Benjamin Amanquah* Kofi Safo Adjei

www.iiste.org

IISTE

Department of Accountancy, School of Business and Management Studies, Accra Polytechnic

P. O. Box GP 561 Accra

*E-mail of the corresponding author: <u>bamanquah@apoly.edu.gh</u>

Abstract

With more and more banks entering the Ghanaian financial sector due to the stable political and macroeconomic environment there has been the need for banks and other financial institutions in the financial services sector to come up with new products, services and processes in order to stay afloat. Increased competition and sophistication of customers require that banks rethink and design processes, procedures, products and services that are cost efficient and effective with the aid of technology to remain competitive and profitable. Employing a descriptive research design methodology with the use of structured questionnaires one hundred and eighty (180) staffs of Ghana Commercial Bank Limited were sampled. Out of this number 48% were females and 52% being males to find out the impact of Information Technology and Human resources in a reengineering process. The study found out that the bank had increased investment in IT which lead to increased operating incomes. However the bank did not fully realize the benefits desired, as staff were not fully involved due to communication barriers even though management (leadership) was fully committed to the BPR process.

Keywords: Reengineering, Information Technology, Human Resource

1. Introduction

Companies all over the world would like to be the best or among the best in all that they do. This will require that these organizations put in place processes and procedures to ensure they are able to serve their clients effectively, address customer queries and problems, improve the speed and time it takes to transact business and above all improve their profitability. However processes and procedures overtime become outmoded and are not able to cope with changing demands of the ever sophisticated clients. Another reason for the review of these processes and procedures is the ever increasing competition that is faced by firms (Hammer and Champy 1993) and that is no exception for banks that operate within the Ghanaian economy. In the last few years there has been an influx of banks into the financial sector of the Ghanaian economy thus increasing the competition with the industry. There is therefore the need to review processes, procedures, products etc and come up with new ones that will enable one stay afloat.

Business Process Reengineering (BPR) is a management approached aimed at improving the means and elevating the efficiency and effectiveness that exist within and across organizations. The key to BPR is for organizations to look at their business processes from a "clean slate" perspective and determine how they can best construct these processes to improve how they conduct business (Hammer 1990). Thus the objective of BPR is to radically reform and transform business operations to achieve improved performance. BPR has helped the National Commercial Bank of Jamaica to achieve a return on investment (ROI) of more than 500% Horwitt (2006). BPR enable GTO Inc. to move its net profit from the red to nearly \$500,000. This was accompanied by a 9% increase in gross sales along with a 33% decrease in total operating and administrative costs. Employee turnover decreased equally dramatically. As employees began to seek outside education and were promoted from within, the number of returned goods fell (Hamel and Prahalad 1994).

The Ghanaian economy has seen the seen a sudden influx of foreign banks into the country. This has been described by many as a good thing as it is going to get banking services to the over 70% of the Ghanaian population who do not have access to banking services (Business and Financial Times 2006). These banks have also brought about increased competition within the banking sector through the introduction of new products and services as well as new and faster ways of doing things. Thus for the traditional banks that have been operating in the country for over 50 years there is the need there is the need to sit up and match the completion or they will soon find themselves out of business. In addition to this all the banks in the country have acquired universal banking licenses and as a result of this they have ventured into areas that hither to were the preserve of only a few banks in that particular segment. They have thus introduced new processes procedures and products into the financial sector which has lead to increased competition within the industry.

Ghana Commercial Bank (GCB) Limited was established in 1953 to provide banking services to the nation for its socio economic development. It was the first indigenous and wholly owned Ghanaian bank. The Government of Ghana initially held 100% shares until 1996 when it divested the majority of its ownership. In 2007 the bank floated additional shares through a right issue which was to raise additional capital to enable the bank network all its branches and computerize all its processes and procedures (GCB Annual Report 2007). This will the enable the bank with the biggest asset base in the country take its rightful place the leader in banking. Currently the Government of Ghana owns 21.36% while institutional and individual investors hold 78.64%.

The bank has 161 branches and agencies nationwide and has the largest asset base in the banking industry. Most of its branches were stand-alone and manually operated until the middle of 2007 when the bank was able to computerize and network all its branches which has been as a result of increasing competition in the banking industry. However despite these laudable gains the bank has not been able to take advantage of its potential and to maintain its lead as the number one bank in the country even though it is now a computerized and networked bank and some products have been repackaged and re-lunched. Ghana Commercial Bank Limited has over a period of time invested heavily in improving its information technology infrastructure and to introduce new and innovative products to meet the needs of its numerous customers. It has also invested in its human resource base as well as instituting change management programs to improve its image. It is the goal of the bank to become the number one bank in the country with a large share of the market considering the number of its branches and how widespread they are. Yet despite the massive investments in information technology and human resources it has still not been able to take advantage of this and become the number one market leader. In order to find answers to the above and other related questions the research sought to find out what business process reengineering entails and what should be done to get the best results from such a venture in the case of Ghana Commercial Bank Limited.

2. Objectives

The overall objective of the study is to examine the effect of BPR on the bank's performance. Specifically the study will examine:

- The extent to which Information technology impacts on reengineering in Ghana Commercial Bank Limited
- The role and impact of human resources to the success or failure of reengineering

3. Literature Review

3.1 BPR Defined

Hammer and Champy (1993) define business process reengineering as the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance such as cost quality service and speed. Davenport (1993) also another well know writer on this subject also defines business process reengineering as the envisioning of new work strategies i.e. the actual process design activity, the implementation of the change in all its complex technological, human and organizational dimensions. Johansson (1993) also defines business process reengineering as a radical rather than a merely a continuous improvement. It seeks to make process orientation a strategic tool and a core competence of the organization. Thus business process reengineering concentrates on core business processes and uses specific techniques within just in time and total quality management as enablers while broadening the process vision. Comparing the definitions given by Hammer and Champy (1993) to that of Davenport (1993) it is clearly seen that Davenport (1993) introduces a new concept into business process reengineering which is the human factor. Though both definitions take into account the need for information technology Davenport (1993) goes on to add that human resources play a very key role in this process. This view is also supported by a business engineer Lyndall Urwick who stated that it is not enough to hold people accountable for certain activities but that it is also essential to delegate to them the necessary authority to discharge that responsibility. This thus goes to show the need for worker empowerment which is key to reengineering. Davenport (1993) again points out that the major difference between BPR and other approaches to organizational development is that businesses seek not fractional but multiplicative levels of improvement that is 10X rather than 10%. Johansson (1993) definition seeks to look at business process reengineering in relation to other process-oriented views such as Total quality Management and Just in Time Systems. Davenport (1993) also claims that classical reengineering repeats the same mistakes as the classical approach to management by separating the design of work from its execution and this tends to lead to friction. In order to achieve the desired benefits of BPR there is the need for change in the organizational structure and other ways of managing and performing work as well as utilize information

technology.

3.2 Organizational structure, Human Resource and reengineering

Structure according to Mullins (2006) it is the pattern of relationships among positions in the organization and among members of the organization. Structure makes possible the application of the process of management and creates a framework of order and command through which the activities of the organization can be planned, organized, directed and controlled. Getting the right structure is the first step in business process reengineering. Thus according to Druker (1989) good organizational structure does not by itself produce good performance but a poor organizational structure makes good performance impossible no matter how good the individual managers may be. It is therefore important to design an organizational structure that will ensure that activities are performed in an efficient and timely manner. It must however be noted that the commitment and involvement of employees are key success factor for reengineering and that reengineering obstacles that have resulted in failure was due to lack of employee commitment (Mullins 2006). Changing an organization means changing the behaviour of its people. Unless the people are enthusiastic about the change no lasting change can take place Coh (1997). It is therefore important that an effective communication system be put in place that clearly define communication lines with effective feedback, as well as clearly defining the roles and responsibilities of employees in the BPR process. This, if done will boost the morale and commitment of staff to the BPR process. The integration of business-process re-engineering and human-resource development enhances the performance of a company's business processes due to the integration of the process knowledge and empowerment of employees. This integration could serve as a basis for continuous-improvement processes. BPR must have the full support of top management to succeed. If resistance is encountered, the leader must be willing to "drive" change, even to the point of ruthlessness Weicher et al (2008).

3.3 Information technology and reengineering

Information Technology is usually the driving force an enabler behind organizational restructuring and hence the driving force behind BPR. Information technology consists of all the hardware and software that a firm needs in order to achieve its business objectives Laudon and Laudon (2006). It thus enables managers and workers to analyze problems and create new products and services. To ensure that information technology becomes successful there is the need to ensure that (1) leadership to place information technology at the centre of the business and (2) commitment to the necessary support mechanisms (Davenport 1995). This will mean that merely throwing computers at an existing business problem does not cause it to be reengineered. In fact, the misuse of technology can block reengineering altogether by reinforcing old ways of thinking and old behaviour patterns Hammer and Champy (1993). Since IT is an enabler it is best to design the process and then IT is used to optimize the process (Caldwell 1994, Davenport 1995). This would involve reducing and or at times combining activities that are closely related or eliminating tasks that are not relevant. There is therefore the need to always keep the business model in sight and only use a level of technology that supports and feeds the model. Having technology for technology-sake is a costly waste of your precious capital (Laudon and Laudon 2006).

4. Methodology

The research design used for the study is descriptive survey. The descriptive survey design was chosen because it is the most appropriate design which enable the research achieve its purpose and draw meaningful conclusions from the study. Because of the apparent ease and directness of this method a researcher can gather information in terms of individual opinion about some issues by a simple questionnaire. The population for the study was all the 2,179 staff of all its 161 branches and agencies. Stratified random sampling and quota sampling techniques were used to collect data. In all 180 people from 36 branches were selected. Primary was gathered from the field through the use of questionnaires and interviews were conducted for managers of GCB and system administrators to obtain relevant data.

5. Results of the study

5.1 Information Technology

fuele i i formasmely, investment in 11 and operating meene								
Year	Net Profit	Investment in IT	Operating Income	Total Operating	Operating Expenses	Staff Cost		
				Expenses				
2006	26,014,700	15,196,200	121,446,800	81,602,600	34,177,300	47,425,300		
2007	32,267,246	16,687,250	146,007,056	92,681,719	35,497,559	57,184,160		
2008	37,004,851	22,675,163	185,319,712	110,968,645	43,254,635	67,714,010		
2009	18,117,151	26,568,130	200,743,232	132,346,534	47,407,838	84,938,696		

Table 1 Profitability, Investment in IT and Operating Income

The use of Information technology (IT) is very essential to any business process re engineering. All 180 respondents agreed that IT systems had been put in place. This was seen in the fact that the bank had networked all its branches and introduced a common banking software in all its operations as compared to different kinds of software that were in use by different branches. From Table 1 it evident that the bank had increased its investments in IT as IT investments had nearly doubled over the period. During that same period the banks operating income had also more than doubled from GH¢121,446,800 to GH¢200,743,232. This was possible due to a new banking software that enabled the bank introduce several products that were not available in all its branches before BPR. However this increased income had not lead to significant increases in profitability. Further analysis of the financial statements of the bank showed that operating expenses has also increased during the same period thus eroding the incomes earned. A breakdown of the operating expenses showed that staff cost has increased astronomically over that same period. While most BPR processes lead to a reduction in staff numbers staff numbers remained unchanged during the period thus resulting in an increased compensation package to staff leading to increased operational cost hence reduced profits. However on the efficient use of IT systems it can be seen from table 2 that 35% of respondents said there was very little usage while 62% of respondents said the usage rate was between 25 - 50% and just 3% of respondents said the rate of use was about 75%. The underutilisation was due to lack of training, and resistant to change by staff. This thus goes to confirm what Hammer and Champy (1993) said that merely introducing and installing IT systems does not cause a system to be reengineered. It can thus be seen that even though investments in IT had almost doubled profitability had not increased by the same margin

	EXTENSIVELY	75 (%)	50(%)	25(%)	VERY
					LITTLE (%)
Reengineering Process Into Single/Few	-	3	38	49	10
Steps					
Processing Time	-	10	48	39	3
New Customer Focused /New Product	-	14	62	24	NIL

Table 2 Extent of Change in Processes and Procedures

In respect of processes and procedures being reengineered into single or a few steps which is usually at the centre of most business process reengineering, from table 2 the extent of change was not very significant as 87% or respondents said the extent of change was less than 50% with 10% of respondents agreeing to the fact that there was very little change. Thus significant changes were not recorded in processes and procedures. 87% of respondents said that ICT was added to enable processes and procedures to be undertaken within a short time but the extent of reducing processing time was less than 50% meaning this had not significantly reduced the time it took to process transactions; however 62% of respondents said new products had been introduced to meet customer needs. These however were not much as the demands of customer had increased and become more sophisticated. The extent to which new products had been introduced was not much can be seen from the table 2. Most of the new products introduced were just at the pilot phase and yet to be rolled out throughout its branch network

	Extensively	75%	50%	25%	Very Little
Reliability of IT systems			32	34	34
Use of IT Systems		3	24	38	35

From table 3 just 32% of respondents considered the IT infrastructure as fairly reliable. The majority of respondents (68%) considered the IT system as not very reliable. Reliability of systems also affects the employees in the performance of their duties. This was evident in the various challenges they encountered in their operations out of which 97% said the biggest problem was network failure.

5.2 Reengineering On Human Resource

The success of any business reengineering process inextricably linked to the human resource. During the implementation of this program, the number of staff employed increased. There were a lot of new young and energetic individuals employed which is evident from the responses got in that over 95% of the respondent said that new people have been employed and out of the people sampled 35% of the respondents had been actually been employed during the period. 82% of new staff employed had most of the competencies that were required to perform on their jobs. Also aside those in full employment of the bank there were also out sourced staff, temporary staff and national service persons that were recruited to augment the staff numbers and would bring about the need transformation that was required for the radical thinking of the business. The purpose of recruiting young and energetic individuals was for them to bring on board new ideas and ways of doing things and this will impact greatly on the change management plan that had been put into motion.

The radical change that was expected was not realised because the old staff imposed their views and ideas on the new staff to the extent that their initiative was killed and they just had to tow the line. This thus goes to confirm what Coh (1997) said that change will only come if the people are enthusiastic about the change. Staff commitment to the BPR process was low due to the lack of involvement and contribution by staff to the BPR process. 47% of respondents said they had very little involvement in the BPR process hence they did not see themselves as part of the process. They thus saw the process as being forced on them. It can therefore be seen that this lead to 42% of respondents not being fully committed to the BPR process.



Figure 1 Changes in leadership Styles

Figure 1 shows the responses to the changes in management style of GCB. The success or otherwise of any BPR is dependent on the role of its management that is its leadership styles and how efficiently and effectively they are able to carry out their duties. Under the period of the BPR was under taken respondent said that management style had changed 65% of respondent agreed to the fact that there was a new type management style while 23%said there was no change management style. However, 12% of respondents were indifferent on the issue of management style.

	EXTENT	75 (%)	50(%)	25(%)	VERY
					LITTLE (%)
Contribution/Involvement to BPR process			21	32	47
Relevant Skills Required		48	34	18	NIL
Commitment of Staff to BPR Process		6	29	23	42
Changes in leadership styles		20	45	23	12

Table 4 Commitment, Involvement and leadership styles to BPR

Table 4 shows the contribution of staff to the BPR process. 47% of respondents did not see themselves as part of the BPR process even though 32% and 21% of staff said their level of involvement was 25% and 50% respectively. As a result of the low involvement and contribution of staff in the BPR process the extent commitment was also very low as 42% had very little commitment to the process and 23% had just about 25% commitment to the process and 29% had commitment levels of about 50%. It can thus be concluded that the majority of staff did not see themselves as part of the project but rather as an idea been implemented by management which could affect the overall success of the project. It is evident from their responses that 48% of respondents being the majority had the skills required for the BPR process which would ensure that the BPR process was a success.

The change in management style could be seen from the aggressive nature management went out to look for new business relationships as well as strengthen and renew existing business. One example that was cited readily by respondents during interview was the re-establishing and strengthening of relationship with GHACEM. Also management sought to reduce the bad debts of the organization and went out to recover major debts outstanding by using every legal means available. This was therefore to serve as a morale booster to other members of staff to also look for new businesses and recover any debts outstanding. It came out from various respondents that management even though they adopted an aggressive and positive attitude there had not been communicated very well.

5.3 Reengineering and communication

Communication is always a vital part of any successful business process reengineering. The communication flow for a successful BPR should be top-bottom and bottom –up. On the issue of communication 88.4% of the respondents said there was regular communication from top management to lower of staff. This was mainly through memos and circulars that were issued from time to time. These circulars and memos usually communicated rules procedures and matters that were required to achieve superior service and ensure the welfare of staff. The means of communicating which was mainly via courier services also contributed to delays in receiving timely information that was sometimes required to carry out specific tasks.



Figure 2 Quality of Feedback

However one thing that was found to be lacking in the communication system was poor feedback that is bottom

to up communication. Most of these memos and circulars received, according to respondents contained instructions and directives that were to be carried out to the latter. There were however some of the rules and procedures that either conflicted with existing procedures or these memos were sometimes received from two or three different departments on the same issue and ended up confusing staff since they did not know which of the directives has to be followed. Figure 2 shows that 50% of respondents considered feedback in the organization as ineffective, 35% as poor while 15% considered it as good. However, because of poor feedback, some of the problems encountered were not communicated to top management quickly for resolution. This thus led to the loss of some top customers and some good business opportunities. Due to the poor feedback system and the inability of staff to make significant contributions to the reengineering process there was a lukewarm attitude towards the project which affected the overall gains that was to be achieved.

Also because the method of communication was mainly by memos and circulars, it took time to disseminate information across such a large organization. This thus resulted in delays such that there were times that information that was urgently required to take major decisions was not forthcoming and as a result decisions made were based on very little information, thus also going a long way to affect service delivery. This also contributed to the delays in implementing major projects. At the end of the project, the bank was supposed to have had 25% of market share from 22% that they enjoyed. However at the end of the period, their market share had fallen to 15.99%. Even though communication was always forth coming from top management, it was noted that most staff had become resistant in later stages and staff began to harbor doubts about the Impact of the project a situation that Caldwell (1994) said could arise. Thus when new directives, circulars, memos are received requiring changes in operation, staff are reluctant to implement them especially those that affected service delivery thus resulting in poor performance. However for such directives and memos to be implemented, there should have been in place employee sessions, schemes or surveys where staff are able to participate and contribute to such policies before it is implemented. By so doing, it makes implementation very easy. Also due to the infrequent discussion, it resulted in straight jacket that is one size fit all solution that was implemented across the organization. This thus resulted in poor performance of some branches thus affecting the overall performance of the bank.

6. Conclusion

The study revealed that GCB has not achieved fully the purpose of the BPR, considering the expenditure of the bank for each year which keeps increasing as against the profit made and when you compare that to its other competitors who with their smaller branch network are able to make profit much larger than GCB. The study also showed that management was committed to the process but because communication was basically one sided i.e. from top-down and lack of an efficient feedback staff were resistant new changes since they saw it rather as an imposition by management.

7. Recommendations

- Any future reengineering process should have the involvement and participation of all staff.
- A good communication system with an efficient feedback mechanism should be put in place.
- IT systems and infrastructure should be robust and reliable and meet the needs of the organization
- Need for right sizing of employees to get the best from the BPR process.

References

Caldwell, B (1994), Missteps, Miscues -- Business Reengineering Failures, InformationWeek, June 20, 1994; Pg. 50.

Davenport, T H. (1993), Process Innovation: Re-engineering Work through Information Technology (Boston: Ernst & Young, 1993)

Drucker P F (1989)The practice of Management, Heinemann professional 1989

Hamel, G. and Prahalad, C.K., Competing for the Future, Harvard Business Review, July-August 1994; Pg. 122

Hammer, M. (1990) Reengineering Work: Don't Automate, Obliterate Harvard Business Review July/August 1990 pg 104 – 112

Hammer, M. and Champy J (1993) Reengineering the Corporation: A Manifesto for Business Revolution. Harper Business Chapter 1

Horwitt, E. (2006) Business process reengineering efforts helps bank achieve more than 500% ROI available at http://searchcio.techtarget.com/tip/Business-process-reengineering cited on 20/06/2008

Laudon K C and Laudon J P (2006) Management Information Systems Managing the digital firm Pearson Education Inc.

Mullins, L. J. (2006) Management and Organizational Behaviour. 9th Ed Financial Times Prentice Hall, 2007

Weicher, M. Chu, W. W., Lin, W. C., Le, V., and Yu, D. (2008) Business Process Reengineering: Analysis and Recommendations. Available at http://www.netlib.com/bpr1.htm#11 cited 20/06/2008

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage: <u>http://www.iiste.org</u>

CALL FOR JOURNAL PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <u>http://www.iiste.org/journals/</u> The IISTE editorial team promises to the review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <u>http://www.iiste.org/book/</u>

Recent conferences: <u>http://www.iiste.org/conference/</u>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

