

The Effects of Computerized Accounting System on Ghanaian Banks, The Way Forward (A case study of Amanano Rural Bank LTD.)

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<p>This thesis aims to answer general questions concerning the computerization of accounting systems in Ghana. Furthermore, it analyzes the possible factors and benefits of this subject matter. It also presents how banks computerization has helped eradicate many problems in the banking field, comparing and giving insights into differences between computerized accounting systems and manual accounting/banking systems. The study was carried out to show the importance Ghanaian banks confer on computerized banking technology, the extent to which this technology is being employed and how relevant this banking technology is to customers and staff as a whole.</p> <p>The bank examined in the study was Amanano Rural Bank Limited because this bank just introduced this form of technology. The study was conducted through primary data collection where questionnaires were designed and distributed to customers at the bank. Personnel at the bank were also interviewed through e-mails and telephone conversations. Secondary data collection involved reviewing some textbooks, magazines and the like that have materials relating to this topic. Fifty questionnaires were sent to the bank to be distributed to their customers and staff for completion and the response received were analyzed.</p> <p>The study concludes with observations summarizing the research and the recommendations that emerged. It analyses the level of technological advancement in the banking sector in the country. The empirical findings showed that banks using manual banking systems have not been apt in delivering quick and efficient services to their customers. On the other hand, banks operating with computerized accounting/banking systems offer much improved, efficient and fast services to their customers, thereby making them much more competitive.</p>	
<p>Key words Computerization Accounting system, Manual Banking system, Banks, Accounting Software, etc.</p>	

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1 Introduction

1.1 Background of the study

Banks are financial institutions set up to provide customers with some specific functions such as receiving deposits from customers for savings and onward money transfer as well as credit services. Banks as defined by Business dictionary.com is

An establishment authorized by a government to accept deposits, pay interest, clear checks, make loans, act as an intermediary in financial transactions, and provide other financial services to its customers.

More so, banks are into safekeeping transaction and group management purposes with the intention of making profits and delivering best but affordable services to their customers. These customers may either be individuals or institutional and serving them in the more convenient, efficient and fastest possible way is the aim of all banks so as to derive utmost benefit from them. In the 1990's through to early 2000's, the number of accounts holders in the various banks in Ghana both rural and commercial banks were very few. The use of manual banking system made it uneasy to serve customers in a more diverse ways as urgent demand for information coupled with reconciliation of financial statements of the various institutional customers were very hard to come by. But with the introduction of Computerized Accounting System, the more tedious banking functions through the use of manual banking system has considerably been softened.

In Ghana, the use of computerized Accounting System in the various banks is drastically changing the way banking activities are being organised. Electronic commerce is now regarded as the panacea for the new commercial revolution that is taken place in the advance world which in one way or the other lacking in Ghana, and by offering reasonable banking products and services to customers, Ghanaian banks had to adopt computerized Accounting System. Moreover, considering the recent improvement in the country's infrastructure then one can say that the banks had nothing to say but to

forcibly adopt this technology in order for them to improve their services for their customers.

1.2 Introduction of Case Company

Amanano Rural Bank Ltd was registered as a Limited Liability Company on the 29th March 1982 and it is Head quartered at Nyinahin off Kumasi Bibiani Road. The Bank is currently operating other Agencies or Branches namely Bibiani Agency, Afful Nkwanta Agency and Mbrom Agency all in Kumasi. Services that are currently being rendered by Amanano Rural Bank Ltd to its clients includes Report Activities, Loans, Overdraft, Micro-Finance, Business Advisory, Money Transfers and Investment Services. A very detailed coverage of the case company will be given in my next report.

1.3 Mission and Vision of Case Company

Vision

Amanano Rural Bank's vision is to become the eye opener and a pacesetter of Rural Banking in Ghana with Strong growth indicators for regulators and competitors to use as a benchmark and for employees to feel proud working with us.

Our Mission

Amanano Rural Bank's mission is to generate superior returns to all stakeholders: that is to improve Shareholder value, employee motivation and customer care.

Values

The bank's core values are integrity, professionalism, growth mindedness and continuous improvement.

1.4 Research Problem

Complaints over the processes in which Ghanaian banks offer their services specifically in withdrawal and deposit services, processing customer information and giving them feedback called for this research. The computerization of the bank's operations and services as well as the introduction of accounting software and Automated Teller machines by some multi-national banks has helped in improving the financial strength

of Ghanaian banks. Various studies conducted by most scholars established that Information technology has considerable positive effects on banks productivity, cashier's duties, banking transaction, bank patronage, bank services delivery and customers' services. They concluded that, these have positive effects on the growth of banking industry.

The main research problem is that, banks in Ghana seem to be performing below expectation and this has affected customer's participation of which some of them have been left with no other option than to be selective and extra vigilant in their dealings with the banks.

1.5 Investigative Questions

These research questions are of interest to me and the stakeholder company in the sense that, the existence of any banking firm to a very large extent hangs on the banks ability to entice and maintain customers through the offer of innovative and technologically improved banking services and products. In order to analyse and interpret these main problems, the following research questions of the study were identified.

1. What are the benefits of a computerized banking system at Amanano Rural Bank Limited?

After completing the thesis there should be a clear answer to the following questions as well.

- What are the factors behind the growth in the use of computers?
- What are the different software products and their applications?
- What are the benefits of the computerized system in comparison with the manual system?
- What are the cost effects of operating a computerized accounting system?

1.6 Objective and Benefits to Stakeholders

The primary purpose of this study is to figure out the importance Ghanaian banks attach to the idea and practice of Computerized Accounting System and to determine whether the adoption and practice of this system has warranted efficient, effectiveness, timely and accuracy in delivering of banking services and activities to customers as expected. It is also to draw a very conclusive distinction between computerized and the manual banking operations systems. More importantly, this study will spell out how Accounting System has helped the core functions of Accounting in the Banking industry.

1.7 Thesis Topic

The introduction of computerized accounting system into the banking system of Ghana. Detailed description of this study has been indicated in the Overlay Matrix, which can be seen as an attachment.

1.8 Demarcation of the Study

This Thesis will be focused on the Introduction of Accounting System into Ghanaian Banks by basically referring to the case company and the benefits of the computerised accounting system, it will also focus on the difference between manual and computerised accounting system. In otherwise, these can be grouped as follows:

1. Chapter one deals with the background of the study.
2. Chapter two introduces the case company, the research problem, investigative questions and the overall objective of this study.
3. The research methodology can be found at chapter three, which shows the method used to conduct this research.
4. At this section can be found the theory framework as well as the definition of key concepts.
5. This chapter shows the empirical findings and the software used by the case company.

6. The findings at fieldwork and data interpretation can be found at the chapter six.
7. Whilst the last chapter which is chapter seven shows the discussions which comprises summary, conclusion and recommendation for the case company.

2 Research Methodology

2.1 Study Location

The study will be undertaken in Ghana precisely Kumasi with a total population of 1,468,609 ('07 est.). The city is located right in the middle of Ghana. The city of Kumasi is the commercial capital of Ghana and so most political, educational, financial, cultural and research institutions can be located in this city.

2.2 Sampling and Data Collection

A total of 50 personnel will be interviewed through questionnaire and telephone, some customers will be randomly selected and be interviewed from Amanano Rural Bank while the rest would be staff, this is to know their opinion about the impact this subject has had on them. Samples will be drawn randomly using a table of random numbers. A standardised questionnaire would also be administered as indicated earlier. Qualitative data will also be collected to know their views. Primary data collection will rest solely on the detailed standardized questionnaire. Each of the sections will cover detailed questions on all relevant inputs and outputs.

2.3 Data Analysis

The data will be analysed using descriptive and illustrative statistics (mean, standard deviation frequencies etc.) Regression and correlative analysis would be performed using Statistical Package for Social Scientists (SPSS). Excel would also be used in making simple calculations

2.4 Risks and Risk Management

This study like all other studies cannot be without some limitations. Firstly, the bank is yet to upgrade its data on classes of account holders since the introduction of this technology. The number of customers that have been added to the existing customers data since the introduction of this technology can also not be found. This would be an obstacle for me to get adequate statistical and quantitative data for this study. Nonetheless I hope to rely on the customers to collect this information through the questionnaires and the bank's financial statements.

More so, the sample size to be used for the bank would not necessarily be a true representation of the entire customer population size of the bank. Also the interview that will be conducted with the case company thus, whether I should go to Ghana for face-to-face interview or telephone interview. Finally, the chosen case company, that is Amanano Rural Bank Limited, does not completely give the entire picture of the views of all banks in Ghana since different banks in the country have their own way of doing business and the target customer group they deal with especially the commercial banks.

2.5 The interviews

It can be described as two-way conversations that the parties involve have some sort of objectives or goals to accomplish. Ask.com defines interview as a

“Meeting between two or more people in order to ascertain if there is adequate compatibility to achieve a specific purpose”. (Asks.com, 2013.)

Interview was chosen for this survey because I realised that it was the most reliable source to get the requisite information needed from the customers, management and the staff at large. Management, Staff and Customers were the category of people selected for this thesis because upon brief consultations with some scholars and banking analyst, I found out that they were the vary people upon which the desired information can be sourced. The information obtained was basically primary data from the field of work and they were carried out by distribution of questionnaire to customers and telephone interview directly to the management and staff. The data was analysed by using descriptive and illustrative statistics (mean, standard deviation frequencies etc.).

3 Theory Framework

A computerized accounting system can be referred to as an accounting information system that processes the financial transactions and events to produce accurate accounting results as per the user requirements or guidelines. Every proper accounting system, be it manual or computerized must follow the generally accepted accounting principles and also the framework for maintenance of records and generation of reports must be well defined and easily to be understood.

In a computerized accounting system, the process of storage and handling of data, which is normally referred to as operating environment consists of computer hardware and software under which the accounting system operates. Computer hardware and software are interdependent and so one cannot do without the other. The link here is that, the type of accounting system employed determines the operating environment. More so, the nature of software used determines its hardware so selecting a computer hardware depends upon several factors like the number of users, secrecy level and the sectional or departmental activities in the bank, etc. (Computerised Accounting Software, Chapter 13, 492)

A computerized accounting system also involves the use of computer hardware and software to perform the recording and reporting functions that would otherwise have been done manually by a staff of a bank or an owner of a business. Prior to technological advancement, accounting records were being kept only on a manual basis whereby the bookkeeper needed to complete a manual basis document for each sale or receipt, and then spend all day or better still a week in writing the records of the day or week into special journals, stock cards, as well as debtors and creditors records. This clearly took some time, time that would otherwise have been spent in managing the business. More importantly, completing the accounting records were sometimes seen as a hurdle to business, rather than a way of making it more profitable. (ICT in Accounting, Simmons, Hardy 2011, 372)

However, the development of computerized accounting systems has transformed the way small businesses kept their accounting records. This has permitted small business

owners to simplify the accounting processes, thus leaving them more time to work on their main business. (ICT in Accounting, Simmons, Hardy 2011, 372)

The ever-changing global competitiveness in the services provided by banks has however increased the volume of activities banks perform. This has been made possible through the use of computerized accounting software which has softened the more tedious banking functions through the use of manual banking system. In Ghana, development in information technology (ICT) is drastically changing the way businesses are being organised. Banking institutions coupled with other sections of the financial services industry, continue to face pressure from the considerable change in the regional and global financial meltdown. The onus to transform successfully rest on the technology & operations side of the Banks, which must be ready to step up and face the task.

3.1 Definitions of Key Concepts

The following factors that have been extensively discussed are among the factors that have led to the widespread use and acceptance of computerized accounting systems over the last few years.

SECTION A

3.2 Accounting System

Accounting system as defined by business dictionary.com states as

An organised set of manual and computerized accounting methods, procedures, and controls established to gather, record, classify, analyse, summarize, interpret, and present accurate and timely financial data for management decisions. (Business dictionary.com, Quoted 10.12 2012)

Every organisation must operate accounting system due to the fact that it is generally recommended for companies to report on its financial position to the stakeholders for better decision-making and other policy implementations. The decision to choose

whether a company would operate manual or computerized accounting system depends on the company itself.

3.3 User-Friendly Software

Basic accounting software demands not only ICT skills, but also thorough accounting knowledge. By contrast, current accounting software can be run with only a simple understanding of the accounting practice. Nowadays, with in depth help menus and also the vast information that can be sourced online free of charge, resources to assist users in their use of accounting software are easily to come by. (ICT in Accounting, Simmons, Hardy 2011, 372)

3.4 The Growth of E-Commerce

The advancement in technology especially the Internet has generated new methods of communicating with customers both current and potential in the banking world. E-commerce has not only changed the way businesses specifically banks market their products or services, but also how these products or services are normally delivered, knock with computers is highly significant in this direction. (ICT in Accounting, Simmons, Hardy 2011, 372)

SECTION B

3.5 Accounts Receivable Software

The accounts receivable must consists of a detailed listing of customers and the amounts of money each owes the company or bank and other information like the date the debt was incurred, address and phone numbers of each customer. Businesses considering the installation of accounts receivable management software must undertake an extensive research into the available alternative solution to ensure it includes the key potentials that would enable accuracy and integrity of its financial reporting.

The right accounts receivable software solution updates the ledger accounts with appropriate transactions automatically. Invoices are added and customer payments in regards to outstanding invoices are also deducted. The software checks that payments

have been applied to a specific invoice or identify that it covers multiple invoices. There should be regular reports generated in detailed, such as an accounts receivable aged listing so that customers at risk of defaulting could easily be identified. (Accounting Software, Quoted: 25.05.2012)

3.6 Accounts Payable Software

The company or organization considering the implementation of accounts payable software solution must first of all realize that the best ones are the one that provide a rapid return on investment. The main characteristics of accounts payable that increase the payback include early payment awareness that enable the company to make use of discounts offered. More so, the ability to write cheques to suppliers and to have the correct debits and credits applied to the company account makes balancing the books easy. (Accounting Software, Quoted: 25.05.2012)

3.7 General Ledger Software

A ledger account refers to an accounting record that summarizes all transactions affecting each individual item such as Bank, Stock, Creditors, Vehicles or Capital. In the financial statements all items have its own ledger account and so in this case the bank can have so many ledger accounts to manage considering its numerous customers, without computerized accounting system, it would be virtually impossible to locate one ledger account out of hundreds accurately and conveniently. (ICT in Accounting, Simmons, Hardy 2011, 373)

The general ledger software is a very important software solution for all businesses since it is the main accounting record of the business. Key features companies must look for in general ledger accounting software are its ability to trace budget and financial data so as to produce accurate financial statements, detecting fraud so easily, tracking budget and financial data to produce accurate financial statements that can bring out better income statement, balance sheet, and general ledger reportage. When the best general ledger software is chosen, it helps to develop year-end reports and statements quickly and accurately. The general ledger software automatically passes data from subsidiary ledgers such as accounts payable and accounts receivable for quick and

accurate double entries as well as balance sheet balance sheet. (Accounting Software, Quoted: 25.05.2012)

3.8 Accounting Packages and Chart of Account

A number of Software packages have been developed to assist in the accounting field and some of such packages are QuickBooks, Mind Your Own Business (MYOB), Cash flow Manager, Attaché, Econet and Temenos T24. Even though some of these software mentioned here are developed for small businesses, they are also designed specifically for accounting purposes in the banks, especially the Temenos T24 software which is currently in use by Amanano Rural Bank Limited. It functions in such a way that once a customer's data is entered, the accounting records of that particular customer are updated automatically, and also customers reports pop-up so easily. Links between the bank and its staff, as well as other information are easily accessible and can be produced quickly, accurately and efficiently. These accounting packages that have been outlined here earlier bring out transactions using accounting records such as the general ledger accounts. (ICT in Accounting, Simmons, Hardy 2011, 373)

Furthermore, if some of the customers have the same names or similar names it may be very difficult to identify which account they belong to. To tackle these issues, a bank or business can use a Chart of Accounts to arrange its ledger accounts. A chart of accounts is a catalogue of all the accounts, which detects and organizes each ledger account individually by assigning to it an account number or code. (ICT in Accounting, Simmons, Hardy 2011, 373)

4 Empirical Findings

This chapter gives a detailed explanation about the findings at Amanano Rural Bank and also determines the type of Computerized Accounting Software at their disposal. It measures the customers' as well as the staff response in relation to the Computerized Accounting System and Manual Banking Systems of the bank's daily activities or transactions.

4.1 Changing the Banking System in Ghana

Advancement in technology and globalization have brought a very rife competition within the banking industry in Ghana. The desire for offshore investment opportunities that is being triggered by less stringent regulations in the financial sector coupled with regional economic integration have compelled most local banks in Ghana of which Amanano Rural Bank is of no exception to modernized. Amanano modernized its operations by moving from the traditional banking system known to all Ghanaians or customers that is the manual banking system to a more robust way of banking, the computerized banking system. The introduction of some products and services could not have been necessitated without the use of computerized banking system, international money transfer system, microfinance loans, Apex link money transfer, Apex i-trans and processing of salaries have all been successfully implemented because of this system.

Ghana as at September 2012 was estimated to have a little over 1.5 million account holders in the various banks out of a total population of 24 million (a ratio of 6.25%) compared to Nigeria's 23 million bank accounts holders among a population of 140 (more than 16%). This shows the vast investment opportunity that is yet to be harnessed within the financial sector in the country. Foreign banks that emerged after the liberalization of the financial sector over the last few years predominantly dominate the financial market. This influx of foreign banks in Ghana has brought about technology, products innovations and different modalities of banking into the banking systems in Ghana. In fact, most products and services like Mobile banking, automated payments systems and offices, telephone banking (SMS), prestige and premium banking could

not have been necessitated without these foreign banks which brought high level of competition into the banking system.

4.2 Manual Banking Systems at Amanano Rural Bank Limited

Manual can be referred to as anything physically done or operated by the hand. Manual as defined by Dictionary.com refers to anything that is

“Done, operated, worked, etc., by the hand or hands rather than by an electrical or electronic device”. (Dictionary.com quoted: 12.03.2013)

This concept when applied to banking can be described as the process whereby the mainframe activities of the bank such as customers, management and accounting information are received and recorded by handwriting without computerized or electronic supported devices. With Manual banking at Amanano Rural Bank, all information about a customer including opening of an account, cash and cheque deposits as well as withdrawals, not to talk of information on the ledgers, mortgage, overdraft and other credit agreements including international banking services are processed by handwritten. Manual banking system at Amanano presents itself in a way that can be depicted as below:

A customer opening an account with the Bank must first fill in his personal details on an account opening form. The bank recently introduced a new way of opening an account called zero account unlike the previous system whereby the customer has to deposit some amount of money into the account before the account number is activated but with this zero accounts, the customer's account can be activated without an initial deposit. In both cases the bank official enters the customer's identical information on the ledger cards both customer and the banks ledger books and when the necessary recordings are completed, the customer is given a bank passbook that contains the customer's account number and his/her particulars.

In situations where a customer wishes to make cash withdrawals, the customer is then given a withdrawal form to fill his particulars. When the form is fully completed it is then presented to the cashier together with the passbook, the cashier then passes them on to a ledger desk and after a supervising clerk on the ledger desk has received it, he

or she matches the withdrawal form with the customers details to ensure proper verification and accuracy. After making sure the information on the forms correspond with each other, the supervising manager makes the necessary bookkeeping recordings in the customer ledger card as well as the bank's ledger books. After this then an approval is given on the customers withdrawal form for payments to be effected by the cashier.

In circumstances of cheque withdrawals, after a cheque is presented to the cashier, it is then sent to the ledger desk for a supervising manager to check the genuineness of the cheque to see if it conforms to what is in the bank to ensure its precision. After the cheque is certified with its true authenticity, the customer's account balance is also checked to see if there is a positive balance. If there is enough balance, the cheque is then sent to another counter for signature verification in order to make sure that the cheque is not forged. The supervising manager then make the necessary bookkeeping recordings in the customer's ledger card as well as the bank's ledger books before approval is given for payment to be effected by the cashier.

When a customer comes in for a bank statement and since each customer has a ledger card with the bank as well as a nominal ledger book, all the transactions that take place between the bank and its customers are recorded concurrently both in the customer ledger card and the bank's ledger book. Based on the recorded information at that specified given period, the customer's bank statement is produced and presented to the customer.

4.3 Problems with Manual Banking System

At Amanano Rural Bank, the below problems were identified with the use of manual banking system:

1. It was realized that processing of customer information takes a very longer period of time.
2. Customers waste precious time in joining long queues at the bank for their banking activities.
3. There is also huge labour cost, in terms of salaries and its related cost.
4. Errors of commission and omission are very prone in the bank.

- The manual banking system at Amanano Rural Bank as sourced from customers and management makes banking with the bank very dull, unpleasant and uncompetitive.

The illustration below shows a manual accounting system model designed by Rita Duah et al, 2012.

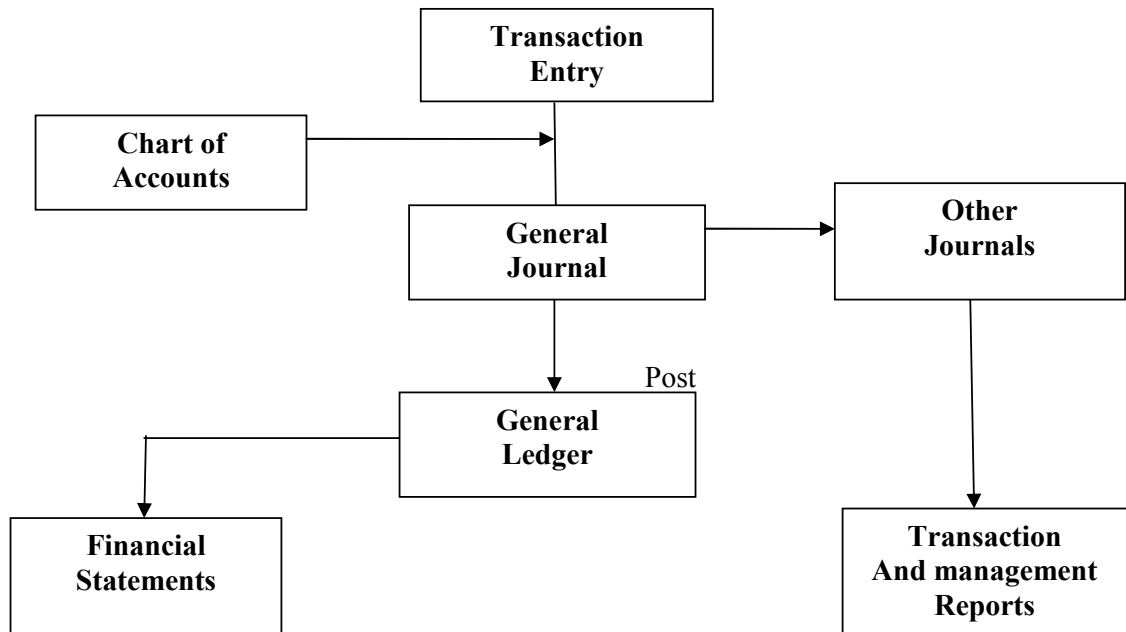


Figure 2. A manual accounting model

4.4 Why Computerized Accounting System

A Journal written by Boye S.S titled *“Innovative Banking Activities in Ghana”* (1990) indicated that in any industry with which the banking industry is of no exception, there is the need to create innovative services and products to respond to the varying consumer demographics and their lifestyles. The intense competition among Ghanaian banks calls for regular overhaul of the banking activities or services in order to guarantee customers with quick but efficient service delivery.

Moreover, due to the high level of competition that exist in the banking sector it is apt to Amanano to accept the need and benefits of regularly replacing old products with new or modified ones in order to enhance their performance. An enhanced service through computerized accounting system can serve as a very strong marketing or ad-

vertising tool for banks by attracting customers from outside and within the sphere of the existing markets. Amanano realized that computerization of the accounting system could lead to reduction in cost such as salaries, higher returns by participating in international banking services and an improved security system which reduces fraud.

4.5 Computerized Banking system at Amanano Rural Bank

Meigs et al (1998) defined a computerized accounting system as a system that uses computers to input, process, store and output accounting information in form of financial reports. Marivic (2009) described a computerized accounting system as a method or scheme by which financial information on business transactions are recorded, organised, summarized, analysed, interpreted and communicated to stakeholders through the use of computers and computer based systems such as accounting packages.

The bank recently changed its manual banking system to a computerized accounting system and with this system, all information about customers can instantly be made available to the cashier once his/her data is keyed into the computer for the necessary transactions to be effected. Besides, any customer who wishes to have his or her hand on information about his/her account can just come into the bank, provide his data to the staff at the counter and immediately the necessary checks are made all the required information is made available to him/her.

All transactions that take place between customers and the bank instantly reflect in the bank's mainframe computer system for the necessary changes to be effected on the customer's account. With the introduction of the computerised accounting software into the bank by practically eradicating the manual banking system, all the banking transactions are made available to customers or managers without any delay. Customer opening an account with the bank can be enlisted in the bank's file of customers instantly. All what the customer has to do is to make available your particulars to the accounts opening manager and everything is done. The account opening manager would immediately enter your details into the computer terminal and through an online cabling, your details would then be stored in the bank's mainframe computer system for business to start from there.

If a customer wishes to make cash or cheque withdrawals, what the customer has to do is to present the cheque or withdrawal forms to the cashier, then the cashier would keyed in your account number into the computer. After this, the customer's account profile would immediately appear on the screen, when the cashier is satisfied with all the available details on the screen, payments is then effected immediately.

The illustration below shows how a computerised accounting system should work. Gelinias et al, 2005.

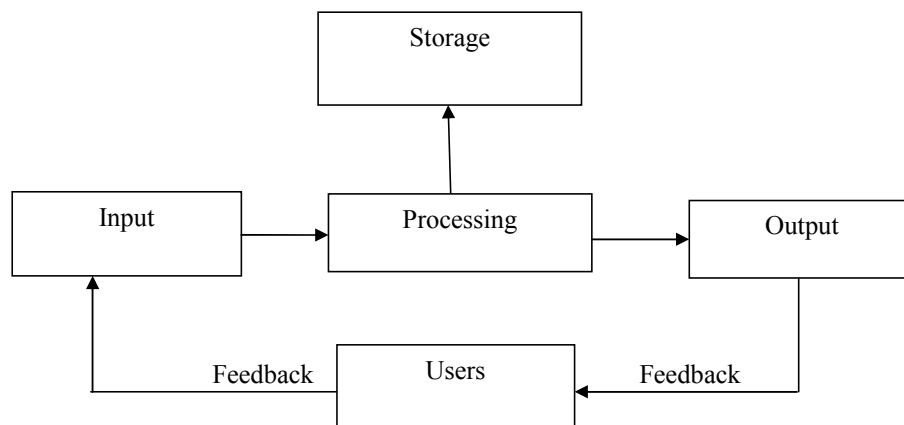


Figure 3. A Computerised Accounting System Model

4.6 Comparison between Computerized and Manual Banking System

1. During the research it was realized that at Amanano Rural Bank Limited the identification of transactions based on application of accounting principles are common to both manual and computerized accounting system.
2. The recording of financial transactions in manual accounting systems at Amanano Rural Bank Limited is through books of original entries but under the computerized accounting system at the same bank, the data content of such transactions are stored in a well designed accounting database or software that can be reproduce quickly.
3. At Amanano Rural Bank Limited transactions recorded in the books of original entry under the manual accounting system are classified by posting into the

ledger accounts, which normally results into multiple entries of data. Whiles computerized accounting system in the same bank, there are no such data duplications because the stored data is classified so that the same is offered in the form of a report in order to bring out the ledger accounts. In some circumstances different forms of same transactional data under the computerized accounting system are made available for the various reports.

4. At Amanano Rural Bank Limited, under the manual accounting system all the transactions are summarized to produce trial balance in order to ascertain the balances of each individual customer's accounts. Based on this, preparation and finalizing each ledger accounts is a must for the preparation of the trial balance. However, within the same bank under computerized accounting system, the data stored originally are processed so as to churn out the list of final balances of various accounts to produce the trial balance.
5. The research showed that under the manual accounting system at Amanano Rural Bank Limited, adjusting entries are made to stick to the cost matching revenue principle. In here, expenses are matched with the revenues of the accounting period generated by the bank. But with computerized accounting system, Journal vouchers are prepared and stored before it then follows the cost matching revenue. There is nothing like passing adjusting entries for errors and rectification which might be the case under the manual banking system, except for correcting an error of principle such as having recorded a wrong voucher, example using payment voucher for a receipt transaction.
6. The research indicated that under the manual system of accounting at Amanano Rural Bank Limited, the preparation of financial statements rely basically on the availability of the trial balance. Whiles in computerized accounting system, such requirements are not vital. The production of financial statements does not depend on the trial balance in that, such statements can conspicuously be primed by direct processing of originally stored data.

4.7 Cost Benefit Effects of Computerized Accounting System

Computerization of banking systems requires some amount of financial commitment with a great deal of managerial and technological expertise needed at the very beginning of the installation process in order to launch a successful venture. There is the need to assess the cost benefit effects that will help in carefully weighing the two so as to know the benefits to be derived from it since in the end, the main focus will be on the benefits.

4.8 Benefits of Computerized Accounting System

During my interaction with the staff as well as some of the selected customers at the bank I found out that, the introduction of this system of banking has benefited the bank immensely in all sections of its activities. The following were some of the benefits reaped so far by the bank:

1. The research indicated that since the introduction of this system in the bank, accounting reports needed by the various branch managers such as reconciliation of financial statements are quickly generated. Data processing and analysis at the bank are faster, accurate and timely which meets management need for decision-making.
2. The staff indicated that the speed at which accounting and other banking transactions are done with a computerized accounting system at Amanano Rural Bank Limited since the introduction of this system is amazing, retrieving information such as balance sheets, income statement are made easy. Problems related to balance sheet and income statement are easily identified and solved instantly.
3. The research also pointed out that there has been a significant improvement in the overall performance of the bank as a result of computerization of the accounting system. Detailed of how this was achieved will be thoroughly examine in the next under the internal control system.

4. Computerized accounting system has helped the bank in various ways such as easing the highly cumbersome auditing procedure and also there is better access to required information as at when it is needed. Information about cheque numbers, payments, and other transactions are easily accessed which help to reduce auditing time considerably.
5. According to the bank, it is easy to perform accounting functions using computerized accounting systems. Ledger posting and the principle of double entry are done easily and accurately when it is done through computerized accounting system.

4.9 Cost Effects of Using Computerized Accounting System

1. In Ghana the accessibility of high-powered computers and comparatively high cost of purchasing such computers have made computers very much unaffordable. Nowadays, even though desktop or laptop can be purchased for a price between €500 and €1000 it is still being considered as an expensive product by the bank.
2. There is limited number of available technological expertise needed to repair and maintain the computers time-to-time and even when there are such experts there is also high cost of hiring. The costing for this has been a very huge headache for both management and policy implementers in the bank.
3. There is also a high cost of re-training staff in order to effectively use the system, the cost involve here is so huge that most banks in Ghana including Amanano finds it very difficult to add that to their balance sheet.
4. One of the most challenges experienced by the bank in the use of computerised accounting system was the cost of implementing and designing the system. The whole process of computerisation at the early beginning rest on the proper designing of the system as well as getting the right components for the set up. The

cost involve in getting the best software designers are very high which most banks in Ghana are reluctant in getting into it.

5. The price for basic accounting packages or software nowadays starts at around €150 or less, but can ultimately increase to around €1000 for multi-user packages or software that are normally required by banks. Also most banks usually wants software written purposely for them, the cost involve in here could be thousands of euros depending on the type of package required by the bank.
6. We normally say time is money, although one of the most known benefits of computerised accounting system is time saving but it could also be time taken away from the bank's main activity of making money or sales. The time involve in installation and network problems that specifically puts business to a stand still was a worry to the bank.

4.10 Available Software in use by Amanano Rural Bank

4.11 Temenos T24, The Banking Software

At the moment, Amanano Rural Bank Limited is using Temenos (T24) banking software in its operations. This software is one of the world's leading, core package banking software that helps banks to deliver growth, manage risk and cost. Temenos has completed more than 600 successful implementations in over 120 countries around the world, encompassing banks from every banking sector. This experience combined with high levels of investment in the product of around 20% of revenues annually, makes T24 the most functionally rich, core banking system available today. Temenos' software products provide advanced technology and rich functionality, incorporating best practice processes that leverage Temenos' experience in over 600 implementations around the globe. T24 is a process-rich system, which delivers significant business benefits particularly in risk management, compliance, and front office support. (Temenos T24 product overview. 2012, 16)

4.12 T24 for Microfinance and Community Banking

This model banking software had been designed for micro finance banking institutions requiring a mature, flexible and affordable core banking system that is easy to install. It supports the specific operational and processing requirements of organizations engaged in retail, community and microfinance banking in emerging markets, micro leading institutions, smaller retail banks, large commercial micro finance institution (MFIs) and global network of financial intermediaries and credit unions. (Temenos T24 product overview. 2012, 7)

5 Findings and Data Interpretation

This chapter gives a vivid description of the findings that were obtained from the case company. It shows graphical representations of the responses obtained from customers, staff as well as management for easily understanding of the subject matter.

5.1 Findings on Bank Accounts at Amanano Rural Bank

The sample size chosen for the interview was fifty customers, out of which I got 35 responses. Out of these responses, 70% of total customers were between the ages of 25 and 46. 20% were above the age of 46 and the remaining 10% were less than 25 years of age. With this I found out that 80% of the customers held savings account whilst 20% of customers held business and current account. It was later realized that 65% of total sample size of hundred chose closeness of the bank as a reason for choosing to save with the bank whilst the remaining 25% were of the view that low minimum deposit rate compelled them to save with the bank. The others chose provision of loans to accounts holders and microfinance as a reason for saving with the bank. Also, most of the interviewees were within the working age group mainly because the bank is situated within the central business district of Kumasi.

5.2 Findings on Staff at Amanano Rural Bank

From the 10 staff interviewed, I had a positive response of 100% participation. Six (6) out of the ten (10) said they have realised a very tremendous changes in their daily working activities as it has positively improved since the introduction of the computerised accounting system. Three (3) said comparably, they do not see much difference thus, comparing the traditional or the manual banking system previously in place whilst the remaining one (1) said no improvement at all and is probably because of lack of computer literacy since the aforementioned staff was not privy to basics in computing. The response here is depicted in a form of a chart as shown below:

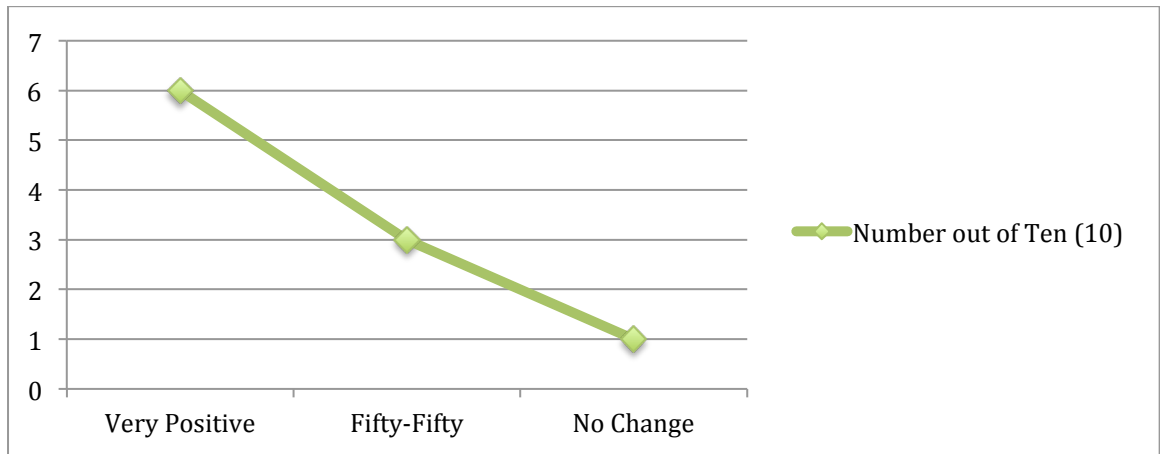


Figure 4. Staff Response.

5.3 Findings on Customers at Amanano Rural Bank

Out of the thirty-five (35) responses I obtained from the field, twenty-eight (28) indicated that they currently enjoy banking with Amanano Rural Bank Limited because of the introduction of the computerised accounting system. They said this has reduced the time they spend in the banking hall, processing of loans have also been quick, not to talk of deposits and withdrawals as well as opening of accounts. Seven (7) customers were of the view that there is an improvement but not as much as they expected but after interviewing the two groups, I found out that a number of similar and diverse views were expressed, which needed review. The chart below is a clear illustration of the study above.

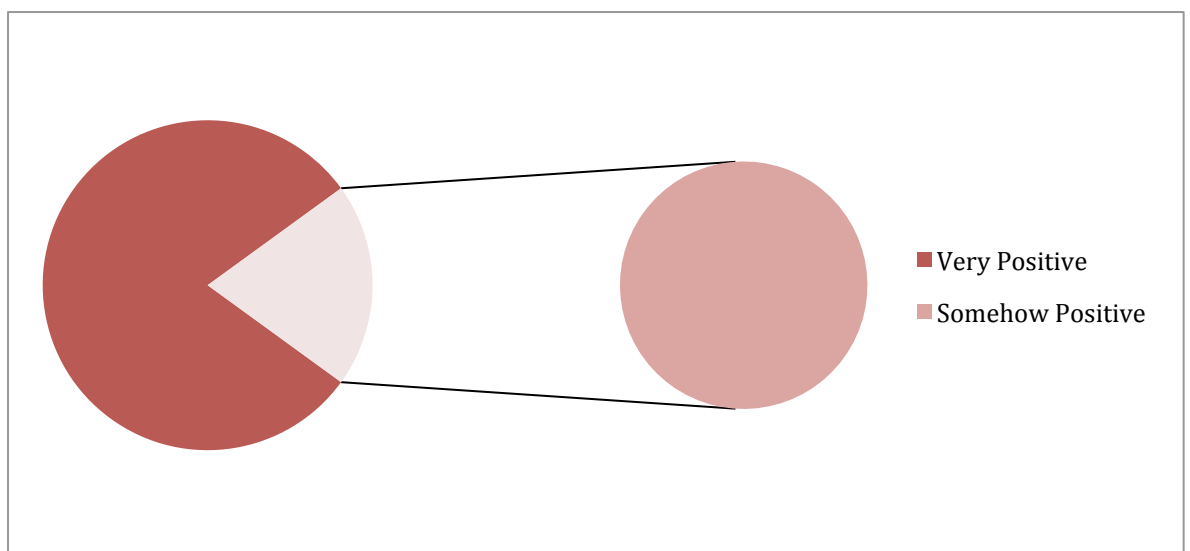


Figure 5. Customer Response.

It was established from 80% of the total responses received from customers that, they were very appreciative of the services delivered to them in areas such as accuracy in

opening and presentation of customer accounts balances as well as bank statements, whilst 20% of the remaining responses obtained from the customers view the system as somehow positive or accurate. Thus it can be inferred from the above illustration that most customers banking with Amanano had no problem with the way and manner of their banking transactions were being operated which then Implied that accuracy does not necessarily depend on whether the operating system in use is manual banking system or computerized banking system. When customers at the bank were asked about one importance factor they would ponder before choosing a bank to bank with, 70% of the customers from the bank said they would rather consider the most efficient customer service delivery through the use of computerized banking system. 30% said they would also consider automated teller machines if the bank can consider installing one, currently this system or machine is lacking in all the branches of the bank.

None of the customers sampled chose a bank using manual system as a factor that would influence their choice of banking with the bank. Beside the use of computerized banking system, customers overwhelmingly selected low amount required for initial deposits, lending rates or low interest rate and most importantly the number of times they spend in joining queues as an influential factor in making their decisions as to which bank to save or not to save with. Also about customer satisfaction, 75% of the customers said they were satisfied whilst the remaining 25% were dissatisfied with the overall performance. Thus from this findings it can be concluded that most customers saw the bank as a bank operating in a faster and quicker banking services due to the computerized banking system.

5.4 Findings on the Bank's Performance

Thirty (30) customers were interviewed to source their knowledge about the bank's performance, out of which 85% of the thirty had their anticipations of the bank's performance in the areas such as cash deposits and withdrawals, loan acquisition and issuance of bank statements unfulfilled whilst the remaining 15% thought their expectations had been fulfilled. The eighty-five percent (85%) out of the total customers whose anticipations were unmet by the bank, a little over 60% gave time wasting in long queues within the banking hall as the most pressing factor affecting the bank negatively. Some customers, about five percent (5%) of them cited or believe unqualified

staff is also a problem militating against the bank.

When the customers were asked about the number of minutes it takes them to make deposits and withdrawals from the bank, 70% of the sample size said it took them over an hour for them to be attended to whilst the remaining thirty percent (30) said it took them 35 minutes for the services to be delivered to them. When the customers were asked why it took a longer time for the bank to deliver these services to them, the following responses were given in a charted form below:

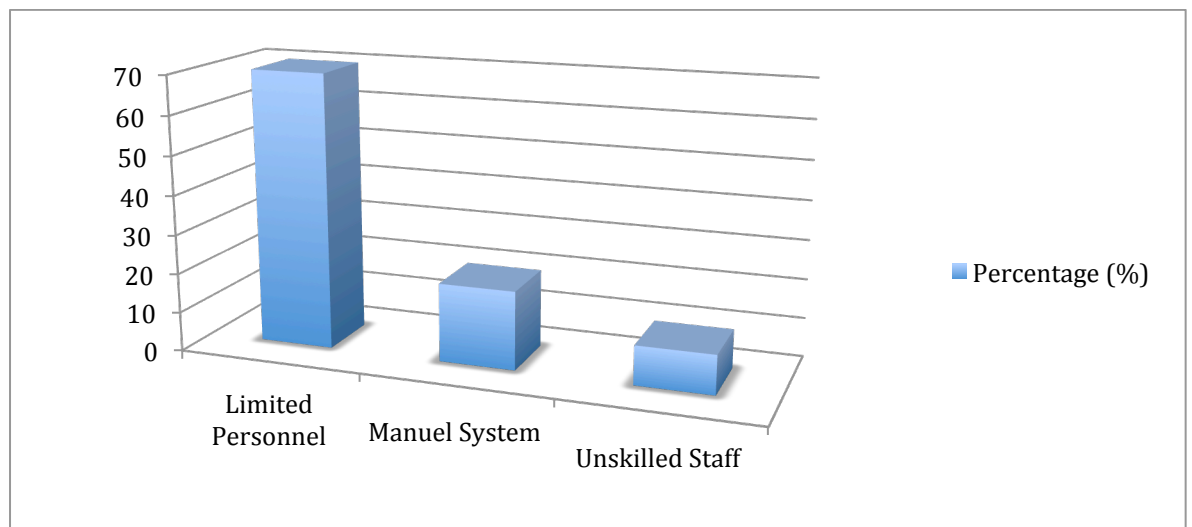


Figure 6. Factors affecting the bank's overall performance.

The chart above denotes 70% of the sample size indicated that the delay in the bank's performance is due to limited personal. 20% attributed the delay to manual system and lack of automated teller machines as against computerized system and places where automated teller machines are installed. The remaining 10% said they believe is lack of skilled personnel at the bank and is probably because of lack of prior knowledge in computers coupled with lack of in-service training that is making the staff perform below expectation. This analysis brings on a lot of interesting analogies. In short, most of the customers at the bank had their hopes concerning the bank's operations and service delivery unmet, others were also not happy due to the time they waste at the banking hall. The quantity and quality of staff at the bank were also questioned by some of the customers. This analysis indicates that the essential factor affecting the bank's performance in the areas of efficiency and customer satisfaction can be considered, as the fact that Amanano has been operating on a manual banking system for quite sometime now. So for customer satisfaction as well as their expectations to be met, the bank should rather rely on the computerized banking system and other technological banking system or services.

5.5 Findings on the Manual Banking System at Amanano

After when the customers were asked about the factors concerning the manual banking system that would encourage them to choose or not to choose a bank to save with the following responses were identified.

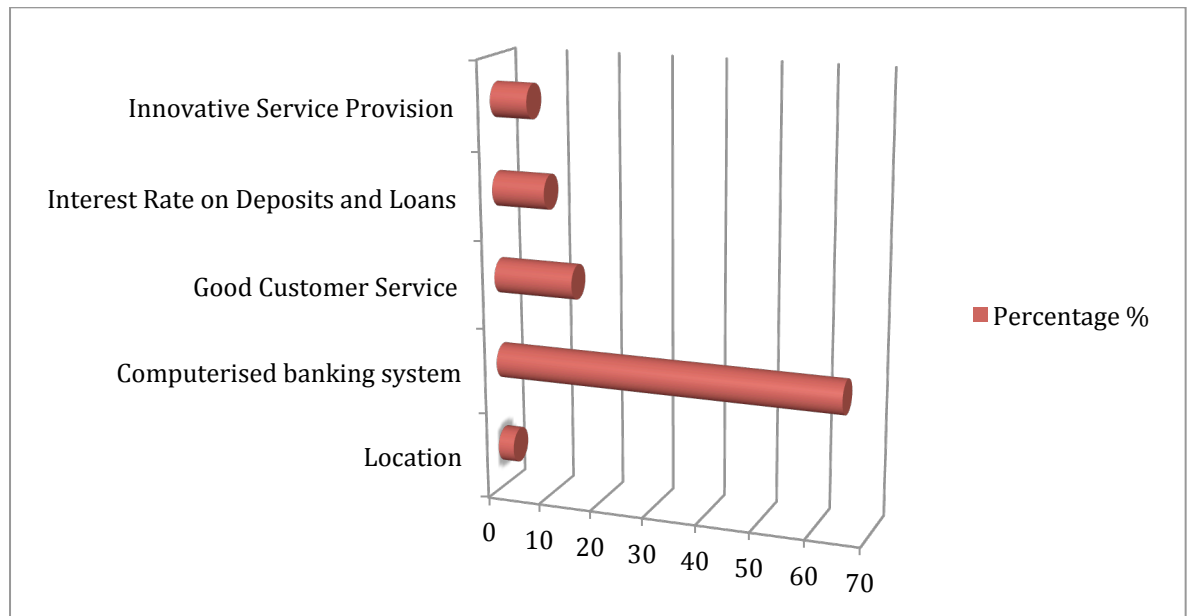


Figure 7. Factors identified before choosing a bank to bank with.

The above data shows that 65% of the customers interviewed consider computerized banking system as a key factor that would influence their decision in choosing a bank to bank with. 15% also chose good customer services as the bases before deciding to save with the bank. Ten percent (10%) of the customers were very much interested in the interest rate on deposits and loans and actually emphasized that the lower the interest rate the higher their level of attraction towards that bank. About the innovative service provisions, 7% said they would like to have prior knowledge about how creative the bank is and also the advice that would be given to them free of charge before, whilst the remaining 3% of the customers were much particular about the location of the bank. There was no indication that the customers would give credence to any form of a bank operating on a manual banking system as a factor that would influence their decision to bank with that bank. When the customers were asked whether they had banked with a bank that operates on a full scale manual banking system, I had a response of all the customers interviewed giving a 100% response as yes. Then I went further to ask about the problems and experiences they have encountered during their

days of doing business with such banks. The chart below shows problems that were identified.

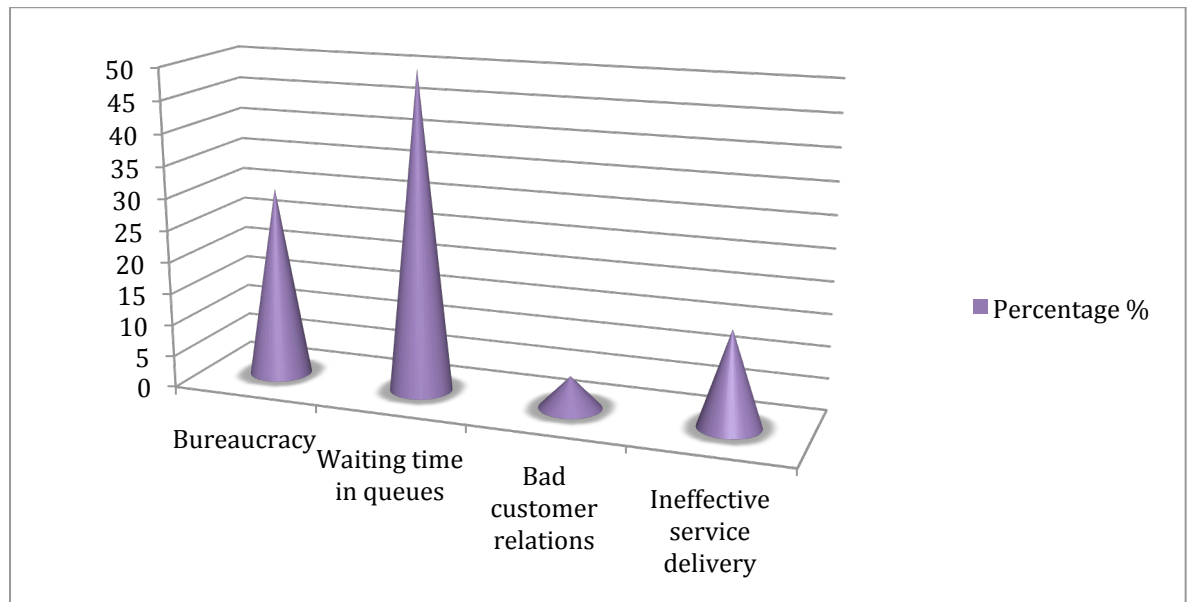


Figure 8. Problems identified in manual banking system.

Here, 50% of the sample size chosen which in one way or the other had saved with a bank using manual banking system was not happy about the waiting time in queues. 30% also stressed on the bureaucracy that manual banking system brings when banking with such banks of which 15% of the customers were dissatisfied with the ineffective service delivery associated with the manual banking system. The remaining 5% were not happy about the poor customer relations that come on as a result of operating with manual banking system. In all, none of the customers interviewed gave any better comment on banks using manual system that then shows the level of frustration customers go through when banking with such banks.

5.6 Findings on Computerized Banking System at Amanano

The results that were obtained from the bank concerning computerised banking system reveals countless number of interesting analogies about the perception the staff as well as customers have on banks using automated banking system. This positive customers and staff perception or response about banks operating in computerized system shows how technology has taken the center stage of every aspect of the banking industry and the entirety of the business world. The findings showed that there is a direct and positive relation between customer satisfaction, bank efficiency, time effectiveness and computerized banking or accounting systems.

The interview conducted indicated what customers and the workers have to say about the system, there was a clear indication that the system enables them to have easy access to their money and customer's information at any given time. 90% of the customers said the system is very fast, whilst some 85% of the customers identified the computerized banking system as providing them with convenience banking. When the workers were asked how efficient the system is in terms of cash distribution, deposits and account inquiries, there was a 100% response as very efficient. In reference to how accurate the computerized banking/accounting system presents account balances and statement of account, 95% of the customers said very accurate whilst 5% were undetermined. The following is the result I had when the customers were asked about the number of minutes or hours it takes to make deposit and withdrawals since the introduction of the computerized accounting or banking system.

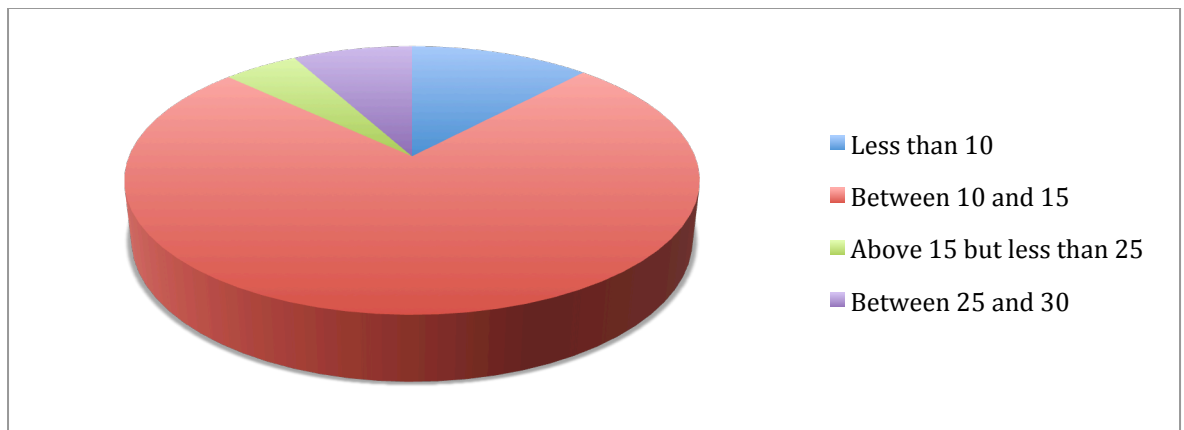


Figure 9. Time taken for deposits and withdrawals.

The chart above indicates how technology has improved and facilitated banking activities in recent times, it is evidently clear by the fact that customers take very limited time in making deposits and withdrawal at the bank. The level of customer satisfaction attached to the various services offered by the bank as a result of the introduction of the computerized banking system was extremely incredible. The fact that 85% of the customers and staff sampled had no problem whilst 15% said they had problem with the system is an excellent indication that the system is well accepted by both customers and the staff at large. The problems indicated by both group were that the system occasionally goes off unpredictably. Also since the energy system or the electricity in the country cannot be wholly depended on, frequent power shortages are also a big problem to deal with. Nevertheless, customers and staff were very happy with the computerized accounting/banking system that was recently introduced by the bank. The anal-

ysis here shows how subtle bank customers have become in terms of innovative banking technology that can succor their engagement and facilitate the bank service delivery to them

5.7 Findings on Internal Control and Security System at Amanano

It was realized during the research that since the introduction of computerized accounting system in the bank, the profit margin has increased considerably which is a good sign that there is some sort of other benefits that are been reaped by the bank internally apart from the external ones being brought in by customers. A typical example is in the year 2010 and 2011 there was an increase of about 43% in net income during those years and an increase of about 31% in net profit before tax in the same years.

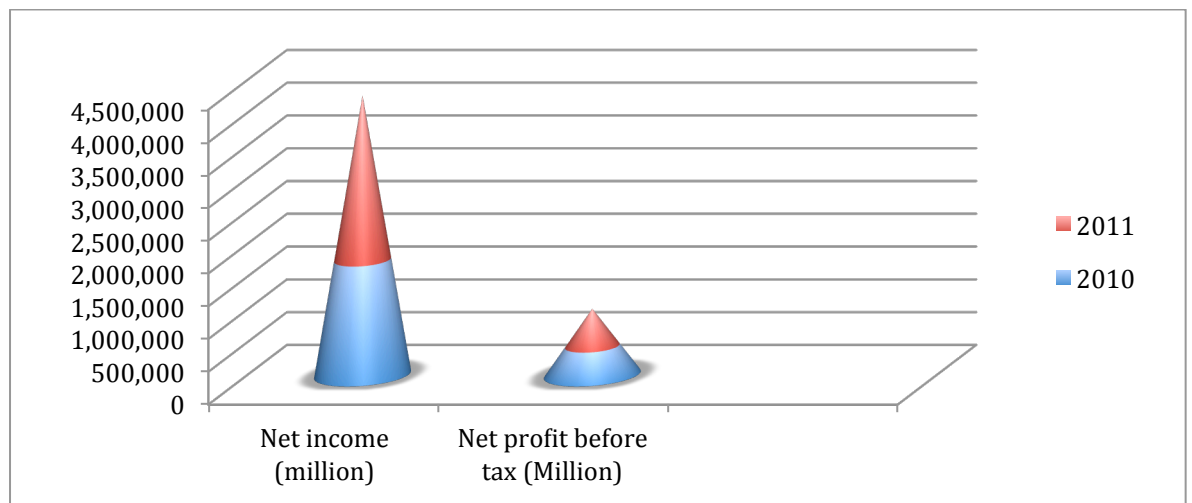


Figure 10. Changes in net income and net profit for the years 2010-2011

The chart above shows that during the year 2010 net income increased from 1,755,521 million Ghana cedis to 2,505,271 million Ghana cedis in 2011, also during that same period net profit before tax increased from 438,164 million Ghana cedis in 2010 to 569,972 million Ghana cedis in 2011 respectively. This benefit did not just come about as the interview that was conducted revealed that there were a number of security controls in place that help prevents an unauthorized outflow of funds. The following security features are currently in use by the bank.

5.8 Password

Password as defined by business dictionary.com is

As a sequence of characters (letters, numbers, symbols) used as a secret key for accessing a computer system or network. Passwords are used also for authentication, validation, and verification in electronic commerce. (Business dictionary.com, quoted 15.04.2014)

This requires a staff or an official of the bank to key in some characters known to the staff concern alone for official purposes only. This code has been put in place by the bank to check the authentication of anybody who enters the computerised accounting system at a particular period of time and for what transactions or activities that went on during that period. A very important aspect of this section of the security features is that the system automatically prompts the staff to change their password from time to time basically annually. This helps in curbing any manoeuvring within the organisation for the purposes of wrongdoing such as fraud and other forms of financial malpractices.

5.9 Separation/Segregation of Duties

Business dictionary.com defines this as a “Control policy according to which no person should be given responsibility for more than one related function”. This for example means that, the persons responsible for receiving cash who are normally called tellers or cashiers at the bank should not also be responsible for micro finance activities. Its also serves as a method and procedures instituted within the bank to check all activities that are being performed by the various departments within the set up by the departmental heads. By so doing, this helps management to know where exactly the problem is coming from and the person responsible for it. This separation of duties aided by the use of accounting software has helped a lot in reducing fraud as well as concealment of financial malpractices in the bank.

6 Discussion

6.1 Summary

This research was carried out to ascertain the effects computerised accounting system has on banks in Ghana precisely rural banks, it's financial reporting and other banking transactions. In doing so, the study brought out the benefits and problems associated with the use of computerised accounting systems. Benefits such as accuracy in issuance of bank statements and fast processing of financial statements as well as easing the highly cumbersome auditing procedure were revealed by the research. Since wherever there are advantages the likelihood of finding disadvantages are very high, problems such as lack of expertise, high installation cost, unstable power supply and software failure that normally put the activities of the bank to a stand still were also revealed by the study. As electronic commerce is now regarded as the panacea for the survival of any modern day business let alone the banking industry, comparing the manual banking system to the computerised accounting systems was considered a very pivotal point for the study as well as the case company.

Moreover, nowadays businesses are constantly looking for ways and means to satisfy their customer needs for better returns and one of the ways is technological advancement, which has proven beyond all reasonable doubt as the most cost effective method. It was also realized during the research that customers were very much concerned with the bank's deposit and lending rates. This was perhaps the rational behind why the number of accounts holders in the various banks in Ghana have increased tremendously since banks in Ghana have consistently been reducing their lending rate while also increasing their deposit rate.

There were some revelations concerning the workers in the bank. Some customers complained bitterly about the customer relation of some of the workers and so could not fathom why people hired to work in such a competitive industry could behave towards customers in such an awkward manner. They even questioned their qualifications and training skills and wondered if some sort of in-service training has been given to them regularly. Among the observations made the most critical were in the area of

efficiency, customer satisfaction as well as time effectiveness. It was also observed that customers expected more innovative and an improved banking services from the bank in the area of customers relations, installation of automated teller machines to reduce the number of queues for withdrawals. However, upon further examination with customers from nearby banks that operated automated teller machines, I realized that their customers were pleased with their service delivery and their operational performance.

Finally, it was also observed that banks in Ghana used computerized accounting for preparation of trial balance, profit and loss account, financial reporting or annual balance sheet. The introduction of this computerized banking system has improved banking activities in a very convenient way, which has resulted in most banks making huge profits at the end of each financial year.

6.2 Validity and Reliability

I was motivated by the case company to come out with a very reliable data, which reflects the situation currently on the ground. In order to come up with such report, I tried as much as I could to ascertain the reliability and validity of the data collected from the field for analysis. Reliability as defined by (Joppe, 2000, 1) is given as:

The extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable.

Validity refers to the extent to which a study truly reflects or measures the specific concept that the researcher is trying to assess. (Campbell and Stanley, 1966), Joppe (2000, 1) gives the following explanation as to how validity in quantitative research is:

Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit "the bull's eye" of your research object? Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others.

Referring to the reliability of the study, I made sure information I gathered was reliable and cross- checked before putting it up into writing. When collecting information from my respondents, I was very particular about the verification of the information I gathered and so was always comparing it to different information sourced from other quarters. In order to be sure of the results and going forward, I designed questionnaires

that can be found at the attachment and interviews were conducted to assess general perceptions of both customers and management about the computerization process, which has taken place. I can emphatically states that the information in this study is reliable for further researchers, rural banks in Ghana who are yet to be migrated into the Terminus 24 (T24) software and especially the case company in order to improve on its operations.

6.3 Conclusion

From the foregoing and the observations made during the field interview process, I can emphatically state that banks that are still using manual banking system as a means of delivering services to their customers have not been apt in some situations such as how fast these services are conveyed to their customers or the appropriate quarters. Some of the branches in Amanano can be found in this category and it might probably be the fact that the bank recently introduced or started a major computerized networking program. This computerization was started at the bank's headquarters and it has gradually been extended to other branches. The aim was to uplift the standard of service delivery in order to compete effectively and also for satisfying customer needs. Ghanaian banks operating on computerized banking system and automated teller machines offer an improved service delivery, efficient and faster services to their customers which makes them highly competitive within the banking industry. It might probably be this competitive advantage that is urging the banks on as against its competitors in the banking industry who do not operate or offer the aforementioned services and this has accounted for the introduction of automation banking system by most banks in the country.

Government of Ghana has assisted most Rural Banks to migrate to the software called Terminus 24 (T24), the aim is to make all of them get into the system within the shortest possible of time. The introduction of computerised accounting system into the banks has its own challenges just like the inception of any other programme or project at the first instance, problems such as installation cost, unstable power supply, computer failure, lack of expertise were expected. Nonetheless, the benefits that can be derived from the use of computerized accounting system as stated earlier in this report far overshadow its disadvantages. All the commercial banks in Ghana are computer-

ized, some of which had been computerized for almost twenty years and so the researcher saw no benefit in accessing them. At this venture, I can say there is an urgent need for all the Rural Banks in the country to migrate to the use of computerized accounting system.

6.4 Recommendations

The research gave a number of indications upon which the following suggestions or recommendations are presented to the industry players, Rural Banks in Ghana precisely.

1. Even though generally computerised accounting system reduces cost such as labour, stationary, auditing and other related expenses the were no such records being kept by most banks in the country and I think the government through a directive from the bank of Ghana should be clear on this so as to enable management in the various bank to document such records.
2. It is highly recommended that a more thorough cost benefit analysis be undertaken before other Rural Banks venture into this business of computerisation in order to be aware of the benefit before hand. This will help them to know whether it will be profitable to go into it or maintain the existing manual banking system.
3. There is a very lengthy time involve in the design and installation of computerised accounting system especially during the trial period and the best way to reduce such unnecessary time is to test the programme in phases rather than waiting until the whole installation system is finished before it is being tested.
4. There should also be standby computers or other related facilities as well as other software backups that can be used in times of an urgent need for such replacement.
5. It is also recommended that banks in Ghana particularly Rural Banks hire highly trained experts in the field of information technology to manage any unforeseen contingencies that can disrupt the smooth flow of the banking activities. Such

future eventualities can be frequent power failure, which can create software problems.

6. Amanano Rural Bank should endeavour to install Automated Teller Machines at most of its branches especially at its headquarters and the one in Mbrom in order to reduce the number of queues for withdrawal services by customers.

It is my deepest hope that the above recommendation shall be given the needed attention it deserves in order to help the smooth operation of the banking activities in the country.

6.5 Suggestions For Further Researchers.

I strongly suggest the following for future researchers who might be interested to research along this path:

1. They should investigate about the impact terminus 24 (T24) has had on the rural banks so far since its introduction into the rural banking system in the country.
2. There should also be some findings about the extent to which rural banks in Ghana are linked and if possible, to the Inter banking payment system amongst both the rural and the commercial banks at large.
3. Other studies can focus on how the emergence of Internet banking in the country is helping the customers and also what the government is doing to help in the area of electronic payment system.

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Attachment 1. Questionnaire

What is your age group? Please tick appropriately:

Less than 26 year Between 26 years and 45 years Above 46 years

What category of account does your account fall? Please tick as below:

Private Business

What type of accounts do you maintain with the bank?

Savings Account Current Account

At what time or month was your account opened?

(Specify please).....

Why did you choose Amanano Rural Bank Ltd?

(Specify please)

Have you exceeded your expectations in choosing this bank in the areas of deposit, withdrawals, loan acquisition and preparation of bank statements?

Yes No If no,

What has gone wrong and can you specify please?

.....

How is Amanano Rural Bank Ltd doing in processing of monthly salaries, cash deposits, withdrawals and issuing of bank statements?

- a. Very efficient
- b. Efficient
- c. Inefficient
- d. Highly Inefficient

What can you say about Amanano's preparation and presentation of account balances and bank statements in terms of accuracy?

- a. Very accurate
- b. Accurate
- c. Inaccurate

What degree of satisfaction do you attach to Amanano Rural Bank Ltd.'s service delivery?

- a. Extremely satisfied
- b. Satisfied
- c. Somehow satisfied
- d. Dissatisfied
- e. Extremely dissatisfied

How long did it take to get your request in the areas of cash deposits and withdrawals services delivered by the bank?

(Specify please)

What do you think has been the rational behind such time interval?

(Specify please)

What do you think about banks using Computerized Accounting System in terms of an improved and efficient customer services?

(Please specify)

Comparing manual banking system and computerized accounting system which one do

you think Amanano rural bank should channeled all its resources on and, why?

(Please specify).....

Do you think Automating Amanano's operations will benefit the bank in some ways and how?

If yes, why? (Specify)

If no, why? (Specify)

14. What TWO most important factors would you consider before choosing a bank to save with?

- a. Location of the bank
- b. Quality and efficiency
- c. Efficient customer service
- d. Varieties of Services provided by the bank
- e. Deposit and Lending rates
- f. Manual Banking System
- g. Computerized Accounting System and ATM machines.

Attachment 2. Products and Services.

Amanano Rural Bank LTD. offers the following products and services:

- Savings Account
- Current Account
- Fixed Deposit
- Susu Savings Account
- Microfinance Savings
- Salary Loans
- Business Loans
- Overdraft
- Salary Advance
- Microfinance Loans
- Auto Loans
- Clearing Financing
- Susu Loans
- Funeral Loans
- Apex Link Money Transfer
- Western Union Money Transfer
- Apex i-trans

LOANS

- Business loans/Overdraft
- Salary Loans
- Salary Advance
- Auto loans - car loans for individuals and G.P.R.T.U members
- Clearing Financing - loans to clear goods from port
- Cocoa loans/Agric loans
- Funeral loans – loans to perform funeral rites
- Nkosuo Micro Finance Group loans – group loans
- Anidaso Susu loans – individual Susu loans with flexible terms
- Me Dakyee Boafo loans - group loans to purchase products like dryers, big machines etc
- Boame school loans – for payment of admission and school fees
- Shares – to become an owner of the Bank (0.10Gp per share)

Attachment 3. Overlay matrix.

Research Problem (RP.)	Investigative Questions (IQ.)	Theoretical Framework. (The concepts & models)	Data Collection.	Results. (Hypothesis of anticipated results)
<p>The main research problem is that, banks in Ghana seem to be performing below expectation and this has affected customer's participation of which some of them have been left with no other option than to be selective and extra vigilant in their dealings with the banks.</p>	<p>1.What are the factors behind the growth in the use of computers? 2.What are the different software products and their applications? 3.What are the benefits of the computerized system in comparison with the manual system? 4.What are the cost effects of operating a computerized accounting system?</p>	<p>1.Accounting Systems 2. User-Friendly Software 3. Accounts receivable Software 4. Accounts Payable Software 5. General Ledger 6. Chart of Accounts and Accounts packages</p>	<p>Interviews, articles and books + primary and Secondary data collection.</p>	<p>Recommendations were given based on the information gathered from the field of study.</p>