THE EFFECT OF AUTOMATED SERVICES ON CUSTOMER SATISFACTION IN GHANA

DAVID ASAMOAH, JOHN AKOTO INKUM & JOHN FRIMPONG MANSO
Department of Information Systems and Decision Sciences, KNUST School of Business, Kumasi, Ashanti, Ghana

ABSTRACT

Purpose

This study seeks to find out the effect of automated services on customer satisfaction of the banking industry in Ghana.

Design/Methodology/Approach

The study was exploratory in nature and it sought to find out which automated bank services customers highly subscribed and whether customers were satisfied with the quality of the service being provided by the bank. The data collected was analyzed using Statistical Package for Social Sciences (SPSS).

Findings

The study revealed that customers were very much satisfied with the automated services provided by the bank and had little or no intention to quit the bank. The most patronized service was the Automated Teller Machine (ATM). Again, beside ease of use of automated services, the other service quality dimensions like reliability, price, security, efficiency, access and service variety of automated services had significant effect on customer satisfaction.

Research Limitations/Implications

The study suffered frustrations on the response to questionnaires because customer respondents could not be easily traced but this did not, in any way, affect the analysis of the results.

Practical Implications

The findings of this study provide policy makers with adequate and empirical information on enhancing the quality of automated services provided by banks. The outcome of the study will help management to do all it can to enhance customer satisfaction since this will eventually lead to customer loyalty and increased patronage of products or services.

Originality/Value

This study will afford bank administrators the opportunity to gain a comprehensive understanding of the quality issues associated with automated services, thereby allowing them a better opportunity to improve customer satisfaction and help gain a competitive advantage.

KEYWORDS: Service Quality, Customer Retention, Automated Service, Customer Satisfaction

INTRODUCTION

Over the past decades, there has been radical transformation of regulations controlling the size, location, and activities of banks the world all over. The situation has not been quite different in Ghana. A bank is a financial intermediary whose core activity is to provide loans to borrowers and to collect deposit from savers (Casu, et al., 2006). By
this intermediation function, banks collect surplus funds from savers and allocate them to those with a deficit of funds thereby promoting a better and efficient allocation of resources. Until 2003, banks in Ghana operated either as a commercial, investment, development or merchant bank. There has been an increasing convergence between the activities of investment and commercial banks.

This development emanated mainly from deregulation, privatization, mergers and acquisitions, globalization, innovation and accelerated improvement in information technology in the financial services sector (Awuttey, 2005). The golden age of business required the creation of a very wide variety of financial assets to fit the funding requirements of business. The introduction of universal banking concept in Ghana has revolutionized the banking industry. There has been intense competition and a wider product-base all with the intention of satisfying and retaining customers. Universal banks have played leading roles in countries like Germany, Switzerland, United Kingdom, USA and other developed countries. In these countries, universal banks are engaged in deposit taking, real estate and other forms of lending, foreign exchange trading, underwriting, securities trading and portfolio management. A very key dispensation of the banking industry attributable to the introduction of universal banking is the increase in automated services.

It is proposed that customer perceptions and preferences of service quality have a significant impact on a bank’s success. Analysing markets based on customer perceptions, designing a service delivery system that meets customer needs, and enhancing levels of service performance are pertinent objectives for banks to gain and retain a competitive advantage (Brown and Swarts, 1989). Service quality in the broader context has received much attention because of its obvious relationship with costs, financial performance, customer satisfaction, and customer retention.

Recently, however, technology has had a remarkable influence on the growth of service delivery options (Dabholkar and Bagozzi, 2002) and a profound effect on service marketing. There are several competitive advantages associated with the adoption of technology in service organisations, including the creation of entry barriers, enhancement of productivity, and increased revenue generation from new services (Fitzsimmons and Fitzsimmons, 1997). Service quality is one of the main factors that determines the success or failure of electronic commerce (Santos, 2003). However, automated service quality has tended to lag behind because practitioners have focused mainly on issues of usability and measurement of use (Buckley, 2003), with little consideration for the outcomes.

The rapid development of IT-based technology options advance the need for research beyond the interpersonal dynamic of service encounters in this technology-oriented context (Meuter et al., 2000). Parasuraman and Grewal, (2000) emphasized the importance of technology in shaping buyer-seller interactions and recommended further investigation into the impact of technology, for example, on the service quality-value-loyalty chain. The quality issues of automated services in the banking context are becoming important because of their potential influence on: attractiveness, customer retention, profitability, positive word-of-mouth, and maximum competitive advantages (Santos, 2003).

The quest for massive automation in the banking industry has become an integral part of the banks success. The questions that remain unanswered are that; do improved automated services bring about customer satisfaction? Is there any relationship between the quality of automated service and customer satisfaction? What are the intentions of customers about the bank and what does the bank do for the customer to make them feel very important? An attempt to find answers to these nagging questions has brought about this research.

To answer these questions, the study seeks to find out the effect of automated services on customer satisfaction in the banking industry and also to determine whether customers were satisfied or otherwise with the service quality of automated services at the bank.
LITERATURE REVIEW

This section discusses the relevant theories on the subject matter and it covers articles and papers on the impact of technology on banks’ philosophy, measuring automated service quality, service quality, customer satisfaction, customer retention and benefits of automated service quality.

The Impact of Technology on Banks' Philosophy

During the last two decades the financial sector has developed rapidly in terms of size, industry structure and the variety of consumer and business-to-business products and services (Edey, 1996). Studying the Australian financial sector, Edey and Gray, (1996) reported that the Australian financial sector has been transformed from a relatively closed system in the 1950s and 1960s based on traditional bank activities to a more open, effective and competitive system which is able to offer a wide range of products and services. Technological developments and financial liberalisation (deregulation) are viewed as the main forces influencing the financial sector’s development (Edey and Gray, 1996, Gardener et al., 1999). The situation is not different from that of Ghana. The introduction of the universal banking concept in September 2003 has brought about a lot of transformations and reformations in the sector. These changes motivated banks to be aware of future trends in order to survive and compete effectively. Banks which anticipated this dispensation began massive shift from manual based operations to automation and they have not regretted doing so.

Many retail banks face a huge challenge in reducing the number of branches they currently operate as down-sizing efforts bring with them complex post-merger problems such as social and political issues, organizational culture concerns, product modifications and IT integration (Gyptra and Dixon, 2002). Recently, technology has had a remarkable influence on the growth of service delivery options (Dabholkar and Bagozzi, 2002) and great effect on service marketing. In order to remain competitive, banks are increasing their technology based service options (Fitzsimmons and Fitzsimmons, 1997). More and more banks have adopted technology to deliver their services and this has resulted in: reduced costs, the creation of value added services for customers (Zhu et al., 2002), the facilitation of their employees’ jobs and ultimately, the provision of self-service options for customers (Dabholkar and Bagozzi, 2002).

In today’s intensely competitive economy, providing excellent customer service plays a vital role in a company’s success and failure (Mouawad and Kleiner, 1996). An increasing number of banks are using technology to deliver their regular service to the consumer. Investigations of quality issues of banks’ automated services are necessary because of their potential influence on: attractiveness, customer retention, positive word-of-mouth, and maximizing competitive advantages (Santos, 2003). To embrace this new technology-oriented context, it is necessary for banks to realize how quality issues of automated services distinguish their customer services from others.

Service Quality

Goods quality is tangible and can be measured by objective indicators like performance, features, and durability. Service quality, however, is intangible. Hence, the service quality literature defines service quality in terms of subjectivity, attitude, and perception. Zeithaml, (1987) explained that service quality is the consumer's judgment about an entity's overall excellence or superiority. It is a form of attitude, and results from a comparison of expectations to perceptions of performance received.

Lewis and Booms, (1983) definition clearly states that service is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectation on a consistent basis. The definitions make it clear that service quality revolves around customer expectations and their perceptions of
service performed. Parasuraman et al., (1991) explained that consistently conforming to expectations begins with identifying and understanding customer expectations. Developing a system to identify customer expectations is critical.

Automated Service Quality

Service quality, within the personal interaction environment, has well established definitions in the literature, but it is only recently that it has been applied to the e-commerce environment (Santos, 2003). To date, the automated service quality research has been limited to relationship management rather than metrics of service quality (Buckley, 2003). Currently there exists a lack of a comprehensive definition of automated service quality in the literature. For example, Parasuraman et al., (2005) only discuss automated service quality within the services that are delivered through web sites. Zeithaml, (2002) limits the definition of automated service quality with specific reference to the internet defining it as, ‘the extent to which a web site facilitates efficient and effective shopping, purchasing and delivery’. Santos, (2003) also defines automated service quality as the overall customer’s evaluation and judgement of the excellence and quality of e-service offerings in the virtual marketplace. This definition seems to be the most appropriate for this research, as the internet banking channel is not the only automated service delivery channel that can be identified in the banking sector. In addition to internet banking service quality, telephone banking and ATM service quality need to be addressed within this particular service environment.

There have been many studies identifying the key service quality factors in the traditional banking environment, where the interaction between employees and customers is the main communication channel (Jun and Cai, 2001). However, there are a few studies that have investigated automated service quality attributes in banking (Szymanski and Hise, 2000; Joseph and Stone, 2003). As such there is a need for further empirical investigation into the most pertinent factors to be used when measuring automated service quality in the banking sector. The automated service model presented in this paper is designed to include all the possible factors that may shape customer perceptions of automated service quality. Dabholkar (cited in Joseph and Stone, 2003) argued that the categorization of technology-based service delivery options may be applied across a spectrum of industries that utilize technology in delivering their service to the customer.

The first classification in this categorization is based on who uses technology to deliver what service. Joseph and Stone, (2003) provided the following example to illustrate the point that in person-to-person deliveries, employees use technology to service individual accounts. Consumer technology refers to the customer’s ability to use existing technology, such as the ATM. The second categorization is based on the location, where the service has to be delivered. For example, at the firm’s physical surroundings, homes or office using personal computers. The final categorization involves the ability to identify the various levels of contact the customer will have during the total period of service delivery either directly (face-to-face) or indirectly (such as in the case of telephone banking). In relation to banking, it can be identified that the service delivery components of ATM, internet banking and telephone banking are representative for the three categories of technology based service discussed.

Furthermore, a number of marketing scholars identify these three delivery channels as the principal automated delivery channels for retail banking (Joseph et al., 1999, Joseph and Stone, 2003). These are telephone banking, ATM and internet banking. Telephone banking provides services such as account balances, instruction to issue bank cheques, account payments. While ATM, the most frequently used electronic distribution channel, allows customers to perform their main banking transactions, such as deposits and withdrawals, 24 hours a day (Davies et al., 1996). Internet banking on the other hand, allows consumers to check account balances, conduct credit card payments/transfers, transfer funds and account payments (Jun and Cai, 2001).
Customer Satisfaction

Satisfaction is the state felt by a person who has experienced a performance or outcome that has fulfilled his or her expectations. Satisfaction is thus a function of relative levels of expectation and perceived performance. Expectations are formed on the basis of past experiences with the same or similar situations, statements made by friends and other associates, and statements made by the supplying organization (Kotler and Clarke, 1987). Customer satisfaction can be defined as when the customer’s expectation of the service provided matches his perception of the actual service received (Sasser et al., 1978; Parasuraman et al., 1985). Customers judge the services provided or the product delivered by making a very subjective value judgment which many times do not reflect reality. The current stiff competition and sophisticated marketing environment has urged service organizations to shift focus from profitability to customer satisfaction. Better service will assure customer satisfaction. Delighted customers will stay loyal and in return it will increase revenue.

It is widely accepted in the marketing community that customer satisfaction should be primary component of any organizational strategic plan (Newman, 1998). Parasuraman et al. (1985) concluded that customer satisfaction is the result of customers’ perceptions of service quality. Newman et al. (1998) in their extensive case study on service quality, customer satisfaction and profitability in the banking industry through extensive conceptual research carefully demonstrated that service quality is linked to customer satisfaction.

Customer satisfaction in service industries has been approached in two ways; satisfaction as a function of disconfirmation, and as a function of perception (Davis and Heineke, 1998). Al-Hawari and Ward, (2006) cited Jones and Sasser, (1995) that achieving customer satisfaction is a vital target for most service firms today as it leads to improved profits, word-of-mouth, and less marketing expenditure (Reichheld, 1996; Yeung et al., 2002). The confirmation/disconfirmation paradigm views customer satisfaction judgments as the result of consumer perceptions of the gap between their expectation and perception of actual performance (Parasuraman et al., 1994; Oliver, 1981). However, the disconfirmation theory has been increasingly criticized by many marketing scholars (Churchill and Suprenant, 1982; Teas, 1994). In particular, the latter author argued that the different definitions of expectations and the difficulties with measurement operationalization have undermined these models which used expectation concepts. Thus, there was no consistency in operationalizing the expectation part of customer satisfaction in the literature. Some authors have considered that neither disconfirmation nor expectation had any effect on customer satisfaction (Cronin and Taylor, 1994; Churchill and Suprenant, 1982). Some researchers demonstrated a direct link between actual performance and satisfaction levels (Cadott et al., 1987).

The feeling of satisfaction is a result of the comparison between perceptions of a product’s performance and expectations (Oliver and Swan, 1989). This theory, representing psychological evaluation processes, provides an understanding of expectations, desires, experiences, and performances that may affect customer attitudes. Based on this theory, Mckinney et al.’s (2002) study suggested that the difference between expectations and actual performance on system quality and information quality is likely to determine web customer satisfaction.

Customer Retention

Many companies focus on strategies that overemphasize new sales, seriously neglecting the vital strategies related to customer loyalty and retention. If service providers knew how much it actually costs to lose a customer, they would make greater effort to retain them (Allred and Addams, 2000). Unfortunately, as Reichheld and Sasser, (1990) point out, today's accounting systems do not capture the value of the loyal customer. Their study analyzed more than 100 companies in two dozen industries and found that the longer a company keeps a loyal customer the more the customer purchases each
year. Also, year by year, loyal customers purchase more expensive items and are willing to pay more for existing products. As purchases rise, operating costs decline. Loyal customers also provide very persuasive, free advertising. Reichheld and Sasser also reported that by reducing defections by just 5 percent one bank generated 85 percent more profits.

Allred and Addams, (2000) reported that MBNA America found that a 5 percent improvement in customer retention increases its average customer value by more than one hundred and twenty-five (125) percent. In addition, Reichheld and Sasser, (1990) again found that many businesses lose 15 to 20 percent of their customers each year. Simply cutting defections in half will more than double the average company's growth rate. Hence, customer retention is another fundamental principle of customer service that is worth examining. Allred and Addams, (2000) found in their study that like other service quality research, it was confirmed that the number of service providers who understand their customers’ expectations and consistently provide a quality process is small. Even smaller is the number of service providers who have a strategy for retaining customers. It therefore suggested that, banks had no corporate strategies to ensure customer retention.

It was reported by Reichheld and Sasser, (1990) that in 1982, Charles Cawley, the president of the credit card company MBNA of America, became increasingly frustrated by numerous complaints from defecting customers. A strategy was implemented to call defecting customers personally and obtain information about the reason for their defection. Chronic problems were determined and prioritized; appropriate changes were implemented. Eight years later, MBNA’s defection rate was reduced to just 5 percent, one of the lowest in the industry. Allred and Addams, (2000) suggested that companies should begin developing customer retention strategies which tend to increase service quality. They added that many studies have indicated that it costs eight to ten times less to keep a customer than to develop a new one. If companies will calculate the long-term profitability of customer loyalty, for example, over time: advertising and employee costs for new and existing customers are reduced, customers purchase more, customers increase purchases of premium products, and free, word-of-mouth advertising increases, they will surely conclude that a profitable opportunity awaits them.

Benefits of Automated Services

By definition, automated channels refer to methods of delivering service products using electronic media such as the telephone, internet and ATM (Hway-Boon and Yu, 2003). Telephone banking provides services such as account balances, instruction to issue bank cheques, account payments. While ATM, the most frequently used electronic distribution channel, allows customers to perform their main banking transactions, such as deposits and withdrawals, 24 hours a day (Davies et al. 1996). Furthermore, internet banking allows consumers to check account balances, conduct credit card payments/transfers, transfer funds and account payments (Jun and Cai, 2001). The incredible growth of the internet is changing the way corporations conduct business with customers and it allows banks, as with ATM, to offer financial services without a need for employee-consumer interaction. This therefore suggests that, automated services save the customer time and cost in performing transactions. More often than not, bank customers queue up in banking halls for services. The turn-around-time is drastically reduced through automated services.

METHODOLOGY

The study was exploratory or investigative because it tried to find out which automated service bank customers patronized very much and whether they were satisfied with the quality of the service being provided by the bank. The researchers used a Ghanaian bank as the case study organization, covering all the four branches within the Kumasi metropolis to give it a cross-sectional perspective since customer variations exist for the various branches.
Primary and secondary data were used for the study. Questionnaire and interviews were used to collect the primary data. The data was obtained from a survey of one hundred customers each from the four branches of the bank in Kumasi. Also the results of the interview with the four branch managers constituted another source of the primary data. The secondary data was obtained from annual reports and diaries of the bank published periodically.

The data collected was analyzed using Statistical Package for Social Sciences (SPSS). The results were presented in frequency distributions, charts and cross-tabulation of key variables. Also, the researcher ran a regression between the dependent and independent variables to find out the strength of the service quality dimensions in predicting customer satisfaction. The ANOVA tables, coefficients and model summary tables were generated for analysis. The hypothesis was tested using the ANOVA to find whether there was significant effect of the quality of automated service on customer satisfaction.

To ensure that there was internal consistency of the measurement scale, reliability test was conducted using the Cronbach coefficient alpha. A typical reliability for a researcher designed instrument is approximately 0.7 or higher. The Cronbach coefficient alpha (α) for the independent variables was 0.75. To ensure validity of the instruments, the questionnaire was pretested before it was administered. The purpose was to ensure that anomalies were corrected so that the instruments could measure exactly what it was intended for.

Profile of the Study Organization

Currently the bank understudied is one of the most innovative banks in Ghana, commenced operations in July 1990, mobilizing resources from world financial markets and channeling them to the Ghanaian markets. Through this way, the bank supports the development of the national economy, focusing particularly on the key sectors of the economy, including the manufacturing and export sectors.

Having acquired the universal banking license in 2004, the bank has included a retail banking arm to its operations with an impressive array of specialized products and services with highly skilled and professional staff and emphasis on customer service and efficiency to cater for the retail market. In November 2004, the bank was officially listed on the floor of the Ghana stock exchange (GSE), after a successful Initial Public offer (IPO) to raise GH¢ 5.4 million as equity to finance the bank’s retail banking operations as per its strategic repositioning and current status as a universal bank.

The banking services department operates in four regional capitals of Ghana (Accra, Kumasi, Tema and Takoradi) and one district capital, Tarkwa. The bank provides high quality, satisfactory, sustainable and cost-effective banking services to its clients and potential customers. The staffs are very efficient, courteous, experienced and smart. They are skillful in the application of modern banking procedures, honest and readily helpful as far as the needs of the customers are concerned.

The bank’s international standing allows the bank to benefit from their strong correspondent banking relationships, which positions them to handle international transactions quickly and efficiently via the SWIFT network. The banking halls are ultra-modern, all accounts are computerized, offer on-line and real-time banking transactions, and have internationally certified SWIFT equipment etc. all allowing fast and speedy turnovers in their operations. It offers online banking services, offering a range of banking services and management information that is timely, accurate and reliable. The online banking services have been designed to supplement, and improve the operational and financial control of businesses without the customer having to leave his or her desk. Customers can therefore access their account information, print statements and conduct reconciliation in the comfort of their offices/homes. These online banking
services are available to customers anywhere in the world. The bank has also developed its email marketing software in order to offer subscribers up to the minute information and responses on the bank and its products and services.

The client service department, staff with seasoned professionals with wide range of banking operations experience, provides assistance to clients in resolving problems and issues that may arise in their interactions with the bank. The bank also provide clients and customers access to account information through telephone banking, and prospective customers with information on various banking.

The departments therefore compliments the functions of the operational departments by ensuring that all customer related queries, complaints and issues are handled and resolved in a timely and satisfactory manner, and as such provide a human face to the delivery of banking services to our esteemed clients.

RESULTS
Analysis of Results

Table 1: Satisfaction with Quality of Automated Services

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>276</td>
<td>74.2</td>
<td>74.2</td>
</tr>
<tr>
<td>Not Satisfied</td>
<td>96</td>
<td>25.8</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>372</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Field Survey, 2010

The respondents indicated satisfaction with the quality of automated services provided by the bank. The customers were satisfied with the reliability, price, security, access, efficiency, service variety and ease of use of automated services. However, 96 (25.8%) respondents indicated that they were dissatisfied with the quality of automated services. The representation is quite significant and the bank should embark upon measures to correct the dissatisfaction.

Table 2: Intention to Quit Bank

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>No</td>
<td>269</td>
<td>72.3</td>
<td>76.1</td>
</tr>
<tr>
<td>Not sure</td>
<td>89</td>
<td>23.9</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>372</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Field Survey, 2010

The respondents indicated from table 2 that they had little or no intention to quit the bank. It was indicated by 14 (3.8%) respondents that they intended to quit the bank. Their intention to quit the bank may be due to some level of dissatisfaction experienced. Although their number is quite insignificant, they have the ability to affect other potential customers with their dissatisfaction. It was overwhelmingly declared by 269 (72.3%) respondents that they had no intention of quitting the bank. This may due to the fact that either the bank had not done anything to incur their displeasure or were comfortable with the way the services have been rendered during their stay with the bank. Such people feel satisfied or very satisfied with the bank and would not trade their relationship with the bank for anything. However, there were 89 (23.9%) respondents who were indecisive of their intention to quit the bank. Such customers are floating and must be handled with care because they can swing to any other bank upon least dissatisfaction of service.

Table 3: Reason for Intention to Quit the Bank

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee courtesy</td>
<td>18</td>
<td>4.8</td>
<td>4.8</td>
</tr>
<tr>
<td>High fees charged on services</td>
<td>8</td>
<td>2.2</td>
<td>7.0</td>
</tr>
</tbody>
</table>
The Effect of Automated Services on Customer Satisfaction in Ghana

### Table 3: Contd.,

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Errors and mistakes in transactions</td>
<td>9</td>
<td>2.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Inability to meet customer needs</td>
<td>8</td>
<td>2.2</td>
<td>11.6</td>
</tr>
<tr>
<td>Unreliable automated service</td>
<td>15</td>
<td>4.0</td>
<td>15.6</td>
</tr>
<tr>
<td>Not applicable</td>
<td>314</td>
<td>84.4</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>372</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Field Survey, 2010

Among some of the reasons given for their intention to quit the bank was employee courtesy. It was the view of 18 (4.8%) respondents that, employees of the bank were not courteous to the clients. The employees serve as link between the bank and the customer and should portray a good image to the customer. Customers see the employees as the bank and their actions and inactions go a long way to affect the customer’s impression about the bank. Management should therefore be mindful of the frontline staff so that the bank does not lose customers as a result of the employee’s behaviour. It was again indicated by 8 (2.2%) respondents that, the fees charged on services were high.

### Table 4: Treatment of Bank Customers

<table>
<thead>
<tr>
<th>Bank’s Action</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship with bank staff</td>
<td>200</td>
<td>53.8</td>
<td>53.8</td>
</tr>
<tr>
<td>Constant contact through telephone, mail, text, alert call</td>
<td>57</td>
<td>15.3</td>
<td>69.1</td>
</tr>
<tr>
<td>Regular visits by bank officials</td>
<td>8</td>
<td>2.2</td>
<td>71.2</td>
</tr>
<tr>
<td>Invitation to programmes and functions organized by the bank</td>
<td>11</td>
<td>3.0</td>
<td>74.2</td>
</tr>
<tr>
<td>Nothing really</td>
<td>96</td>
<td>25.8</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>372</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Field Survey, 2010

The actions or inactions of the bank can go a long way to make the customer feel very important and respected. It was indicated by 200 (53.8%) respondents that the relationship with the bank staff made them feel very important as customers. This means that bank employees treated customers with some respect and dignity and were responsive to their worries and requests.

It was indicated by 57 (15.3%) respondents that constant and regular contact through the telephone, alert calls, text messages and mails made them felt very important as customers.

### Regression Analysis

#### Table 5: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.954</td>
<td>.910</td>
<td>.908</td>
<td>.13280</td>
</tr>
</tbody>
</table>

- **Predictors**: (Constant), Ease of use of Automated Services, Service Variety of Automated Services, Access to Automated Services, Security of Automated Services, Efficiency of Automated Services, Price of Automated Services, Reliability of Automated Services
- **Dependent Variable**: Satisfaction with Automated Services

From Table 5, the model summary suggests that the predictors or the independent variables were able to predict the dependent variable for 91% which can be read from the R square. It means that, collectively, ease of use of automated services, service variety of automated services, access to automated services, and security of automated services, efficiency of automated services, price and reliability of automated services are very strong in determining the level of customer satisfaction on automated services.
Table 6: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>64.806</td>
<td>7</td>
<td>9.258</td>
<td>524.968</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>6.419</td>
<td>364</td>
<td>.018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.226</td>
<td>371</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Predictors**: (Constant), Ease of use of Automated Services, Service Variety of Automated Services, Access to Automated Services, Security of Automated Services, Efficiency of Automated Services, Price of Automated Services, Reliability of Automated Services

- **Dependent Variable**: Satisfaction with Automated Services

Table 6 shows that the model is very significant in predicting the level of customer satisfaction with automated services. It means that, the reliability of automated services, price of automated service, security of automated service, access to automated service, efficiency of automated service, service variety of automated service and ease of use of automated service are very significant in determining the customer’s satisfaction. The significance level at 95% confidence interval was 0.000.

**Hypothesis Testing**

The analysis of variance (Anova) was used to determine whether there was significant effect of the quality of automated services on customer satisfaction. At 95% confidence interval, the result shows that there was significant effect of the quality of automated services on customer satisfaction. This is seen in the significance value of 0.000. The result suggests that the null hypothesis should be rejected and the alternative hypothesis sustained. This therefore means that there is significant effect of automated services on customer satisfaction.

To determine the size of effect of automated services on customer satisfaction, the researcher used the Eta squared which is given by the formula:

\[ \text{Eta squared} = \frac{t^2}{t^2 + n - 1} \]

where \( t \) = t-value and \( n - 1 \) = degrees of freedom (df)

From the Anova table, the F-value was given instead of the T-value and the formula will be given by

\[ \text{Eta squared} = \frac{F^2}{F^2 + n - 1} \]

where \( F \) = F-value and \( n - 1 \) = degrees of freedom (df)

\[ \text{Effect size} = \frac{524.968^2}{524.968^2 + 372 - 1} = 0.9986 \]

Teas, (1994) cited Cohen, (1988) who interpreted the eta squared values using the following guidelines:

- 0.01 = small effect,
- 0.06 = moderate effect,
- 0.14 = large effect.

The effect size obtained (0.9986) suggests that there is large effect of the quality of automated services on customer satisfaction. This was confirmed in the regression model summary which revealed that, the quality of automated services affected customer satisfaction by 91% determined by the \( R^2 \) value.
The coefficients table looks at the contribution of each of the independent variables in predicting the dependent variable. The coefficients table suggests that apart from ease of use of automated services which was very insignificant (sig = 0.892), all the other predictors were very significant (sig < 0.05) in determining the level of customer satisfaction with automated services. It suggests that, management in their attempt to ensure high customer satisfaction with automated services, should ensure that the automated services are reliable, the price is reasonable, enough security is guaranteed, access to the service is not a hindrance, the automated service should be efficient in providing the service it is supposed to provide and a wider variety of services provided by the automated service. Management can choose not to worry itself on the ease of use of automated services since its contribution to customer satisfaction is very minimal or insignificant.

**DISCUSSIONS OF RESULTS**

**The Impact of Technology on Banks’ Philosophy**

The study found ATM service as the most patronised service in the bank. According to Davies *et al.*, (1996) the ATM is the most frequently used electronic distribution channel which allows customers to perform their main banking transactions, such as deposits and withdrawals, 24 hours a day. This saves the customer from a lot of hustle and time which should have been spent at the banking hall. According to Hway-Boon and Yu, (2003), telephone banking provides services such as account balances, instruction to issue bank cheques and account payments thus saving customers a lot of time getting to the premises.

It was reported by Jun and Cai, (2001) that internet banking allows consumers to check account balances, conduct credit card payments/transfers, transfer funds and account payments. It is therefore necessary for management of the bank to ensure that the reliability and efficiency of the internet and telephone banking services of all the branches are guaranteed to avoid dissatisfaction.

**Service Quality**

The most customers of the bank are satisfied with the reliability, price, security, access, efficiency, service variety and ease of use of automated services. According to Kotler and Clarke, (1987) satisfaction is the state felt by a person who has experienced a performance or outcome that has fulfilled his or her expectations. Satisfaction is thus a function of relative levels of expectation and perceived performance. Again, Sasser *et al.*, (1987) noted that customer satisfaction is realized when the customer’s expectation of the service provided matches his perception of the actual service received. The management of the bank should do a lot to ensure maintaining the highest level of satisfaction among customers in order to enjoy competitive advantage. Customer satisfaction is found to be an important tool to create and maintain loyal customers (Schoenbachler *et al.*, 2004) and these loyal customers contribute towards high repeated purchases (Law and Hui, 2003).
It is good news for the bank to have customers who are satisfied with the services being provided. However, few customers have issues with service quality. The bank can address customer dissatisfaction by ensuring that customer complaints are warmly received and corrected promptly. The interaction with customers should be regular so that eventual customer loyalty and retention would be the result.

**Customer Satisfaction**

The actions or inactions of the bank can go a long way to make the customer feel very important and respected. The findings indicated that the relationship with the bank staff made them feel very important as customers. This means that bank employees treated customers with some respect and dignity and were responsive to their worries and requests. Occasionally, employees pay visits to facilities belonging to customers. It is normal for bank officials to occasionally visit clients especially those who have sought facilities from the bank to ensure that their businesses are flourishing so that advices can be given where necessary. This will reduce possible loan default and other risks involved in loan repayment. It is true that the bank cannot meet every expectation of the customer but the impact of the bank should be felt in one way or the other by every customer because every customer is equally important and must be treated as such. The result indicates that it is not only ensuring high service quality of automated services that influence customer satisfaction but other actions of the bank that makes the customer feel very important.

**Customer Retention**

Since customers have expectations before joining their banks, these expectations must be met so far as they don’t contravene the bank’s policies. A number of service providers who understand their customers’ expectations and consistently provide a quality process are small. Even smaller is the number of service providers who have a strategy for retaining customers. It therefore suggested that, banks had no corporate strategies to ensure customer retention (Allred and Addams, 2000). The banks must be aware of customer expectations and this they can obtain by undertaking official and unofficial surveys. Parasuraman et al., (1991) explained that consistently conforming to customer expectations begins with identifying and understanding customer expectations. Developing a system to identify customer expectations is thus critical. Once the customer needs are met, expectation equates the customer’s perception and satisfaction is the result and customer loyalty, retention and profitability would be achieved. The most popular response was those who indicated “not applicable”. It means that they were satisfied with they had no reason to quit the bank or are not aware of anything yet to make them quit the bank. It is a positive development for the bank because it shows that a high level of satisfaction is recorded by customers of the bank. The result above again reveals that the level of customer satisfaction is not only a function of the quality of automated services but other related factors which include employee courtesy, errors in transactions, the cost of services and inability to meet customer expectations.

**CONCLUSIONS AND IMPLICATIONS**

This study assesses the effect of automated services on customer satisfaction of the banking industry. It is clear from the findings that the customers of the bank are entirely new set of customers and very young who have much appreciation for technology-based products and services. On the issue of customer satisfaction, the findings show that customers are generally very satisfied with the quality of the bank’s automated services and have no intention to leave the bank. The high patronization in ATM services as compared to other automated services suggests that the quality of this service should be ensured so that much income could be made from that section. The patronization in automated services has little to do with people’s level of education because customers with no formal education patronized in the automated services. Also, customers are generally very satisfied with the quality of the bank’s automated services and have no
intention to leave the bank. Such customers can even offer word of mouth recommendation to their friends so that the bank could save the cost of searching for customers. The bank enjoys much customer loyalty because of their satisfaction and this can help the bank retain most customers which eventually has positive relation with profitability. The quality of automated service is significant to determine the level of customer satisfaction with the service.

Based on the findings of this study, some relevant recommendations are made. Management should concentrate on the reliability, price, security, efficiency, and access and service variety of automated services to increase the level of customer satisfaction so that the resulting benefits could be realized. The high patronization in ATM services as compared to other automated services suggests that the quality of this service should be ensured so that much income could be made from that section. It is recommended that management intensifies the education of customers on the use of automated services because with little or no formal education, people can manipulate technology-based product like ATMs. This will increase the number of customers who patronize this service and the fees for the usage could contribute significantly to the bank’s revenue. To achieve Customer retention strategies, the bank ought to conduct frequent customer survey to find out the needs of customers. This is because the industry is very competitive and customer defection is not uncommon. The bank should pursue competitive urge on the use of automated services since the customers are satisfied with the services. If these suggestions are adopted, they will go a long way to increase the quality of service and hence customer satisfaction.

REFERENCES


