6.5% | 93.5% | More satisfied |
| CS3 | Quickness of the Web page on bank's portal site loading. | 41.9% | 58.1% | Less satisfied |
| CS4 | Banking portal to perform service correctly at the first time. | 14.5% | 85.5% | More satisfied |
| CS5 | Prompt reception of responses to customer request. | 42.0% | 58.0% | Less satisfied |
| CS6 | ability to guide customer to resolve problems | 46.8% | 53.2% | Less satisfied |
| Assurance | | | | |
| AS1 | Reliability and credibility of transactions ... | 8.1% | 91.9% | More satisfied |
| AS2 | Protection/security of customer transaction data... | 4.8% | 95.2% | More satisfied |
| AS3 | Feeling of relief of customer to transact on internet banking | 3.2% | 96.8% | More satisfied |
| Preferential treatment | | | | |
| PT1 | Offering preferentially lower fees/ rates and charges | 33.9% | 66.1% | Not satisfied |
| PT2 | Reasonability of the transaction fee for this banking portal site. | 40.3% | 59.7% | Less satisfied |
| Information provision | | | | |
| IP1 | Complete and sufficiency of the information... | 6.5% | 93.5% | More satisfied |
| IP2 | Accuracy of the online transaction process of the bank. | 6.5% | 93.5% | More satisfied |

Sat. – satisfied, Dissat. – Dissatisfied

5 DISCUSSION AND IMPLICATIONS

The overarching objective for this paper is to describe CS with IBSQ within and across GCB and MBG in the Ghanaian banking industry. Regarding the overall CS with IBSQ between the two banks, the study also found significant difference in the overall CS between the two banks regarding their internet banking service quality, and that generally customers of MBG are more satisfied than those of GCB. Regarding the influence of demographic variables, the results show that, generally, differences in satisfaction of IBSQ significantly differs among only income groups, but not among sub-groups of gender, education and marital status. The results further suggest that respondents who earn higher incomes above GH¢ 500 and 1500 are more satisfied than those in the lower income groups. It is important to note that in a developing country like Ghana, where the per capita income is relatively low, consumers are always price conscious because, other things being equal, they consumers would desire, prefer and expect the banks to deliver not only quality internet banking services, but also, and more importantly, affordable internet banking services since their income is relatively low. Regarding satisfaction with dimensions of IBSQ, the study found that most respondents of the two banks are satisfied with web design factors. For customer service dimension, most respondents of both banks were more satisfied than dissatisfied with sufficiency of real time financial information provided by the internet banking portal site (CS1), validity of the hyperlinks on the bank's portal (CS2) and ability of the bank's banking portal to perform service correctly at the first time (CS4). Moreover, whereas most respondents of both banks were less satisfied with prompt reception of responses to customer request CS5) and Internet banking system's ability to guide customer to resolve problems (CS6), most respondents from GCB were, in addition to the above, less satisfied with Quickness of the bank's web page in loading (CS3). Regarding Assurance dimension, most respondents from both banks were satisfied with the IBSQ, which are the reliability and credibility of transactions on the banking portal (AS1), protection or security of customer transaction data by the banking portal site (AS2) and feeling of relief of customer to transact on internet banking (AS3). For preferential treatment of IBSQ, which are, offering preferentially lower fees or rates (PT1) and charges and reasonability of the transaction fee for the banking portal site (PT2), while most respondents from GCB were typically more dissatisfied than satisfied, most respondent from MBG were more satisfied with these IBSQ dimension items. Finally, for information provision aspect of IBSQ, most respondents of the two banks with more satisfied than dissatisfied with the completeness and sufficiency of the information the internet banking portal provides (IP1) and accuracy of the online transaction process of the bank (IP2).

5.1 Theoretical Implications

Theoretically, while many previous studies have examined CS with IBSQ in different industry contexts [15], [16], [17], [18], [19], [20], [21], [22], [23], [24], very little is known about IBSQ in developing country contexts in general and Ghana in particular. This study fill this void and contributes to the global body of knowledge in the area of customer evaluation of internet banking service quality in two banks in an emerging economy context. Notably, the study found that assurance, defined to cover online security, is the IBSQ dimension that received the highest satisfaction from the respondents in the two banks, specifically, relief of customer to transact on the internet banking

portal. This contradicts the finding of [45], who found that assurance dimension could be dropped since it was not a significant quality dimension in online banking, which they defined differently to mean the knowledge and courtesy of administrators. Furthermore, the study found that customer dissatisfaction was highest for some customer service factors such as prompt reception of responses to customer request and Internet banking system's ability to guide customer to resolve problems. Furthermore, the findings that overall CS for IBSQ in the two banks were significantly different lend support to the fact that CS and its relative importance may significantly differ from one banking service provider to the other in the same industry context, and that satisfaction of customers for different IBSQ dimensions may vary across service types. This study, again, increases extant knowledge on the subject of CS with IBSQ in Ghana, which has not received much attention in the literature. In this study, CS with IBSQ is described in two leading banks in Ghana, GCB and MBG; this is an important contribution to IBSQ literature and provides empirical evidence based on which debate, references and discussion could be made by scholars and practitioners. Furthermore, the study contributes to the literature on the difference in satisfaction based on consumer demographic variables such as gender, age, income, education and marital status. It highlights the significant differences in higher and lower income groups regarding their CS of IBSQ in developing countries.

5.1 Managerial Implications

The paper has implications for management of IBSQ in developing countries and in Ghana in particular. The following are some useful implications and recommendation the paper makes to internet banking management:

5.1.1 Increase satisfaction for lower income customers

The study revealed that satisfaction differences exist among different income groups and that, generally, higher income groups tend to be more satisfied with IBSQ than lower income groups. One possible explanation is that it might be that banking staff tend to pay more and closer attention to the needs and wants of higher income customers of the two banks than those customers who earn lower. Though it is fact that not all customers are equally important, it implies that management of the banks should give more attention to the needs and wants of lower income customers in order to increase their satisfaction level. Aside this, management could use income as basis for developing internet banking services to suit higher and lower income groups. Again, it is recommended that management of GCB and MBG should do further study to gather more information on income differences among their customers to have other distinct groups among the customers that could be used as basis for market segmentation.

5.1.2 Focusing on customer priority for assurance and information provision

Since the study showed that customer satisfaction of internet banking service quality was higher for three variables, it implies that the management should pay more attention to the IBSQ items that received the highest ratings among the customers. In this regard, management should focus and give priority to these items in providing internet banking services to its customers:

1. Relief of customers to transact on the internet banking portal (AS3). Thus make customer more relief to transact business on the internet portal.

2. Accuracy of online transaction and completeness (IP2). Thus, ensure that online transactions are free from mistakes and errors.
3. Sufficiency of the information the internet banking portal provides (IP1). Thus, provide adequate information on the internet banking portal for customer use.

5.1.3 Reducing customer dissatisfaction through customer service and preferential online charges

Since the study found that more customers of GCB were dissatisfied with five dimension items, three of which are related to customer service and two to preferential treatment for online charges, it is recommended that while management of MBG should seek to increase the level of CS for these IBSQ areas, the management of GCB should focus attention on improving IBSQ for the these areas that received the greatest dissatisfaction ratings by their customers. These are:

1. Quickness of the web page on bank's portal site loading. This has to do with the speed of the online system, so management would need to increase the speed or bandwidth for effective browsing and opening of pages; especially pages with video and pictures require high bandwidth.
2. Prompt responses to customer request. This relates to customer relationship. This requires training of more efficient customer service staff who would be able to handle customer request promptly.
3. Internet banking system's ability to guide customer to resolve problems. Customer may have many problems in accessing and utilising online banking portals, it is the responsibility of the management to ensure that all diverse customer problems are attended to by technicians with expert knowledge to resolve customers' problems.
4. Offering preferentially lower fees/ rates and charges. This is very important as customers would expect that with advancement in technology, the cost of online transaction would be moderately cheap to encourage them to continue online banking in an emerging economy like Ghana. Management should make online banking rates/fees and charges lower to attract more online customers.
5. Reasonability of the transaction fee for this banking portal site. This item also relates to the price paid for online banking services. Customers expect to have a reasonable transaction fees. Reasonability is perceived in terms comparability of the cost-benefit analysis of the customer for the overall online banking services. Management of the two banks, particularly GCB, should ensure that the transaction fees are more reasonable. This could be achieved by involving customers in pricing decisions as this may help reveal many reasonable considerations that customers may expect from the bank regarding online transaction fees.

5.1.4 Using IBSQ as competitive advantage

The difference in customer overall evaluation of IBSQ between the two banks has important implications for the management of MBG and GCB. It implies that since MBG has significantly higher IBSQ that meets customers' expectation more than GCB, it can be used as a competitive tool to attract potential customers to MBG. As customers become more and more conscious of their internet banking needs and requirements and which banks to get them from, delivering high IBSQ could be used to entice potential customers to the internet banking services. One way to attract new customers is by promoting viral marketing among the bank's existing customers. Thus, it is recommended that the management of MBG initiates and promote and sustains viral marketing strategies that ensure that existing customers communicate about IBSQ they experience to other prospective online and offline customers. On the other hand, management of GCB should endeavour to improve upon its IBSQ so that their customer will not switch for better IBSQ from competitors or spread negative word-of-mouth communication about GCB's IBSQ. Word-of-mouth communication has could attract other new customer to a superior service provider [46], [13].

6 CONCLUSION AND LIMITATIONS

This study sought to evaluate and describe CS with IBSQ in Ghana Commercial Bank and Merchant Bank of Ghana. As more and more customers adopt the internet for their banking transactions, it becomes important for management of banks to be innovative in their approach to meeting customer requirement. Customers' evaluation of IBSQ could provide useful feedback to management for strategic decisions. This paper has demonstrated through empirical data that understanding consumer evaluation IBSQ could be a starting point for, not only management innovation, but also for marketing scholars to understand important areas of IBSQ that needs more innovative research attention. While the findings of this paper could be learned by researchers and practitioners, it is cautioned that some generalisations based on this paper may not be applicable since the findings are limited to the two cases of banks involved in the study.

REFERENCES

- [1] Z. Liao and M.T. Cheung, "Internet-based E-Banking and Consumer Attitudes: An Empirical Study". *Information and Management*, Vol. 39, pp. 283-295, 2002.
- [2] Z. Liao and M.T. Cheung, "Measuring Consumer Satisfaction in Internet banking: A Core Framework", *Association for Computing Machinery. Communications of the ACM*, Vol. 51 No. 4, pp. 47-51, 2008.
- [3] C. Garau, "Online Banking in Transition Economies: The implementation and development of online banking systems in Romania", *International Journal of Bank Marketing*, 20 (6), 285-296, 2002.
- [4] History of Banking in Ghana, downloaded at http://www.ehow.com/facts_5510268_history-banking-ghana.html retrieved on April 20, 2010
- [5] *Ghana Banking Survey*, 2012. Downloaded at www.pwc.com/gh/en/pdf/ghana-banking-survey-2012.pdf
- [6] J. Abor, "Technological Innovations and Banking in Ghana: An Evaluation of Customers' Perceptions", *American Academy of Financial Management*, 1, 1-16, 2004. [Online] Available: <http://www.financialcertified.com/armstrong.html> on June 6, 2011.
- [7] R. Boateng, "Developing E-banking Capabilities in a Ghanaian Bank: Preliminary Lessons", *Journal of Internet Banking and Commerce*, August 2006, vol. 11, no.2, 2006.
- [8] A. Woldie, R. Hinson, H. Iddrisu, and R. Boateng, "Internet Banking: An Initial Look at Ghanaian Bank Consumer Perceptions", *Banks and Bank Systems*, Volume 3, Issue 3, 35-46, 2008.
- [9] J.L. Heskett, E. Sasser and L. Schlesinger, "The Service Profit Chain", Free Press, New York, 1997.
- [10] C. Grönroos, "Service Model and Its Marketing Implications". *Eur. J. Market.*, 18(4): 36-44, 1984.
- [11] C. Lovelock and J. Wirtz (2007) *Services Marketing: People, Technology, Strategy* (6th ATDF JOURNAL Volume 7, Issue 3/4 2010 Ed.), Pearson Prentice Hall, New Jersey
- [12] V. Zeithaml, "Service Quality, Profitability and Economic worth of customers: what we know and what we need to learn". *Academy of Marketing Journal*, Winter, 2000.
- [13] V.A. Zeithaml, L.L. Berry, & A. Parasuraman, "The Behavioral Consequences of Service Quality", *Journal of Marketing*, Vol. 60 No. 2, pp. 31-46, 1996.
- [14] R.N. Bolton, "A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction", *Marketing Science*, Vol. 17 No. 1, pp. 45-65, 1998.
- [15] H. Arasli, S.T. Katircioglu, and S. Mehtap-Smadi, "A comparison of service quality in the banking industry: some evidence from Turkish- and Greek-speaking areas in Cyprus", *The International Journal of Bank Marketing*, Vol. 23 Nos 6/7, pp. 508-26, 2005.
- [16] E. Cristobal, n. C. Flavia and u, M. Guinali, "Perceived E-Service Quality: Measurement Validity and Effects on Consumer Satisfaction and Web Site Loyalty", *Managing Service Quality*, Vol. 17 No. 3, pp. 317-40, 2007.
- [17] E. Daniel, "Provision of Electronic Banking in the U.K. and Ireland," *International Journal of Bank Marketing*, Vol. 17, pp.211-232, 1999.

- [18] A. Musiime and M. Ramadhan, "Internet Banking, Consumer Adoption And Customer Satisfaction", *African Journal of Marketing Management*, Vol. 3(10), pp. 261-269, October 2011 Available online at <http://www.academicjournals.org/AJMM> ISSN 2141-2421 '2011 Academic Journals
- [19] N. Siu and J. Mou, "Measuring Service Quality in Internet Banking: The Case of Hong Kong", *Journal of International Consumer Marketing*, Vol. 17 No. 4, pp. 99-116, 2005.
- [20] R. K. Srivastava (India), Customer's Perception on Usage of Internet Banking. *Innovative Marketing*, Vol. 3, Issue 4, 2007.
- [21] M. Loonam and D. O'Loughlin, "Exploring E-Service Quality: A Study of Irish Online Banking". *Marketing Intelligence & Planning* Vol. 26 No. 7, pp. 759-780, 2008, DOI 10.1108/02634500810916708.
- [22] M. Jun and S. Cai, "The Key Determinants of Internet Banking Service Quality: A Content Analysis", *The International Journal of Banking Marketing*, Vol. 19 No. 7, pp. 276-91, 2001.
- [23] B. Yoo, and N. Donthu, "Developing a Scale to Measure the Perceived Quality of an Internet Shopping Site (SITEQUAL)", *Quarterly Journal of Electronic Commerce*, Vol. 2 No. 1, pp. 31-46, 2001.
- [24] C. B. Ho and W. Lin, "Measuring the Service Quality of Internet Banking: Scale Development And Validation", *European Business Review*, Vol. 22 No. 1, 2010, pp. 5-24, 2010, DOI 10.1108/09555341011008981.
- [25] V.A. Zeithaml, A. Parasuraman, and A. Malhotra, "Service quality delivery through web sites: a critical review of extant knowledge", *Journal of the Academy of Marketing Science*, Vol. 30 No. 4, pp. 362-75, 2002.
- [26] L. Arunachalam, and M. Sivasubramanian, 'The future of Internet Banking in India', *Academic Open Internet Journal*, Vol. 20, 2007. Available online at: www.acadjournal.com
- [27] M. Joseph, C. McClure, & B. Joseph, "Service quality in the banking sector: the impact of technology on service delivery". *International Journal of Bank Marketing*, 17 (4), 182-191, 1999.
- [28] V.A. Zeithaml, A. Parasuraman, and A. Malhotra, "A conceptual framework for understanding e-service quality: implications for future research and managerial practice", *Working Paper 00-115*, *Marketing Science Institute*, Cambridge, MA, 2001.
- [29] A.M. Aladwania, and P.C. Palvia, "Developing and validating an instrument for measuring user-perceived web quality", *Information & Management*, Vol. 39 No. 6, pp. 467-76, 2002.
- [30] Z. Yang, and X. Fang, "Online service quality dimensions and their relationships with satisfaction", *International Journal of Service Industry Management*, Vol. 15 No. 3, pp. 302-26, 2004.
- [31] Z. Yang, M. Jun, and R.T. Peterson, "Measuring customer perceived online service quality: scale development and managerial implications", *International Journal of Operations & Production Management*, Vol. 24 No. 11, pp. 1149-74, 2004.
- [32] C.N. Madu, and A.A. Madu, "Dimensions of equality", *International Journal of Quality & Reliability Management*, Vol. 19 No. 3, pp. 246-59, 2002.
- [33] M. Wolfinbarger, and M.C. Gilly, "eTailQ: dimensionalizing, measuring and predicting e-tail quality", *Journal of Retailing*, Vol. 79 No. 3, pp. 183-98, 2003.
- [34] A. Parasuraman, V.A. Zeithaml, and L.L. Berry, "SERVQUAL: a multiple-item scale for measuring consumer perceptions of services quality", *Journal of Retailing*, Vol. 64 No. 1, pp. 12-40, 1988.
- [35] M. Wolfinbarger and M.C. Gilly, "ComQ: dimensionalizing, measuring and predicting quality of the e-tailing experience", *MSI Working Paper Series* No. 02-100, Marketing Science Institute, Cambridge, MA, pp. 1-51, 2002.
- [36] H. Li and R. Suomi, "A Proposed Scale for Measuring E-service Quality International Journal of u- and e-Service," *Science and Technology* Vol. 2, No. 1, pp. 2-9, 2009.
- [37] P. Kotler and K. Keller, "*Marketing Management*", 12th Ed., Pearson Education Inc, New Jersey, 2006.
- [38] R.T. Rust and R.L. Oliver, "Service quality: Insights and Managerial Implications from the Frontier", in Rust, R. and Oliver, R. (Eds), *Service quality: New Directions in Theory and Practice*, Sage Publications, Thousand Oaks, CA, pp. 1-20, 1994.
- [39] S.G. Nimako, "Linking Quality, Satisfaction and Behaviour Intentions in Ghana's Mobile Telecommunication Industry". *European Journal of Business Management*, 4(7): 1-17, 2012.
- [40] P. Shamdasani, A. Mukherjee, and N. Malhotra, "Antecedents and consequences of Service Quality in Consumer Evaluation of Self-service Internet Technologies", *The Service Industries Journal*, Vol. 28 No. 1, pp. 117-38, 2008.
- [41] R.L. Oliver, "Cognitive, Affective, and Attribute

Bases of the Satisfaction Response”, *Journal of Consumer Research*, 20, pp. 418-30, 1993a.

- [42] E.W. Anderson, C. Fornell, and D.R. Lehmann, “Customer Satisfaction, Market share and Profitability”, *Journal of Marketing*, Vol. 58 No. 3, pp. 53-66, 1994.
- [43] P. J. Danaher, and V. Haddrell, “A Comparison of Question Scales Used for Measuring Customer Satisfaction”, *International Journal of Service Industry Management*, 7(4), pp. 4-26, 1996.
- [44] D. Straub, M. Boudreau, and D. Gefen, “Validation Guidelines for IS Positivist Research”, *Communications of the Association for Information Systems*, 13:380-427, 2004.
- [45] M. Rod, N.J. Ashill, J. Shao and J. Carruthers, “An examination of the relationship between service quality dimensions, overall internet banking service quality and customer satisfaction - A New Zealand study”, *Marketing Intelligence & Planning*. – Vol. 27. No. 1, 2009.
- [46] S. G. Nimako and A. F. Mensah, “Examining the Relationships among Antecedents of Guests’ Behavioural Intentions in Ghana’s Hospitality Industry: A Structural Equation Modelling Approach”. *Asian Journal of Business Management*, 5(2): 252-266, 2013.