

NO. 49

**Undergraduate First Time Bank
Customers' Perception of Service
Quality in Ghana**

By
Robert Hinson,
Julius Dasah
&
Nana Owusu-Frimpong

August 2009

International Business Economics
Aalborg University
Fibigerstraede 2
9220 Aalborg East
Denmark
Phone + 45 99 40 99 40
Fax + 45 98 15 69 50
<http://www.business.aau.dk/ivo>

WORKING PAPER SERIES

NO. 49

Undergraduate **F**irst **T**ime **B**ank Customers' Perception of Service Quality in **G**hana

By
Robert Hinson,
Julius Dasah
&
Nana Owusu-Frimpong

International Business Economics
Aalborg University
Fibigerstraede 2
9220 Aalborg East
Denmark
Phone + 45 99 40 99 40
Fax + 45 98 15 69 50
<http://www.business.aau.dk/ivo>

Robert Hinson, Julius Dasah & Nana Owusu-Frimpong

Design: Joan Vuust

Lay-out: Joan Vuust

ISSN: 0908 1658

Undergraduate first time bank customers' perception of service quality in Ghana

Robert Hinson, Aalborg University, Denmark

Julius Dasah, GIMPA Business School, Ghana

Nana Owusu-Frimpong, London Metropolitan University Business School, United Kingdom

Abstract

Purpose: With the cut-throat competition now prevailing in Ghana's banking sector, it has become imperative to study students' perception of service quality in Ghana's banking sector. This is because undergraduate students are usually first time account holders and if nurtured properly, could evolve into profitable retail clients to banks in the future. This study, utilizing a sample of undergraduate students in Ghana's oldest business school, seeks to determine service quality dispositions of banks operating in Ghana in respect of customer service (human interaction), service knowledge and bank infrastructure and technology. **Methodology:** Data were obtained from undergraduate first time bank customers in the University of Ghana Business School via a questionnaire using simple random sampling. Although a structured questionnaire containing 12 service quality statements was designed and administered to 600 first time bank consumers to measure their perception of service quality in Ghanaian banks, only 519 of them responded to the questionnaires. We used the repeated measures analysis of variance in the analysis of our data. **Findings:** Undergraduate first time bank consumers in Ghana perceive the service knowledge dimension of service quality as the weakest performance service attribute for banks operating in Ghana. **Originality/Value:** This study contributes to the bank marketing literature by utilizing a new service quality conceptualization to investigate our research issues and also focused on a banking segment that is under-researched in the context of developing economies and Africa in particular. **Practical Application:** This study offers practical tips for bank managers seeking to manage an increasingly important segment; the undergraduate banking segment.

Key words: Ghana, Banking, students, service, quality, customer, first-time

Customer Perceptions of Bank Service Quality

The customer is central to all marketing activities of banks the world over. Banking is one of the many service industries, characterized by high customer contact with individually customized service solutions, where customer satisfaction has been an increasing focus of research. Levesque and McDougall (1996) point out that customer satisfaction and retention are critical for retail banks. They investigate the major determinants of customer satisfaction (service quality, service features, customer complaint handling and situational factors), and future intentions in the retail bank sector. Bloemer et al. (1998) investigate how image, perceived service quality and satisfaction determine loyalty in a retail bank. Similarly, Armstrong and Seng (2000) analyze the determinants of customer satisfaction in the banking industry (transactional paradigm, purchase intentions and fairness (equity)). In all these studies, customer satisfaction and delight is presented as solid bedrock of bank longevity and profitability. One review of US customer perceptions of service quality by Stafford (1994) found that customers want courtesy, friendliness and convenience; and also view fair prices, concerned management and institutional stability as integral components of the service process.

Kaynak and Kucukemiroglu (1992) also conducted a study to investigate the importance of a series of factors in choosing a commercial bank. Fast and efficient service and friendliness were found to be important selection criteria, then the efficiency of completing banking transactions and convenience. The authors recommend that banks follow a market segmentation strategy in order to differentiate themselves by creating an image which is tied to the provision of a few services or elements of service quality. Continuing from the segmentation thinking espoused by Kaynak and Kucukemiroglu (1992), it might be fair to say that undergraduates constitute an attractive segment for retail banks in many countries of the world (Gerrard and Cunningham 2001) and this is the rationale for the conduct of this study. Thwaites and Vere (1995), in their paper "bank selection criteria: a students perspective" published in the *Journal of Marketing Management*, speak convincingly about the special features and increasing essence of the undergraduate market to bankers. Perhaps, however (Gerrard and Cunningham 2001), provide an even more forceful justification for the legitimacy of studying undergraduate student bank consumption idiosyncrasies. Gerrard and Cunningham (2001) posit that

1. Once graduates commence their careers, they generally enjoy a higher salary compared with non-graduates of the same age. This would be true in both developed and developing economy contexts.
2. As graduates would normally expect to have a more progressive career, so their income should be generally higher than non-graduates of the same age
3. Graduates may be considered as being as being more financially sophisticated and, hence will need/use a wider range of financial services as they pass through their own life cycle

A review of the literature on bank service quality and patronage and financial services consumption in respect of the student segment in the developed western economies, reveals fairly scanty contributions (see Gray 1977, Lewis 1982, Lewis and Bingham 1991, Schram 1991, Chan 1993, Lewis, Orledge and Mitchell 1994, Thwaites and Vere 1995 Gerrard and Cunningham 2001). In respect of developing economy and African contexts, bank studies focusing on student segments are even rarer and this study is positioned as one of the initial attempts to fill that gap.

This paper is set out as follows: the first part focuses on customer perception of bank service quality whilst the second portion highlights the research gap and study objectives. Part three of the paper provides a justification for the utilization of Ghana as a research site whilst part four of the paper

introduces us to the study's conceptual framework. The fifth portion of the paper introduces us to the methodology adopted for the paper whilst the sixth section of the paper presents a discussion of the study findings. The seventh section of the paper proffers some implications for managerial practice and recommendations for future research.

It is important to note that, throughout this paper we use “undergraduate students” and “first time bank customers” interchangeably to mean undergraduate first time bank customers

Research Gap and Study Objectives

At least two key elements stand out in the literature of relationship marketing and customer management: customer loyalty and positive word-of-mouth (Henning-Thurau et al., 2002; Wong and Zhou, 2006). Customer loyalty in particular can be fostered by the repeated delivery of superior service quality to bank customer audiences. Customer loyalty also concerns itself with purchase reiteration behaviour and is activated by company marketing activities. Loyalty is one of the primary phases of relationship marketing and service management and considerable scholarly attention has been devoted to the concept, especially in relation to profitability from theoretical and empirical perspectives (Reichheld and Sasser, 1990). Customer loyalty cannot be achieved without a focus on the delivery of superior banking service quality.

Superior service quality is very important in banking today. In a global climate characterized by financial apprehension after the shock of the global financial melt-down, banks would have to pay the most critical attention to their varied customer audiences in order to rebuild trust and foster new customer loyalty bonds. The banking sector in Ghana has undergone a revolution with the emergence of competition. As at 2007, there were 24 operating banks in the country (Ghana Banking Survey, 2008). The increasing number of banks in Ghana implies that the competition in the banking industry in Ghana is very stiff. Apart from the competition alluded to earlier in the Ghana Banking sector; there is also a rise in firms operating in competitor industries like the non-bank financial institutions and insurance sectors. With increasing competition from within and without Ghana's banking industry, banks operating in Ghana would have to begin to pay a lot more attention to their student clientele and manage the fledgling relationship they have with them to deepen commitments and ultimately create profitable retail and corporate banking portfolios for the future. The marketing literature has long recognized the importance of developing and maintaining enduring relationships with customers of service business (Henning Thurau et al 2002) and studies in the service sector focusing on issues relating to relationship marketing and service satisfaction are also fairly rife (see Gronroos, 1990; Berry, 1995; Gwinner et al., 1998; Jamal and Naser, 2002). The paucity of research relating specifically to how students in developing economy contexts (and especially Ghana) perceive service quality from banks is rather startling to the extent that the banking sector in a majority of developing economy contexts, is becoming a key fulcrum of economic development. To the extent that extended customer lifetime values could lead to improved bank profitability, it therefore becomes important to track bank customers (students) who are in the beginning phases of their banking experiences/relationships.

Sweeny and Morrison (2004) note that many innovations have recently modified the concept of retail banking due to new forms of distribution of financial services as well as to the evolution of twenty first century answers. Undergraduate students would typically fall into the retail banking domain of banks the world over. Lewis et al (1994) note that young people (the universal set within which undergraduate students fall) are a key market for financial services and ascribe a multiplicity

of reasons for the importance of conducting research into students' assessment of bank service quality:

1. Students may be characterized by little bank switching and attracting accounts from the young, although not profitable in the long term, should be in the longer term.
2. Some students eventually graduate to become high net worth individuals and therefore an increased service focus on such students is warranted.
3. Students market for personal accounts is presently of particular interest to banks as it is a growing sub-group of the total youth market.

The point (3) alluded to earlier is as true of developed economies as it is of developing economies. The size of Ghana's university population has more than trebled from the beginning of the twenty first century to date; with a new heavy influx of private universities. Calls by Lewis et al (1994) for more research into the student segment by service marketing scholars have also been echoed by scholars like Colgate et al (1996) and Gerard and Cunningham (2001).

Colgate et al (1996) in particular conducted a study on student customer defection in Ireland and note importantly in the introduction to the article that "university students are a particularly illustrative case study since, a priori, their lifetime value, in terms of future revenue streams, have the potential of being greater than that of many customer types". It would seem that university student populations represent an important target for all discerning banks. Bingham (1989) also expressed the notion that young people today expect higher levels of service than their predecessors and it is really no surprise then that financial institutions in most western economies are beginning to target university students with increasing service fervour. Colgate et al (1996) also note that focusing on the student segment enhances a bank's chances of maximizing the full lifetime value of these customers rather than focusing on more mature markets. Colgate et al (1996) also conclude in a revealing manner in their article, that university students obtain professional jobs after graduation and thus in the long term they tend, on the average to earn higher revenues than other market segments. They conclude their article by noting that high revenue earners have the potential if cross-sold and serviced effectively, to become profitable customers.

Majority of bank patronage studies relating to students reviewed so far, have related to western contexts. Additionally different methodological and conceptual routes have been utilized in reaching the conclusions of the student bank patronage studies noted in western contexts. The main reasons for conducting this study are that the findings of this study will contribute significantly to the global discourse on undergraduate bank service quality perceptions and we also propose to employ a new service quality conceptual framework to investigate our research issues. The specific research questions this study proposes to address are enumerated next:

1. Are there any perceived differences in the service quality dimensions (bank customer service, service technology and infrastructure and service knowledge) among undergraduate first time bank customers in Ghana?
2. Which of the service quality dimensions is perceived as the "best performance area" of banks operating in Ghana by first time bank consumers?
3. For each of the three service quality dimensions considered, are there differences that can be attributed to
 - the sex of the bank customer?
 - the age (15 – 24; 25 – 34; 35+) of the bank customer?
 - the bank type (local, international)?

Why Ghana?

Buchs and Mathiesen (2008) note in an article on "banking competition and efficiency in Ghana", that despite high overhead costs and sizeable provisioning, Ghanaian banks' pre-tax returns on assets and equity are among the highest in sub-Saharan Africa. In a speech delivered by the Governor of the Bank of Ghana, Dr. Paul Acquah at the 8th Ghana Banking awards, the governor noted that Ghana's banking sector is "reasonably efficient, financially innovative, profitable and growing rapidly" The governor, who was in 2008 voted Africa's Central Bank governor of the year (www.myjoyonline.com), noted also that the size of the balance sheet of Ghana's banking system expanded by 372 percent to 52.5 percent of GDP in 2008 from 27.3 percent of GDP in 2003. Total deposits have risen to 34.2 percent of GDP from 23.4 percent of GDP in 2003. Ghana's banking industry, the governor noted, also has a branch net of 642 in 2009 compared with 332 in 2003 and noted in conclusion that "the Ghanaian banking sector is on a sound footing and well positioned to strengthen it's inter-mediation role" (news.myjoyonline.com/business; published 5/10/2009).

Ghana's banking system is currently on an upswing and does not seem to have been greatly affected by the global economic crisis. In an article published on www.myjoyonline.com entitled "Central Bank governor lauds Ghana's robust banks" it was noted of the Ghanaian banking industry that "stringent tests indicate the local industry is quite robust to external shocks given the current levels of capital adequacy of banks". The same article also noted that "over the past years, Ghana's financial sector has been built on a strong regulatory and supervising framework"

To the extent that undergraduate students and the growth market would generally tend to be technologically friendly and generally represent the digital generation; there has also been a recent financial innovation which is worthy of note in Ghana's financial services sector. The E-Zwich, a common electronic platform introduced in 2008, makes it possible to integrate and link all banking institutions with a biometric smart card and is a vehicle for financial inclusion of all Ghanaians.

Ghana's banking industry is in its growth phase and is attracting a lot of international attention evidenced by the increasing influx of international banks into Ghana. With the recent oil find in Ghana, the growth of Ghana's tertiary sector, the exemplary political stability in a fairly unstable political region and the favourable international press Ghana enjoys; the Ghanaian banking sector will increasingly become a key economic pillar in Ghana's industrial drive. A Ghanaian Times publication of November 2008 noted that for the first time in 35 years; the cedi appreciated against the U.S. dollar and Ghana issued its first Eurobond (sub-Saharan Africa's first outside of South Africa); which globally; was tremendously over-subscribed.

Over a decade ago, Yavas et al (1997) noted that the banking sector, in many developing countries, is undergoing change in order to keep up with world trends. Ghana is no exception with new banks entering the sector in the last 5 years. Notable among them are Stanbic bank (the most capitalized bank in Africa; originally from South Africa), Zenith Bank (originally from Nigeria), United Bank of Africa (originally from Nigeria) and Fidelity Bank (formally Fidelity Discount House). Some other non-bank financial institutions like Unique Trust Financial Services expanded so much; they acquired BPI Bank and re-branded it as UT Bank. It is worth of note that UT Bank is a local bank and both local and international banks are jostling for market share by defining and re-defining their service delivery positions in order to maintain their relevance on an increasingly competitive banking terrain. Wang et al (2003) note that delivering quality service and products to the customer, is essential for success and survival in today's global and highly competitive banking environment.

The world over, the banking sector is becoming increasingly competitive and with several banks having to carefully re-build after the global economic crisis, the importance of astute segmentation and the delivery of superior service to key banking segments is going to be more important than it has ever been. Banks in Ghana would have to pay closer attention to their youth segments in particular and this study seeks to investigate how banks operating in Ghana are doing in that regard.

The table overleaf showcases the profile of banks currently operating in Ghana.

Table 1: Banks operating in Ghana as at July, 2008

Bank	Age of Bank (years)	Majority ownership	Branches	Bank origin	Nationality of CEO	Presence of a marketing department
1. GCB	56	Local	148	Ghana	Ghanaian	Yes
2. BBGL	92	Foreign	154	UK	Ghanaian	Yes
3. SCB	113	Foreign	19	UK	American	Yes
4. EBG	19	Foreign	44	Ghana	Ghanaian	Yes
5. ADB	44	Local	51	Ghana	Ghanaian	Yes
6. SB	10	Foreign	13	RSA	Ghanaian	Yes
7. MBG	38	Local	15	Ghana	Ghanaian	Yes
8. SG-SSB	34	Foreign	29	Ghana	French	Yes
9. ZBL	4	Foreign	12	Nigeria	Nigerian	No
10. HFC	19	Local	17	Ghana	Ghanaian	Yes
11. FAMBL	15	Local	5	Ghana	Ghanaian	Yes
12. CAL	19	Local	13	Ghana	Ghanaian	Yes
13. IBG	3	Foreign	12	Nigeria	Nigerian	Yes
14. ABL	12	Foreign	12	Nigeria	Ghanaian	Yes
15. PBL	16	Local	9	Ghana	Ghanaian	Yes
16. TTB	13	Local	17	Ghana	Ghanaian	Yes
17. Fidelity	3	Local	9	Ghana	Ghanaian	Yes
18. UBA	5	Foreign	16	Nigeria	Nigerian	Yes
19. GTB	5	Foreign	9	Nigeria	Nigerian	Yes
20. ICB	13	Foreign	12	Malaysia	Malaysian	Yes
21. UGL	12	Local	12	Ghana	Ghanaian	Yes
22. UTB	14	Local	9	Nigeria	Ghanaian	No
23. Baroda	2	Foreign	1	India	Indian	Yes
24. BSIC	1	Foreign	1	Libya	Ghanaian	Yes
25. NIB	46	Local	27	Ghana	Ghanaian	Yes

Source: Authors' own compilation

Code

GCB – Ghana Commercial Bank
SCB – Standard Chartered Bank Ghana Limited
ADB – Agricultural Development Bank
MBG – Merchant Bank (Ghana) Limited
ZBL – Zenith Bank (Ghana) Limited
FAMBL – First Atlantic Merchant Bank Limited
IBG – Intercontinental Bank Ghana Limited
ABL – Amalgamated Bank Ghana Limited
PBL – Prudential Bank Limited
TTB – The Trust Bank Limited
Fidelity – Fidelity Bank Limited
UBA – United Bank of Africa (Ghana) Limited
GTB – Guaranty Trust Bank (Ghana) Limited
ICB – International Commercial Bank Limited
UGL – Unibank Ghana Limited
UTB – UT Bank Limited
Baroda – Bank of Baroda
BSIC – Sahel – Sahara Bank Limited
NIB – National Investment Bank Limited
BBGL – Barclays Bank Ghana Limited
EBG – EcoBank Ghana Limited
SB (Stanbic) – Standard Bank Limited
SG-SSB – Societe Generale SSB Limited
HFC – HFC Bank Limited
CAL – Cal Bank Limited

The Ghanaian banking sector seems fairly robust in the midst of the global financial crisis; but given the heightened competition in the sector and a new fixation on the retail market as a growth source; it is very opportune to study service quality perceptions from the youth segment in Ghana.

Service Quality

The influx of new banks in the new millennium into Ghana's banking sector has engendered competition that is unprecedented in the annals of Ghanaian banking history. When competition heightens to the level that is now being witnessed in Ghana's banking sector, the power of bank products in themselves to deliver competitive advantage whittles down dramatically. In fact, any time competition heightens in any industry, the most proven means of effectively differentiating any institution in that industry is the delivery of superior service quality. The Ghanaian banking system has grown in terms of size (total assets), number of banks and level of participation by the consuming public. With the issuance of universal banking licenses to all banks in Ghana, all banks are now striving to grow their retail banking portfolios and undergraduate students (for reasons alluded to earlier) are a key segment that is now being targeted by banks operating in Ghana. It is now fairly commonplace to find several banks setting up movable stands at universities when they open at the beginning of the academic year; trying to woo undergraduate students to open bank accounts with them. With the increased competition intensity however, it becomes important to address the question: how do we retain these undergraduate students even if they choose to open accounts with us, even if they opt for us at the beginning of their university education? One key way of doing this is the delivery of excellent service quality to curtail switching behaviour in the future and extend the customer lifetime values of these students.

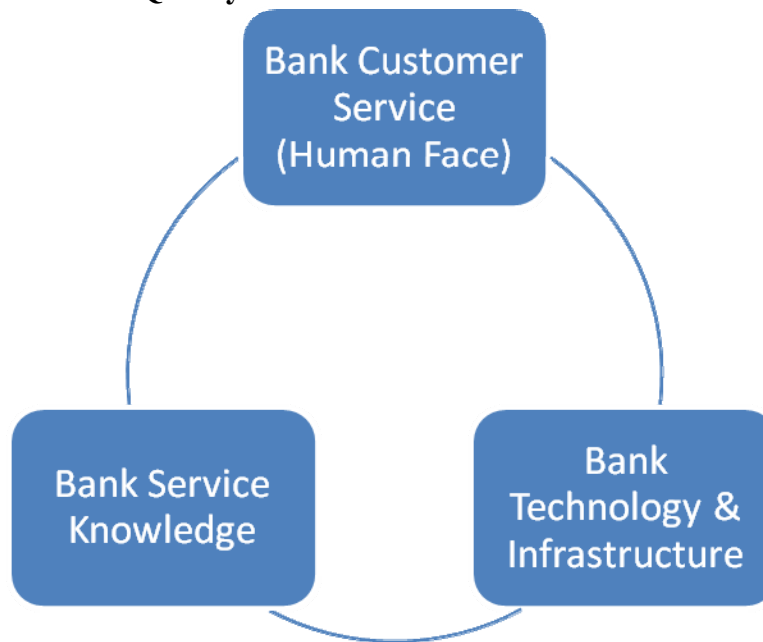
Service quality is a well-trodden conceptual path in respect of contributions from diverse management disciplines like marketing, operations, service management and even total quality management. From a services marketing standpoint however, service quality can be argued to be one of the single most researched areas. Early research in service quality focused on its subjective nature but it was not until several years later that the concept of service quality as the result of the differences between actual and expected levels of service began to emerge (Fisk et al 1994). Service quality studies have been greatly influenced by the works of scholars like Gronroos (1983), Lehtinen and Lehtinen (1992), Horovitz (1990) and Oliver (1980). It can be argued that service quality includes the work of Parasuraman et al (1985), Berry et al (1985) and Berry et al (1988). Particularly, their work on the often cited "Gap Model" and the measurement instrument "SERVQUAL" for assessing service quality have contributed significantly to service quality research.

In today's competitive banking environment, quality service is critical to corporate success. Delivering high quality service is closely linked to profit, cost savings and increasing market share. Improved service quality cuts cost because banks would have fewer customers to replace, less service failures to correct, fewer complaints and enquiries to handle and less employee turnover and customer dissatisfaction to deal with. Service quality definitions abound in the service management literature but the inspiration for the service quality model that is proposed to be adopted in the study, to study undergraduate perception of service quality in Ghana's banking sector, is the definition by Donnelly et al (1995). Donnelly et al (1995) define service quality as the degree of excellence or superiority that an organization's product possesses. It encompasses both the tangible and intangible aspects of a firm/bank's products or services and could refer to such traits as features, performances, reliability, durability, aesthetics, serviceability and conformance to specifications. They emphasized that although quality can be evaluated from varying perspectives, the customer is the key perceiver of quality and it is his/her purchase decision that determines the success of an organization/bank's product or service or even the fate of the organization/bank itself.

In the light of Donnelly et al (1995)'s definition of service quality, we propose that an undergraduate's perception of bank service quality in Ghana will be influenced by three service quality dimensions:

- Customer Service
- Service knowledge
- Service Infrastructure and Technology

Figure 1: Bank Service Quality Model



Source: Authors' own conceptualization

In the service quality model we conceptualize bank service quality as having three sub-components. In respect of the components in the service quality model, we conceptualize bank service quality as having three sub-components. In respect of the components which emphasize human contact and the human interface in the delivery of service, Coskun and Frohlich (1992) have long argued that customers are demanding more humanized banking. In an era of branchless banking; online banking and several digital technologies, it is easy to overlook the importance of customer contact in the retailing of banking services. This phenomenon could be dangerous from a retail banking standpoint since the human face; and more importantly customer service, is seen as an important factor if a retail bank is to achieve competitive advantage.(Wong and Perry, 1991; Kelly, 1990; Javalgi, 1992) There are multiplicity of titles that characterize customer contact personnel in Ghana's banking sector and these range from tellers, personal financial consultants, administrative assistants; customer care representatives, relationship managers, account managers to personal bankers. These categories of personnel are critical in the delivery of bank customer service (Thompson 1989; Hinson and Hammond 2006; File and Prince 1992; and Burton 1991).

In respect of undergraduate students however, an argument can be made that would also employ technological and non-human interventions like e-statement, online banking, ATMs etc; so our service quality model caters for hard-side non-human elements of the banking experience as well. It is actually instructive that a survey of U.S. bank customers found "ease of doing business" and "quality of personal service" as the first and second most important reasons for choosing a financial institution (Lewis, 1989). Hard-side service elements like technology infrastructure and soft-side elements like quality of customer service all are important determinants of quality.

In respect of knowledge, it is fair to postulate that more knowledgeable banks/service providers might resonate better with an undergraduate student segment. Needless to say, undergraduate students would be inquisitive, have a greater capacity to compare bank choices than a mature market; because of peculiar characteristics like internet literacy. Undergraduate student populations

might also require extensive education about bank product/service offerings and might also require knowledge pertaining to key competitor profiles and why a particular bank's product and service offerings constitute the most superior value for their fairly limited financial resources. They might also require knowledge about capital market investment options (e.g. shares listed on the Ghana Stock Exchange) and money market investment instruments as well (e.g. treasury bills and rates). Bankers with superior knowledge postures could also develop effective customer feedback systems and feed back knowledge accrued from such mechanism into improving their service delivery propositions. Knowledge is critical to bank success and in respect of a particularly information hungry student undergraduate market since knowledge must be exploited (Shang et al, 2009) for both business enhancement and innovation. It is also worthy of note that effective customer-specific knowledge is critical in customer value chain creation in professional service organizations (Natti et al, 2006). Natti et al (2006) also note that "without customer specific knowledge, a professional service organization is incapable of building the right service offering; maintaining pro-activity and innovativeness; or developing customer relationships on a long-term basis. Since the undergraduate student is particularly attractive for potential long-term relationship development, astute service knowledge will be a central feature in the delivery of service quality to them. There is evidence in service management literature linking knowledge management to superior performance (Marr et al, 2004) and further scholarly work stressing the importance of knowledge and information management in a globalized environment (Davenport and Probst, 2001) such as we now have in Ghana's banking sector.

Technology as an enabler of the delivery of superior banking services is well documented in the marketing literature. Pyun et al (2002) for example, note that banks have moved quickly to invest in technology as a way of controlling costs, attracting customers and meeting the convenience and technical expectations of their existing customers. Joseph and Stone (2003) also note that the instalment of customer friendly technology (such as menu-driven automated teller machines, telephone and internet banking services has become commonplace in recent years as a way of maintaining customer loyalty and increasing market share. They also note that when a customer freely chooses to use technology as a form of service delivery, the impact on that customer is high in terms of the firm's quality attributes like efficiency and speed. Undergraduates are generally customers-on-the-go and to the extent that they are learning-aid technicians and like the internet and simulated games, as well as brandish I-phones and blackberries; they could be a prime target of technological products from Ghanaian banks; as well as be favourably predisposed to transacting business through technological means. Dannenburg and Kellner (1998) also believe that the appropriate application of cutting edge technology in the banking industry can lead to a momentous competitive advantage for banks. It would seem that both from the standpoint of the service provider and undergraduate student recipient, technology affords key service benefits; with direct contact with technology actually giving customers a feeling of greater control (Dabholkar, 1996).

Joseph and Stone (2003) in apparent support of the application of technology in the banking sector, argue that as long as the exchange from one of delivery service (human interaction) to another (technology) does not adversely impact the relationship building function played by bank employees, or result in significant deterioration in the quality of service delivered; then technology should be increasingly adopted; especially in offering customers self service options. Curry and Penman (2004) argue that technological development in the U.K. banking sector has led to the depersonalization of the service delivery process and the "human factor" between the banker and customer at the local level can thus be lost. They however admit that improved service provision, with the right mix of human input and technology will retain customers in the long term. This

position espoused by Curry and Penman (2004) captures the spirit of the service quality model conceptualized for this study; a focus on customer service, bank knowledge and bank technology.

Methodology

Data Description

Data were obtained from undergraduate first time bank customers in the University of Ghana Business School via a questionnaire using simple random sampling. Although a structured questionnaire containing 12 service quality statements was designed and administered to 600 first time bank consumers (via e-mail) to measure their perception of service quality in Ghanaian banks, only 519 of them responded to the questionnaires. We pretested the questionnaire on 50 students from our proposed sample and we ended up dropping some of the initial proposed data instrument questions because of their complexity or inapplicability to the undergraduate first time bank customer. The respondents were made to indicate the extent to which they agreed or disagreed (Strongly Disagree [SD], Disagree [D], Neither Disagree nor Agree [NDA], Agree [A], Strongly Agree [SA]) with the statements in the questionnaire regarding the service quality practices of their respective banks. Also, categorical data on demographics of customers including; sex, bank type of respondent (local, international), age (15 – 24; 25 – 34; 35+) were collected.

Measurement of variables

We group the 12 structured statements along three major dimensions of service quality, (See Table 3), namely

- Customer service
- Service knowledge
- Service infrastructure and technology

For convenience we adopt the notation given in Table 2 below

Table 2: Service Quality Dimension Notations

Notation	Description	In this paper
D_1	A collection of n_1 customer service related statements	$n_1 = 3$;
D_2	A collection of n_2 service knowledge related statements	$n_2 = 5$
D_3	A collection of n_3 service infrastructure and technology related statements	$n_3 = 4$

Now let $x_{ijk}(i = 1, \dots, n, j = 1, 2, 3, k = 1, \dots, n_j)$ be the score of respondent i to the k th statement within $D_j(j = 1, 2, 3)$. We define

$$x_{ijk} = \begin{cases} -2 & \text{if respondent } i \text{ strongly disagrees with the } k\text{th statement of the } j\text{th quality dimension} \\ -1 & \text{if respondent } i \text{ disagrees the with } k\text{th statement of the } j\text{th quality dimension} \\ 0 & \text{if respondent } i \text{ neither agrees nor disagrees with the } k\text{th statement of the } j\text{th quality dimension} \end{cases}$$

- 1 if respondent i agrees the with k th statement of the j th quality dimension
- 2 if respondent i strongly agrees with the k th statement of the j th quality dimension

Let $\mu_{ij} = E_k (x_{ijk})$ be the expected score of respondent i for $\Omega_j, j = 1, 2, 3$, the population version of D_j . We define the “expected overall score” for Ω_j , the j th service quality dimension as

$$\mu_{.j} = E_i \{E_k (x_{ijk})\}$$

We note that μ_{ij} takes values between -2 and 2. This interval can be viewed as a service quality continuum, with values near -2 and 2 respectively representing “bad” and “excellent” service quality scores. A natural estimate of μ_{ij} is given by

$$\hat{\mu}_{ij} = x_{ij.} = \frac{1}{n_j} \sum_{k=1}^{n_j} x_{ijk}$$

The dimension of service quality that is perceived to be better than the other dimensions by first time bank consumers is then given by

$$j^* = \arg \max_{j \in \{1, 2, 3\}} \hat{\mu}_{.j}$$

The Repeat Measures ANOVA model

In answering the question of whether or not there exist any perceived differences in the service quality dimensions (bank customer service, service technology and infrastructure and service knowledge) among undergraduate first time bank customers in Ghana, we note that because of difference in background, exposure, etc of first time bank customers differences in response to the same questions may be very large. This variability of responses between respondents may make it difficult to detect real differences in the three service quality dimensions. In this study we control for the above variability using the *repeated measures design*. We consider the repeated measures design below:

Let Y_{ij} be the service quality score of the i th respondent for the j th service quality dimension. The statistical model for repeated measures design is given by:

$$Y_{ij} = \mu_{..} + \alpha_i + \tau_j + \varepsilon_{ij}, \quad i = 1, \dots, n, j = 1, 2, 3$$

where $\mu_{..}$ = overall mean effect

$$\alpha_i \sim N(0, \sigma_\alpha)$$

$$\sum \tau_j = 0$$

$$\varepsilon_{ij} \sim N(0, \sigma^2)$$

In the above model, α_i is the respondent i effect, τ_j is the j th service quality dimension effect, and ε_{ij} , the random error term and α_i are independent. We also use x_{ij} as our observed Y_{ij} . Under the above formulation, it is easy to see that the estimate of the j th quality dimension effect is $\tau_j = \hat{u}_{.j} - \hat{u}_{..}$, where

$$\hat{u}_{.j} = x_{.j} = \frac{1}{nn_j} \sum_{i=1}^n \sum_{k=1}^{n_j} x_{ijk}$$

We note that the question of whether or not there any perceived differences in the service quality dimensions (bank customer service, service technology and infrastructure and service knowledge) among first time bank customers in Ghana is equivalent to testing the null hypothesis $H_0 : \tau_1 = \tau_2 = \tau_3 = 0$ against the alternative $H_a : \text{Not all } \tau_j \text{ are equal to zero.}$

Presentation and Discussion of Findings

We present the distribution of responses (Strongly Disagree [SD], Disagree [D], Neither Disagree nor Agree [NDA], Agree [A], Strongly Agree [SA]) of first time bank customer to each of the 12 service quality statements in Table 3.

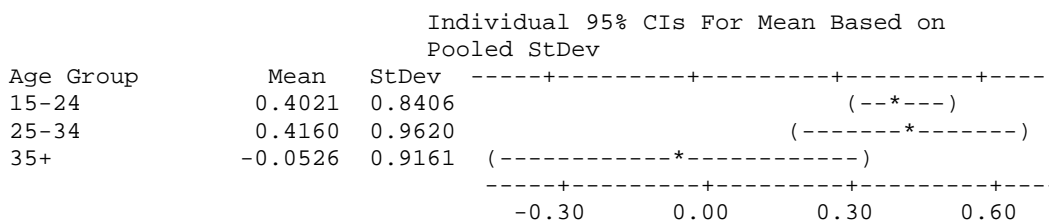
Table 3: Distribution of Responses of first time bank customers

ITEM	SD	D	NAD	A	SA	Total
Customer Service						
The staff at my bank are friendly and polite to me	6.7	8.3	11.2	46.4	27.4	100
My bank is prompt and efficient in dealing with me	9.1	15.9	15.0	42.3	17.7	100
The staff at my bank are professional when dealing with me	6.6	7.3	15.4	44.4	26.3	100
Service Knowledge						
An enquiry I recently made was handled quickly and well	8.9	14.4	20.9	35.6	20.2	100
A complaint I recently made was handled quickly & well	8.1	18.6	27.1	31.3	14.9	100
The staff at my bank have the knowledge to advice me	5.3	10.4	16.1	47.4	20.8	100
My bank is proactive in identifying my needs	6.5	19.8	35.6	30.2	7.9	100
My bank understands my needs/requirements	5.7	14.6	24.7	43.5	11.5	100
Service Infrastructure And Technology						
I like the environment in my bank	7.3	9.0	10.2	41.3	32.2	100
It is easy and convenient to access services from my bank	7.2	10.9	13.5	43.6	24.8	100
I can get advice easily from bank (by phone online and person)	9.1	14.9	17.3	38.0	20.7	100
My bank efficiently provides solutions to the requests I make	7.0	10.8	25.5	42.2	14.5	100

About 60% of first time bank customers in Ghana perceive their banks as prompt and efficient in dealing with them. Between 71% and 74% of first time bank customers perceive their banks' staff as "friendly and polite" and professional when dealing with them. Whereas 69% of first time bank customers say it is easy and convenient to access services from their banks, 59% say they can easily get advice from their banks via phone, the internet or in person. The percentage of bank customers who like the environment of their banks and those who see their banks as efficient in providing solutions to their request are respectively 74% and 57%. Only 38% of first time bank customers see their banks as proactive in identifying their needs. 68% of first time bank customers in Ghana believe their bank staffs have the knowledge to advice them but only 55% believe their banks understands theirs needs/requirements. 56% of bank customers say their recent enquiries were handled quickly and 46% say recent complaints were handled quickly and well.

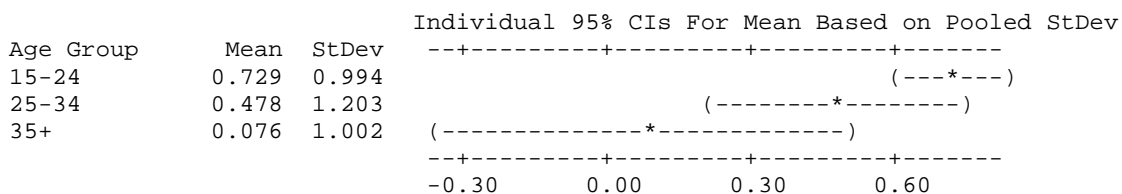
Figure 2: 95% Confidence Interval of mean service quality scores by age group and service quality dimension

Service knowledge



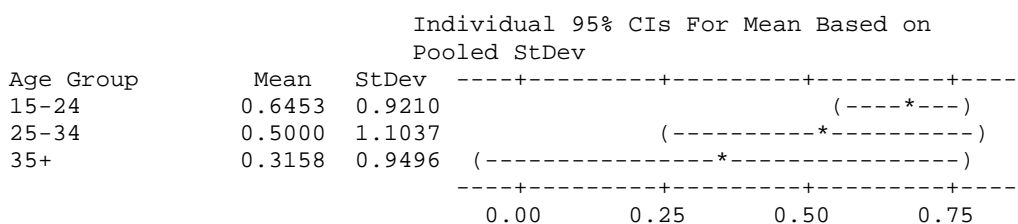
Pooled StDev = 0.8625

Customer Service



Pooled StDev = 1.026

Service Infrastructure & Technology



Pooled StDev = 0.9488

Table 4: Mean service quality scores for the three service quality dimensions

	Customer service	Service Knowledge	Service Infrastructure & Technology
Mean(<i>M</i>)	0.67	0.39	0.62
Stdev(<i>SD</i>)	0.99	0.85	0.91

The overall mean scores of the three service quality dimensions and their corresponding standard deviations for a sample of first time bank customers in Ghana are shown in Table 4. Overall, first time bank consumers in Ghana see the service knowledge dimension of service quality as the least performing area of Banks in Ghana, and customer service as the best performing area. It is important to note that the overall mean score for each of the service quality dimension is less than one, indicating that service quality of banks in Ghana is far from excellent.

A repeated measures Analysis of Variance revealed a main effect for service quality dimension, $F(2, 964), p < 0.0001$. This indicates first time bank customers perceive the performance of Ghanaian banks in the area of customer service, service knowledge and service infrastructure and technology to be significantly different. Post hoc analyses using Tuckey post hoc criterion for significance indicated that the average service quality score for Ghanaian banks is significantly higher in the area of customer service ($M = 0.67, SD = 0.99$) than service knowledge ($M = 0.39, SD = 0.85$), $t(964) = 10.64, p < 0.0001$. Also, the average service quality score is significantly higher in the area of customer service ($M = 0.67, SD = 0.99$) than service infrastructure and technology ($M = 0.62, SD = 0.91$), $t(964) = 7.75, p < 0.0001$. Finally, the average service quality score is significantly lower for service infrastructure and technology ($M = 0.62, SD = 0.91$) than for customer service ($M = 0.67, SD = 0.99$), $t(964) = -2.79; p = 0.015$.

Table 5: Mean service quality scores for the various service quality dimension segmented by bank type and sex of first time bank customers

Service quality dimension	Mean score (SD)	Mean score difference
Customer service		-0.569***
• Local	0.320 (1.03)	
• International	0.889 (0.89)	
Customer service		0.021
• Male	0.683 (0.97)	
• Female	0.662 (1.00)	
Service knowledge		-0.363***
• Local	0.162 (0.88)	
• International	0.525 (0.80)	
Service knowledge		0.025
• Male	0.414 (0.81)	
• Female	0.389 (0.89)	
Service infrastructure & technology		-0.479***
• Local	0.324 (0.97)	
• International	0.803 (0.81)	
Service infrastructure & technology		0.117

• Male	0.691 (0.85)	
• Female	0.574 (0.96)	

*** represents 0.001 significance

No significant differences in mean service quality attributable to the sex of the bank customer were observed. As shown in Table 5, although the mean service quality score for male first time bank customers appear to be higher than that of their female counterparts in all three service quality dimensions, the differences in mean service quality score observed were however not significant, even at 10% significance level. On the other hand, the mean service quality score for first time bank customers who bank with international banks ($M = 0.89$, $SD = 0.89$) operating in Ghana are significantly ($p < 0:0001$) higher those who bank with local banks ($M = 0.32$, $SD = 1.03$) for the customer service quality dimension. The story is the same for the two other service quality dimensions; that is service knowledge and service infrastructure and technology (see Table 5). Note that the mean service quality scores for first time bank customers who bank with international banks are more than double those of the local banks.

The mean and standard deviation of service quality scores of the service knowledge dimension for first time bank customers in the 15-24, 25-34 and 35+ age groups are ($M = 0.40$, $SD = 0.84$), ($M = 0.42$, $SD = 0.96$) and ($M = -0.05$, $SD = 0.92$) respectively. Weak significance ($p < 0:10$) exists among the above means. The negative mean score for the 35+ age group implies that this age group perceive “service knowledge” in their banks as non-existent. As shown in Figure 2 of the Appendix, although the mean service quality scores for the service infrastructure and technology dimension appear to be decreasing with age, the observed decrease was not significant ($p = 0.24$). The observed decreasing trend in the mean service quality scores for the customer service dimension, were however significant ($p = 0.007$).

On all three service quality dimension, international banks scored higher than local banks in Ghana and this performance could be attributable to factors such as the presence of services standards that must be rigidly adhered to; irrespective of the geographical context in which the bank is operating. These international banks also have very structured training regimes and are generally exposed to best practices from all over the world. It is fairly common for employees of international banks in Ghana to do training and employment stints in other African countries, in Europe, or in Asia. These exposures allow employees of international banks to develop learnings which they can use to improve their service performance in Ghana. All banks operating in Ghana however, need to revamp their service delivery propositions to properly attract, retain and cultivate members of the undergraduate student population in Ghana.

Managerial Implications and Directions for Future Research

It is fairly instructive to note that the overall mean scores for each of the service quality dimensions we measured is less than one; indicating the fact that the total service quality the undergraduate students we sampled are receiving; is average at best. In terms of human interaction, knowledge to delight customers and bank technology and infrastructure, there are clear service shortfalls that need to be addressed by banks operating in Ghana. Again, all said, bank service knowledge is also the weakest service performance parameter for banks operating in Ghana and this shortcoming needs to be addressed because weak service and product knowledge could lead to:

- a) Poor performance of bank employees in critical moments of truth

- b) Dissonance between corporate service promises made by banks in advertising and communication media and the way these promises are delivered or undelivered by bank employees.
- c) Employee dissatisfaction because of dysfunctional and disharmonious working relationships
- d) Increases in customer discontent
- e) Increases in customer attrition
and other service failures; too numerous to name within the space constraints of this article.

Like was alluded to earlier in this article, Marr et al (2004) have reported a link between excellent knowledge management and superior service firm performance. Banks in Ghana should establish learning and training development centres and generally foster a learning orientation in all their staff. This learning orientation should be focused on developing superlative knowledge of the employee's own bank's products and services, an understanding of key competitor profiles and an astute understanding of current and future customer needs.

From a research standpoint, we propose to test our service quality model on a wider variety of banking audiences to ascertain the robustness of our service quality model. Also, we propose to ascertain bank executives' perception of the service they render to the undergraduate first time customer in their bid to improve their corporate bottomline.

References

Armstrong, R.W. and Seng, T.B. (2000), "Corporate-customer satisfaction in the banking industry of Singapore", *International Journal of Bank Marketing*, Vol. 18 No. 3, pp. 97-111.

Berry, L.L., Parasuraman, P.A. and Zeithaml, V.A. (1988), "The Service Quality Puzzle", *Business Horizons*, July-August, pp. 35-43.

Berry, L.L., Zeithaml, V.A. and Parasuraman, A. (1985), "Quality Counts in Services Too", *Business Horizons*, Vol. 28No. 3, pp. 44-52.

Berry, L. L. (1995), *On Great Service*, Free Press, New York, NY.

Bingham, G. H. (1989), "An Investigation of the Needs, Attitudes and Behaviour of the Youth Market with Respect to Financial Services", BSc dissertation, Manchester School of Management.

Bloemer, J., De Ruyter, K. and Peeters, P. (1998), "Investigating drivers of bank loyalty: the complex relationship between image, service quality and satisfaction", *International Journal of Bank Marketing*, Vol. 16 No. 7, pp. 276-86.

Buchs, T., and Mathisen J. (2008) "Bank Competition and Efficiency in Ghana" in *The Economy of Ghana: Analytical Perspectives on Stability, Growth and Poverty*; James Currey London; Aryeetey E. and Kanbur R. (eds); pp 173-194

Burton, D. (1991), "Tellers into Sellers", *International Journal of Bank Marketing*, Vol. 9, No. 6, pp. 25-9.

Chan Y. (1993) "Banking Services for Young Intellectuals", *International Journal of Bank Marketing*, Vol. 11, No. 5, pp. 33-40.

Colgate, M., Stewart, K. and Kinsella, R. (1996) "Customer defection: a study of the student market in Ireland", *International Journal of Bank Marketing*, Vol. 14, No. 3, pp.23-29.

Coskun, A. and Frohlich, C. J., (1992), "Service: The Competitive Edge in Banking", *The Journal of Services Marketing*, Vol.6, No. 1, pp.15-22.

Curry, A. and Penman, S. (2004) "The relative importance of technology in enhancing customer relationships in- a Scottish perspective", *Managing Service Quality*, Vol. 14 No. 4, pp.331-341.

Dabholkar, P. (1996), "Consumer evaluations of new technology-based self-service options: an investigation of alternative models of service", *International Journal of Research in Marketing*, Vol. 13 No. 1, pp.29-51.

Dannenburg M. and Kellner D. (1998), "The bank of tomorrow with today's technology", *International Journal of Bank Marketing*, Vol. 16 No. 2, pp. 90-97

Davenport, T. and Probst, G. (2001), *Knowledge Management Case Book*, MCD Verlag and Wiley and Sons, Berlin.

Donnelly, M., Wisniewski, M., Dalrymple, J. F., and Curry, A. C. (1995), "Measuring Service Quality in Local Government: The SERVQUAL Approach", *International Journal of Public sector Management*, Vol. 8 No. 7, pp.15-20.

File, K. M. and Prince, R. A. (1992), "Positive Word-of-mouth: Customer Satisfaction and Buyer Behaviour", *International Journal of Bank Marketing*, Vol. 10, No. 1, pp.25-9.

Fisk, R. P., Brown, S.W., Bitner, M. J. (1994), "Tracking the Evolution of the Services Marketing Literature", *Journal of Retailing*, Vol. 69.

Gerrard, P. and Cunningham, J. B. (2001) "Singapore's undergraduates: how they choose which bank to patronize", *International Journal of Bank Marketing*, Vol. 19, No. 3, pp. 104-114.

Ghana Banking Survey, 2008.

Ghanaian Times publication of November 2008.

Gray, A. D. (1977), "Student attitudes towards banking", unpublished BSc dissertation, University of Strathclyde.

Grönroos, C. (1990), *Service Management and Marketing*, Lexington Books, Lexington, MA.

Grönroos, C. (1983), "Strategic Management and Marketing in the Service Sector", *Marketing Science Institute*. Boston, MA.

Gwinner, K.P., Gremler, D.D. and Bitner, M.J. (1998), "Relational benefits in services industries: the customer's perspective", *Journal of the Academy of Marketing Science*, Vol. 26 No. 2, pp. 101-14.

Henning-Thurau, T., Gwinner, K.P. and Gremler, D.D. (2002), "Understanding relationship marketing outcomes: an integration of relational benefits and relationship quality", *Journal of Service Research*, Vol. 4 No. 3, pp. 230-47.

Hinson, R. and Hammond, B. (2006), "Service Delivery in Ghana's Banking Sector" in *African Marketing Practice: Cases from Ghana*; pp 43-63; Hinson R. (ed), Sedco Publishing Limited, Ghana.

Horovitz, J. (1990), "How to Win Customers – Using Customer Service for a Competitive Edge", Longman Harlow.

Jamal, A. and Naser, K. (2002), "Customer satisfaction and retail banking: an assessment of some of the key antecedents of customer satisfaction in retail banking", *International Journal of Bank Marketing*, Vol. 20 No. 4, pp. 146-60.

Javalgi, R.G. (1992), "Marketing Financial Services to Affluent Customers", *The Journal of Services Marketing*, Vol. 6, No. 2, pp.33-44.

Joseph, M. and Stone, G. (2003) "An empirical evaluation of US bank customer perceptions of the impact of technology on service delivery in the banking sector", *International Journal of Retail & Distribution Management*, Vol. 31, No. 4, pp. 190-202.

Kaynak, E. and Kucukemiroglu, O. (1992), "Bank and product selection: Hong Kong", *International Journal of Bank Marketing*, Vol. 10 No. 1, pp. 3-16.

Kelly, S. W. (1990), "Customer Orientation of Bank Employees and Culture", *International Journal of Bank Marketing*, Vol. 8, No. 6, pp. 25-9

Lehtinen, U. and Lehtinen, J. R. (1992), "Service Quality: A Study of Quality Dimensions. Work Paper. Service Management Institute. Helsinki.

Lewis, B. R. (1982), "Student accounts-a profitable segment?" *European Journal of Marketing*, Vol. 16 No. 3, pp. 63-72.

Lewis, B. (Ed.), (1989) "Service Quality in the Financial Sector", *International Journal of Bank Marketing*, Vol. 7 No. 5, Special Issue.

Lewis, B. R. and Bingham, G. H. (1991), "The youth market for financial services", *International Journal of Bank Marketing*, Vol. 9 No. 2, pp. 3-11.

Lewis, B. R., Orledge, J. and Mitchell V.W (1994) "Service Quality: Students' Assessment of Banks and Building Societies", *International Journal of Bank Marketing*, Vol. 12, No. 4, pp.3-12.

Levesque, T. and McDougall, G.H.G. (1996), "Determinants of customer satisfaction in retail banking", *International Journal of Bank Marketing*, Vol. 14 No. 7, pp. 12-20.

Marr, B., Schiuma, G. And Neely, A. (2004), "The dynamics of value creation: mapping your intellectual performance drivers", *Journal of Intellectual Capital*, Vol. 5 No. 2, pp.312-25.

Natti, S., Halinen, A. and Hanttu, N. (2006) "Customer knowledge transfer and key account management in professional service organizations", *International Journal of Service Industry Management*, Vol. 17 No. 4, pp. 304-319.

Oliver, R. L., (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions", *Journal of Marketing Research*. 17(4): 460-490.

Parasuraman, P., Berry, L.L. and Zeithaml, V.A. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49, pp. 41- 50.

Pyun, C., Scaggs, L. And Nam, K. (2002), "Internet banking in the US, Japan, and Europe", *Multinational Business Review*, Fall, pp.73-81.

Reichheld, F. and Sasser, W. (1990), "Zero defections: quality comes to services", *Harvard Business Review*, Vol. 68, pp. 301-07.

Schram, J. (1991), "How students choose their banks", *US Banker*, Vol. 110 No. 10, pp. 75-8.

Shang, S. S. C., Lin, S. F and Wu Y. L, (2009), "Service innovation through dynamic knowledge management", *Industrial Management & Data Systems*, Vol. 109, No. 3, pp. 322-337.

Thompson, A. (1989), "Customer Contact Personnel: Using Interviewing Techniques to Select for Adaptability in Service Employees", *The Journal of Service Marketing*, Vol. 3, No. 1, pp.57-65.

Thwaites, D. And Vere, L. (1995), "Bank Selection criteria a student's perspective", *Journal of Marketing Management*, No. 11, pp.133-49.

Shang, S.S. C., Lin, S. and Wu, Y. (2009) "Service innovation through dynamic knowledge management" *Industrial Management and Data Systems*, Vol. 109 No. 3, pp.322-337.

Stafford, M.R. (1994), "How customers perceive service quality", *Journal of Retail Banking*, Vol. XVII No. 2, Summer.

Sweeney, A. and Morrison, M. (2004), "Clicks vs. bricks: internet-facilitated relationships in Financial services", *International Journal of Internet Marketing and Advertising*, Vol. 1 No. 4, pp. 350-70.

Wang, Y., Lo, H., Hui, Y. V. (2003), "The Antecedents of Service Quality and Product Quality and their Influences on Bank Reputation: Evidence from Banking Industry in China", *Managing Service Quality*, Vol. 13 No. 1.

Wong, A. and Zhou, L. (2006), "Determinants and outcomes of relationship quality: a conceptual model and empirical investigation", *Journal of International Consumer Marketing*, Vol. 18 No. 3, pp. 81-96.

Wong, S. M. and Perry, C., (1991) "Customer Service Strategies in Financial Retailing", *International Journal of Bank Marketing*, Vol. 9, No. 3, pp.11-16.

Yavas, U., Bilgin, Z. And Shemwell, D. J. (1997), "Service Quality in the Banking Sector in an Emerging Economy: A Consumer Survey", *International Journal of Bank Marketing*, Vol. 15, No. 6.

Webography

Central Bank Governor lauds Ghana's robust banks: culled from MYJOYONLINE.COM @<http://www.myjoyonline.com/tools/print/printnews.asp?contentid=29884>.

Banks in mad rush for spaces on Osu Oxford Street: curled from MYJOYONLINE.COM @<http://news.myjoyonline.com/business/200906/31261.asp>