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Computerization of Rural Banks in Ghana-Issues and Challenges

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Abstract: This study assesses issues and challenges encountered in a computerization project being carried out by the ARB Apex Bank to connect rural and community banks in Ghana. Computerization of banking has been going on in the country for some time now. Unlike the commercial banks, the rural banks lag behind with regards to computer and networking technologies. The ARB Apex Bank therefore embarked on the project to make the benefits of such technologies available to member rural banks. The study selected some rural banks engaged in the first phase of the project. Fifty respondents sampled from staff of the selected banks and experts involved in the project, were interviewed. The study concluded that, on the whole, the project was well designed and implemented; envisaged challenges were adequately specified and catered for and that the first phase progressed successfully. Staff beneficiaries were found to be actively involved in the project and majority of them agreed that the project was within time and budget. The study identified that, on completion, the project will enable the rural banks compete favourably with the commercial banks in the financial market. This will lead to improved service delivery to customers and greater customer satisfaction. In addition, complete computerization and networking will lead to improved monitoring of rural banks in order to reduce financial malpractices. The project will also promote intra/inter bank transactions, peer interaction and peer monitoring among the networked members. The aggregate returns will bring greater efficiency, lower cost of operation and increased profitability and sustainability to the Ghanaian rural banks.

Keywords: Banking computerization, challenges in computerization, Ghana rural banks, rural bank computerization issues,

INTRODUCTION

Over the past decade there has been a concerted drive towards computerization in Ghana due to the rapid advancement in Information and Communication Technology (ICT). Computers have provided organisations with alternative methods to their sales, accounting, payment and personnel management activities. Computerization is the basis on which the future of the Ghanaian economy, particularly the financial sector is being planned. Computerization of the activities of banking institutions is therefore the norm of the day, worldwide. Unlike the commercial banks, rural and community banks lag behind with regards to the use of such technology, specifically computers and networking.

Rural banking is the process of conducting banking transactions out in the country where bank branches are too far away to be of use. Rural banking is popular for very small towns and farmers who live far away from areas of larger population and cannot make the drive to these locations whenever they need to use banking services. Typically, an agent of the bank will visit these rural locations and offer to make transactions in an official capacity Ampah (2010). In Ghana, rural banks have been given the basic responsibility of providing banking services to the rural and community Folks. These services include banking and generating interest for funds deposited, making loans available to qualified rural people especially those in agri-businesses, petty trading and small scale manufacturing (Bank of Ghana, 2000).

In recent times, the dynamism within the Ghanaian banking industry has generated high levels of competition (Buchs and Mathisen, 2003). However, regardless of the advancement in ICT, much of the operations of the rural banks are still undertaken manually. This has thereby reduced their competitive edge in the industry. It has therefore become common to see the big commercial banks extend their activities to cover target markets reserved for rural banks in order to increase their customer base, thereby bringing keen competition to the rural banks. For the rural banks to be able to compete well, they have to enhance their services by improving upon their technical infrastructure and human resources. The rural and community banks need to be formally integrated into the mainstream banking services. By regulation, they have to be able to comply with the central Bank of Ghana's policies of cheque clearing and management

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information report sending. These requirements led to the formation of the Association of Rural Banks (ARB) and later the ARB Apex Bank Ltd. (Andah and Steel, 2003; Addeah, 2001; Agyei, 2001).

All modern trends show that banking is more profitable through the use of technology (Idowu *et al*., 2002). To this end, as well as being a requirement from the central Bank of Ghana, the ARB Apex Bank Ltd. has initiated the computerization of all the rural banks to facilitate efficiency and effectiveness. However, as in all projects, the implementation has brought along challenges that need to be discussed and addressed. This study assesses the challenges that have arisen in the implementation of the computerization program of the ARB Apex Bank.

The study seeks to answer questions as to whatthecomponents of computerization of the rural and community banks are, whether the implementation plan has gone according to schedule, what factors are hindering the successful implementation of the project and what solutions there are to address such implementation constraints. To this end, a survey was conducted on some of the staff involved and their responses reported herein (Botchway-Anang, 2011).

The rural banking concept in Ghana: Although banking penetration ratio in Ghana is still currently low by international standards (at about one bank branch per 54,000 people), the situation was worse in the 1970s due to the strong urban bias. For example, even though the Greater Accra region represents only 13% of the country's population, it commands 35% of the total national commercial bank concentration (Buchs and Mathisen, 2003). Even at the urban centres, most of the potential microfinance clients could not access the services of the commercial banks because their conditions are outside the means and capacity of the poor. This rural banking and microfinance have been studied and discussed for various other developing nations (Hennie *et al*., 1999; Amha, 2000; Robinson, 2001; Gallardo, 2002; Bekele and Amha, 2002; Ambanta, 2012).

In 1976, the central Bank of Ghana issued a regulation allowing rural communities to establish locally-owned unit banks with a much lower minimum capitalization than regular commercial banks (Nair and Fissha, 2010). The rural banking concept was thus introduced to bridge the rural-urban gap of financial transactions (Addo, 1998). Since their introduction, the rural banks have been at the fore-front of developing pro-poor innovative financial products and modifying their operations to suit the specific needs of the rural farmer, the underserved micro-enterprises and other low income operatives of the rural economy (Obeng, 2009; Owusu-Ansah, 1999). With focus on rural clients, one of the tasks that face them is how to manage risk associated with doing business with the poor in order to achieve social missions of poverty outreach while still remaining profitable (Bank of Ghana, 1997; Anin, 2001; Tsamenyi and Uddin, 2008; Ghana Micro Finance, 2012; ARB Bank, 2012).

The objectives of the rural banks include to:

- Provide basic financial services to the poor.
- Play a financial intermediary role by mobilizing financial resources from within their area of operation in order to support viable ventures and ultimately improve the socio-economic well-being of the people in the communities they serve.
- Inculcate banking culture and attitude into the rural folks in order to reduce the condition of high volume of liquidity circulating outside the Ghanaian banking system (through mopping up idle cash in the rural economy and redirecting it into other productive ventures).
- Serve as channels through which government resources would be conveyed to the local authorities.

The rural banks were expected to operate in an environment of high illiteracy rate and lack of financial sophistication. To a large extent they were expected to depend on mobilized deposits instead of government funds in order to avoid high transaction cost and default rates associated with such government subsidized funds. As rural development institutions, rural banks require effective local participation, hence they are to be owned and managed by the communities within which they operate. The rationale behind the community ownership is to promote community identity, encourage local patronage and support the processing of requests for facilities and loans (Bank of Ghana, 1997).

Growth of rural banking: With the initial bank established in 1976, the number of rural banks rapidly increased to 34 by 1982, 117 five years later and 133 by 1998 (Osei-Bonsu, 1998). The rapid rise in the number of rural banks and their proliferation throughout the country could be linked to the enthusiasm and the keen interest shown in the concept by the rural communities. The period between 1999 and 2000, however, saw a drop in the number due to the central bank closure of 23 of them described as "distressed" banks (Ampah (2010). As at 2007, 125 rural banks were in active operation with a total of 460 branches nationwide. The total number of rural banks operating in the country now is 132 with 564 branches (Kowubaa, 2000). In 1981 a non-profit and non-governmental organisation, Association of Rural Banks, (ARB), was formed to

serve as a forum for the rural banks with the key function of giving various training to their various target groups.

Emergence of ARB Apex bank Ltd.: The International Fund for Agricultural Development (IFAD), the World Bank (through IDA) and the African Development Bank initiated and funded a project (referred to as the Rural Financial Services Project, RFSP) in Ghana that sought to promote growth and reduce poverty in the rural areas. A key component of the project was the creation of an apex bank that will be the "mini central bank" for the network of rural banks and provide financial, managerial and technical support to them.

This led to the incorporation of the ARB Apex Bank in 2000, as a public limited liability company with the rural and community banks as its shareholders. The ARB Apex Bank was set up to serve as a mini central bank for the rural banks because the central Bank of Ghana (BoG) realized the need to strengthen and monitor the rural banks. The Apex Bank's main role is to provide technical, financial and managerial support and ensure effective supervision to the rural banks under the umbrella of the main central Bank of Ghana (Andah and Steel, 2003).

The Apex Bank has been assigned to perform certain specific functions which include:

- Serving as a mini central bank
- Providing cheque clearing services
- Providing specie movement/management services
- Providing inspection services
- Providing funds management services
- Providing support to deficient rural banks

The ARB computerization programme: Currently, the Bank of Ghana has implemented a cheque clearing system which is computer-based over a Wide Area Network (WAN). The ARB Apex Bank Ltd., on the other hand, does not even have a computerized network system with its stakeholders; one has to physically go to the nearest ARB Apex Bank Ltd. with cheques to do manual clearing, leading to late clearing and poor services to customers!

In order for the Apex Bank to efficiently and effectively reach out to the rural banks, the RFSP project included a major component aimed at computerizing and interconnecting the Apex Bank headquarters, its regional branches and clearing agencies, as well as the headquarters of all the member rural banks. This component also called for the installation of banking software, a funds transfer interface via SWIFT and an electronic link between the Bank of Ghana and the Apex Bank headquarters (a sub-project called the Ghana Rural Bank Computerization and Interconnectivity Project, GRBCIP).

GRBCIP project rationale: The Ghana Rural Bank Computerization and Interconnectivity Project (GRBCIP) represents an important aspect of strengthening and improving the capacity of the rural banks to deliver financial services. It allows the rural banks to offer and support new banking services, credit services and financial instruments. The project is to concentrate on building a technical infrastructure intended to open the door for a broad range of new financial services and capabilities that will directly benefit not only the small rural farmers but also most of the people of Ghana.

The project is to train and assist the rural banks in transitioning to automated and standardized banking operations. It will also deploy and implement the necessary banking software and technical infrastructure that will interconnect the rural bank headquarters with corresponding branches and agencies and with the Apex Bank headquarters. It is also to provide some limited voice communications.

GRBCIP project description: The objectives of the GRBCIP are three-fold:

- Continue and complete the computerization of rural banks in Ghana.
- Install a WAN to link all rural bank headquarters and agencies.
- Provide a reliable network for implementing electronic payments/funds transfer capabilities among the rural banks.

These three components are to do the following:

- **Strengthen the competency of rural bank staff:** This task is to focus on the change management/mindset required to transform the current manual operations of the rural banks into a consistent and automated process. This will involve data analysis and data conversion, computer literacy training and training in the use of computerized banking software.
- **Install computer hardware:** This will involve planning and installing the necessary servers, redundant storage, tape backup facility and corresponding uninterruptible power supplies at the Apex Bank headquarters that will run the standardized banking software. It will also configure and install the LAN, workstations and printers at the rural banks.
- **Install banking software:** It is also necessary to configure and install banking software in the central server and the rural banks. One will also have to migrate the banks' data into the selected software. The installation and migration will be coordinated for specific rural bank headquarters and all of their branches and agencies.

- **Strengthen the technical skills of the Apex bank technical team:** This task is to strengthen the technical skills required by the Apex Bank technical team through a training programme. This training programme is needed to build up institutional knowledge and expertise on the hardware as well as on the selected banking software.
- **Design and implement a wide area network:** It is necessary to design and implement a WAN that will interconnect the rural banks with the Apex Bank using VSAT satellite network in a star topology. The VSAT network is also to provide voice communication interface to the rural banks.
- **Install a reliable secondary power source:** For back-up power, one would have to install stand-alone generators, if necessary, based on the availability and reliability of electrical power in each rural bank.

Project implementation challenges and issues: The computerisation of the rural and community banks under the Apex ARB has been scheduled over a number of years and the project has its own challenges which if not managed properly will lead to implementation failure. Some of the issues and challenges include the following:

- **User participation:** Users of the computer systems need to be involved from the inception of the computerisation programme. They must be made aware that they own the system and that its successful implementation is their responsibility.
- **Stakeholder commitment:** Computerising the banks requires total commitment from every stakeholder, including top management, staff and users. Commitment from steering committees topush for the timely implementation of the computer systems is a key factor and lack of it could lead to system implementation failure.
- **Planning:** Failing to plan or poor planning often leads to system implementation failure and this need to be avoided by top management. Management must ensure that before deciding to implement the system, time ha been spent on planning the process from start to finish.
- **Meeting key milestones:** In implementing computerized systems, top management must ensure that key deliverables specified are met. Keymilestones are critical phases of the system that must be attained for the successful implementation of the entire system.
- **Lack of resources and training:** Resources such as finances, human and other logistics are vital for the successful implementation of any system. Top management needs to ensure that resources needed are available and that appropriate training is given to staff that will operate the system so that, eventually, maximum benefits can be derived from the system.
- **Request for Proposal (RFP) requirements:** In many situations before computerized systems are implemented, management prepares documents, called RFP, detailing the functional requirements or specifications need for the system. Lack of adherence to these requirements could lead to failure.

Current status of GRBCIP programme: With proper implementation, computerization provides immediate access to accurate information that helps in making decisions, increasing efficiency, improving profitability and controlling costs. This is the basis for the Ghana Rural Bank Computerisation and Interconnectivity Project (GRBCIP). Its underlying objective is to strengthen and improve the capacity of rural banks to deliver financial services.
In its first years, the following milestones have been achieved:

- The Globus banking software has been installed and is currently being used at Apex Bank headquarters and regional branches.
- The eMerge banking software has been installed and is currently being used at 15 rural banks throughout the country.
- A SWIFT interface has been implemented at the Apex Bank headquarters
- The Apex Bank has been linked electronically with the central Bank of Ghana.

METHODOLOGY

As stated earlier, this project seeks to bring out the challenges being faced by the ARB Apex bank in omputerizing its member rural banks. To have a better view of the challenges and address our research questions, we needed to hear from the stakeholders themselves. Accordingly, we conducted a survey on some of the staff involved in the implementation process and their responses reported here. The study is both quantitative and qualitative in approach. It adopts a cross-sectional comparative analysis approach by sampling a cross section of respondents from workers/management of rural/community banks in Ghana. Information generated from the survey is then collated, analysed and the outcome used for the research objectives (Zikmund, 2000). Views of some experts in the banking, ICT and computerization industries were also sought for such information as may be important to the success of the study.

Population and sampling procedure: Two types of population are involved in the study; the staff and management of both ARB Apex Bank Ltd. and rural banks. In all, 15 rural banks were covered out of which 50 respondents were sampled and interviewed. Both non-probabilistic and probabilistic methods involving purposive and systematic sampling procedures were employed for sampling respondents. For example, purposive sampling approach was used to generate the list of rural bankscurrently involved in the computerisation programme, while systematic sampling procedure was used to get the required sample size of respondents. The sampling frame used for the rural banks was accessed from the Apex Bank, while the list of staff/management respondents was generated from the sampled rural banks as well as the ARB Apex Bank.

Collection of data: Data was collected from two main sources; primary and secondary sources. Secondary data refer to empirical data obtained from existing sources. Such data were obtained from various sources such as the ARB Apex Bank Ltd. and member rural banks sampled for the study. Other sources of secondary data were books, periodicals and articles from newspapers and magazines as well as information from the Internet, such as the websites of the organisations. Primary source data was obtained from administration of questionnaire and personal interviews conducted. We believe, with reasonable conviction, that the information obtained from these sources is reliable and can be used for our study.

Data analysis: The analysis of the research data was based on a combination of qualitative and quantitative methods. For the quantitative aspect, we used tables and graphs where necessary to illustrate the frequencies generated through the application of Statistical data Package for Social Sciences (SPSS). We then identified the important issues covering all the possibilities for the qualitative part of the analysis. This is in conformity with the aim of qualitative analysis as in the opinion of Punch (1998).

In presenting the analyses of the data collected, we focus on discussing the results in an attempt to achieving the objectives and answering questions being addressed by the study. The results are presented according to the structure of the questionnaire and interview guides used during the study.

These guides cover a wide range of issues based on the computerization programme embarked on by the Apex Bank.

Socio-demographic information of respondents: As stated earlier, 50 respondents drawn from 15 rural banks were interviewed. Out of the number, 60% were males and 40% females. On category of respondents, 50% were junior staff, 30% senior staff, while 20% represent management (Fig. 1). The study also found out the number of years the respondents have been with their various banks. Out of the total respondents, 82% have been with their respective rural banks between 5 to 10 years, 14% between 11 and 20 years, with only 4% have been working with their banks for more than 20 years.

We sought to know which category of staff usually experience the longest stay with their respective banks and which experience the shortest stay. From Table 1, the junior staff stays the longest; 22% of them having stayed with their banks for 21 years and above. The table also indicates that all the management staff have been working with their banks for 10 years or less.

Aspects of project implementation: We tried to find out whether the implementation plan of the programme is progressing according to schedule. Our concerns include issues like level of staff involvement in the programme, the stage at Which staff got involved, the role staff played at each stage, the reliability of supplier, frequency at which project progress has been communicated to beneficiaries, whether the project was completed within schedule/budget and whether the original strategy is being followed.

On involvement in the IT project, 64% of the respondents answered in affirmative, while 36% have not had the opportunity to participate in the project (Table 2). The conclusion could therefore be drawn that majority of the staff have been actively taking part in the computerizations program. However, the 36% representing those who do not take part is significant enough and must thus be a source of worry to the program implementers.

Staff were also given the opportunity to participate in three stages of the project including the MIS system, networking and software development. Of the 50 respondents, 46% answered they were involved in the MIS system, 26% participated in networking and 28% in software development (Table 2).

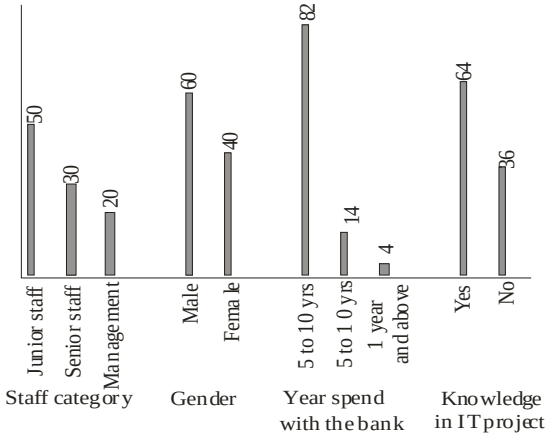

Fig. 1: Background of respondents (%)

Table 1: Category of staff/ number years spent with bank

Category of staff	Number years spent withbank/response (%) 5 to 10 years	11 to 20 years	21 years and above	Total (%)
Junior staff	49	29	22	100
Senior staff	43	43	14	100
Management	100	-	-	100

Table 2: Participation in different components of the project

Issue	Response (%)
Employee involvement in project	
Yes	64
No	36
Type of IT project involved in	
Implementing MIS system	46
Networking	26
Software development	28
Role of respondent in it development project	
Project manager/coordinator	54
End user	34
IT representative	12

The study also checked from the respondents the component of the project they were involved in. Three components of the project namely, manager/ coordinator, end user and IT representative were provided as options. Responding, 54% stated that they were coordinators or managers, 12% were IT representatives and 34% end users (Table 2).

As stated earlier, the computerization project embarked upon was to meet certain standards. To a large extent, these standards could determine whether the project implementation is moving smoothly or otherwise. These standards include ability to be within budget and specification, whether individual beneficiaries were trained as well as timeliness of completion.

On completion of the project within budget, 86% of respondents agreed that it was within budget, while 14% answered it was above budget. As to whether the end users were trained to benefit from the project, 94% of those interviewed said *yes* and 6% stated *no* (Table 3). On the success of the project, all the respondents had no reservation about its success.

With regards to timeliness, respondents were asked whether the process was within time, before scheduled time or behind time. From Fig. 2, as many as 74% of those interviewed agreed it was within time, 4% stated it was completed before scheduled time, while 22% of the respondents were of the view that the project implementation fell behind the scheduled time limit.

The conclusion from the analysis above is that, almost all the major indicators used to measure the success at which the implementation of the computerization programme progressed, recorded above-average performance. To this end one can say that the programme went on smoothly.

Table 3: Standard of Project Implementation

Issue	Response (%)
Completion of project within budget	
Within budget	86
Above budget	14
Whether end users were trained	
Yes	96
No	4
Meeting required specification	
100%, i.e., fully	94
About 50%	6

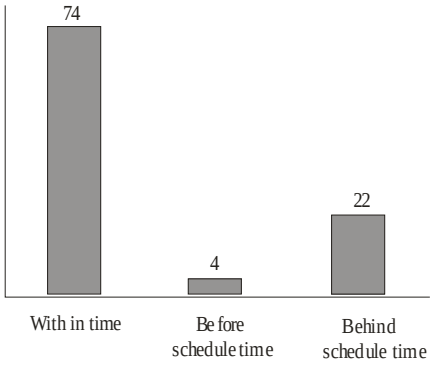

Fig. 2: Timeliness of completion of project (%)

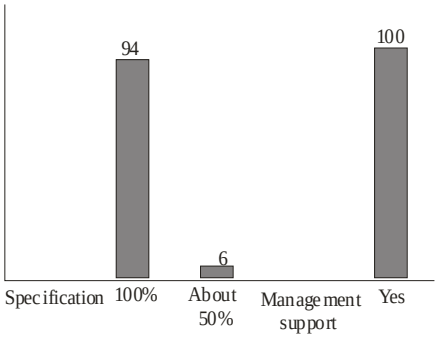

Fig. 3: Specification and management support (%)

Factors hindering smooth implementation: Our study has identified certain factors that are incidental to the successful implementation of the project. These factors spread through every phase; from the beginning to the end of the entire project life-span. They include, whether the project meets required specification, management support to the project, frequency of changing project team, rating the competence of project manager, whether there is a strategic plan in place and whether the strategic plan was considered during implementation. Other factors include the extent to which procurement processes go through tender, fairness of supplier selection, usefulness of procured device/software as well as competence and reliability of suppliers.

Specification and management support: As stated above, the ability of the computerization project to stick

to original technical specification and the extent to which the project receives the blessing and support of management could go a long way to facilitate successful implementation. Respondents were therefore asked whether the project meets specifications.

Responding, 94% stated that the project met specifications fully, i.e., to the extent of 100%, while6% of the respondents said the extent is about 50%. None of those interviewed said the project failed to meet required specifications (Table 3, Fig. 3). On management support for the project, all the respondents replied in the affirmative, implying the project received total support and blessing of management and other important stakeholders. One could therefore conclude that the project has been very successful, judging by these two indicators of meeting specifications and management support.

Project team and managers: Two other important ingredients that could influence the success of implementing this (and any other project) are the stability of project management team as well as the competence of the team. To a large extent, a more stable and competent team is vital to successful implementation of a project.

Respondents were therefore required to state the frequency of changing, as well as, rate the competence of various management teams of the computerization project. On frequency of changing management, 90% of respondents answered it was not quite often, while 10% stated it was slightly often. With regard to management competence, as many as 98% of those interviewed agreed that the project management team was very competent, while only 2% stated that the team was partially competent (Fig. 4). To the extent that respondents, both staff and technical experts, were of the view that management teams were both stable and competent leads us to the conclusion that these two indictors too were met, hence implementation went on smoothly and successfully.

Strategic plan: For the success of every project or programme, it is necessary to formulate a workable and time-bound strategic plan and, as much as possible, stick to the plan during the entire life-span of the project or programme. This research therefore sought to know from respondents whether the computerisation project met these two requirements.

Considering strategic plan availability, almost all the respondents (98%) stated that there was one (Fig. 5). Often, there are instances where project strategic plans are available, but ignored during implementation.

Responding to the question as to whether the strategic plan was considered and followed during

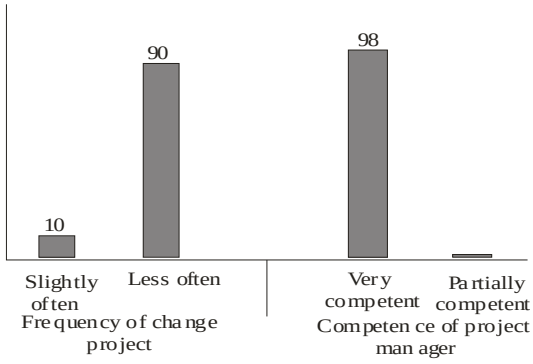

Fig. 4: Frequency of changing team and competence of project managers (%)

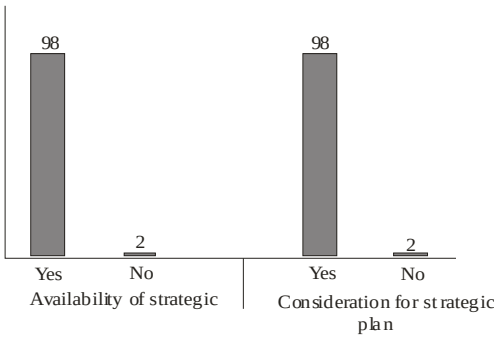

Fig. 5: Availability and consideration of strategic plan

implementation, 98% of those interviewed answered it was considered, while only 2% stated it was not. Just like the other indicators discussed previously, availability and consideration of strategic plan also scored high positive response, implying that most of contributed to the success of the project.

Task definition and identification of challenges: Some important attributes of a well-planned project include ability to define the tasks involved in the project as well as identification of envisaged challenges the project could likely encounter. This offers implementers the opportunity to prepare for any the eventualities. For a big project like computerization and networking of rural banks (which is capital and technology intensive), it is important to identify at each stage the various tasks, resources and technology required for successful completion of the project. Equally important is the ability to envisage potential challenges, such as resource constraints, legal barriers and challenges in direction of technology and government policy for adequate preparation. Success in these directions would ensure smooth implementation and project goal realization.

Respondents of this study, made up of people who were actively involved in every stage of the project life span and are mainly beneficiaries of the project, were

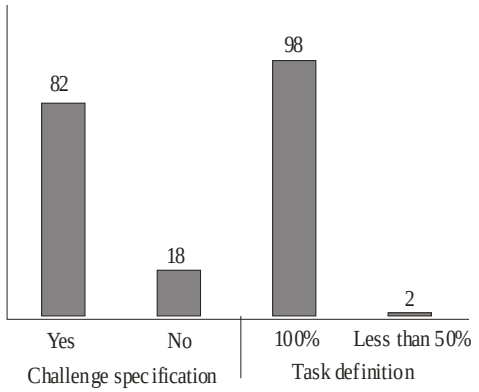

Fig. 6: Task definition and identification of envisaged challenges (%)

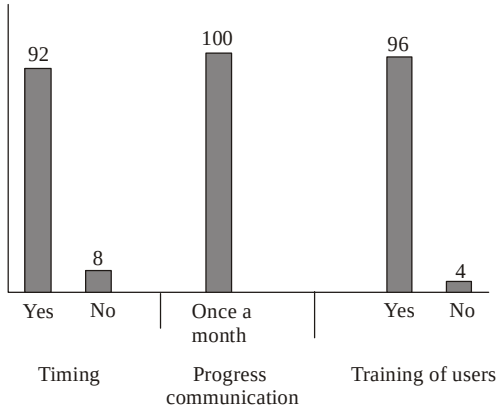

Fig. 7: Timing of project/progress communication/training of users

asked whether the various tasks involved in the project were well defined, resources identified and potential challenges envisaged and specified. In response, 98% of those interviewed answered *yes* while only 2% said *no* (Fig. 6). On challenge specification, 82% of the respondents stated that envisaged challenges were specified and 18% answered in the negative.

Statistics from the analysis above are enough proof that the computerization/networking project embarked on by the ARB Apex Bank Ltd. was well designed and implemented; it was resourceful, tasks well-defined and challenges adequately specified, all geared towards the realization of project goals.

Project timing, communication and user training: Most projects fail not because they are not viable or lack adequate resources for implementation, but simply because of poor timing. For example, computerization projects fixed at times of poor power supply in Ghana are bound to encounter difficulties. Thus, a factor worth considering is progress communication to major stakeholders and keeping them abreast with what is going on. Also, end user training is equally important for the project not to end up as a white elephant.

Respondents were therefore asked to comment on timing, progress communication and training of end users of the ARB Apex Bank Ltd. computerization and networking project. With timing, 92% stated that they enjoyed favorable timing, 8% answered that the timing was poor. With regard to progress communication, respondents were faced with the options of once in a month, once in 3 months and once in every 6 months. Therespondents gave a 100% answer to once in every month. Ninety-six percent of respondents also stated that there was adequate end user training as against 4% (Fig. 7).

Our conclusion on the above analysis is that the implementation took place within the scheduled time frame, progress of work done properly and communicated to stakeholders and beneficiaries adequately trained. These were some of the factors significant to successful implementation of the current phase of the computerization project.

SUMMARY OF KEY FINDINGS

We now highlight the key findings of the analysis and subject them to further analysis by linking them to the benefits and challenges of the project. From the analysis so far, the following points could be highlighted for further discussion:

- Greater percentage of respondents were actively involved in all the components of the project.
- Timing of the project was favorable as 74% of those interviewed agreed it was within time.
- On completion of project within budget, 86% of respondents stated it was within budget.
- With regard to specification, 94% of those interviewed stated that the project met speciation fully, i.e., 100%.
- The project received total support and blessing of management and other important stakeholders.
- On frequency of changing project management, 90% of respondents answered it was not quite often.
- In the area of strategic plan availability, almost all the respondents (98%) stated there was one
- The project was well designed and implemented, as well as very resourceful, tasks were well defined and challenges adequately specified.
- The project was well timed, progress properly communicated to stakeholders and beneficiaries adequately trained.

All these factors are incidental for the successful implementation of the current phase of the ARB Apex Bank Ltd., computerization and networking project.

Implications of findings: From the summary of findings, it is important to note that the computerization project by the ARB Apex Bank Ltd., is set to meet its target and its goals well achieved. With the success of this phase of the project, subsequent phases might

experience little or no hitches, since challenges encountered would be avoided and strengths built upon toward the total achievement of project goals.

With success achieved, the following benefits of the computerization and networking program should be acknowledged. In the first place, the project will enable the rural banks to compete favorably with other well established and endowed commercial banks in the financial market. This will lead to increased competition and improved service delivery to customers, with greater customer satisfaction.

In addition, complete computerization and networking will lead to improved monitoring of activities of rural banks, no matter where they are located. With the problem of distance overcome, the umbrella institution i.e., the Apex Bank, could step up its supervisory role to reduce or eliminate fraudulent financial practices that are rampant with the rural banks.

Also, the project will promote intra/inter bank transactions, peer interaction and peer monitoring among all the networked banks. The aggregate returns of the above points will be greater efficiency, lower costs of operations and increased profitability and sustainability. Issues of banking inefficiency and mediocrity would cease to exist and the rural poor would be the ultimate beneficiaries.

Challenges and constraints envisaged: It spite of the above benefits spelt out, the project faces some potential challenges and constraints that could not be ignored. The first is staff attitude towards change. Naturally in every phase of human transformation or modernization, there are people who are resistant, due to potential/actual disadvantages that go with such changes. For instance computerization means less manual work, hence possible job losses. Affected people may therefore resist attempts of computerization.

Also, studies have shown that IT knowledge and computer literacy are very low among staff of rural banks, having done manual transactions over long periods of time. These people may be uncomfortable switching suddenly to new technologies. Some of these people are bound to resist the change.

Finally, computerization/networking, even though initially funded, may lead to additional costs, due to issues of maintenance and parts replacement. Should this happen, the less endowed rural banks could run into difficulty and this might defeat the purpose of the programme.

RECOMMENDATIONS

As a solution to these issues of the project, the attention of project stakeholders must be engaged right from the start. Staff of the various rural banks, especially those at the country side, must be supported with rigorous training, especially in ICT in order for them to embrace the change from the onset. This could be achieved through consistent training and active beneficiary participation before the banks go with the project, during the implementation and even after the implementation.

In addition, a fund could be set up to support the less financially sound rural banks in times of distress, such as training, equipment/software maintenance, upgrade and replacement. Such subsidization programmes could go a long way to hasten and sustain the achievement of project goals.

CONCLUSION

In this study we discussed issues and challenges encountered in a computerization project being carried out by the ARB Apex Bank to connect rural and community banks in Ghana. The ARB Apex Bank embarked on the project to make the benefits of computer and networking technologies available to member rural banks. The study selected some rural banks engaged in the first phase of the project and sampled fifty respondents for questionnaires. The study concluded that, on the whole, the project was well designed and implemented; envisaged challenges were adequately specified and catered for and that the first phase progressed successfully. The study identified that the project will enable the rural banks compete favourably with the commercial banks and ultimately bring greater efficiency, lower cost of operation and increased profitability and sustainability to the Ghanaian rural banks.

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