International Business Management 5 (3): 151-158, 2011
ISSN: 1993-5250

Business Re-Engineering and Organisational Performance in Nigeria: A Case Study of First Bank Nigeria Plc

Omo Aregbeyen
Department of Economics, University of Ibadan, Ibadan, Nigeria

Abstract: Using paired data samples between 1986 and 2008, this study evaluates the impact of the re-engineering of operational processes on the performance of the First Bank Nigeria Plc. The performance of the bank was assessed focusing on growth, profitability and the extent of financial intermediation. The analysis of the data showed that the re-engineering project significantly, improved the profitability performance of the bank but not for growth and the extents of its financial intermediation.

Key words: Re-engineering, bank, performance, growth, profitability, Nigeria

INTRODUCTION

The business arena (local or global) is replete with firms that have undergone dramatic changes in recent times. These changes are to a large extent caused by economic recession and market forces of demand and supply. Competition, globalization and information technology are some of the others that have given rise to serious transformation in the world of business. In addition, customers' needs, choices, preferences and awareness have also changed rapidly. All of these changes have made it imperative for business organizations and their managers to begin to rethink new, better and more effective ways of doing business more profitably at low cost.

Thus, managers are concerned with discovering new processes and procedures of improving the quality of their products and services, formulating strategies and implementing business programmes that can help their organization respond adequately to market demand and dynamics. Different organizations have applied several forms of business strategies in order to compete profitably in the ever-changing and competitive business environment. Some of these strategies or business efforts include acquisition, mergers, diversification, turn around, total quality management, corporate dieting, re-engineering, etc.

In the service delivery industry, especially banking, emphasis is now on re-engineering efforts as a means to improving organizational performance. This is because patterns of competitive advantage in the banking industry have changed dramatically over the years. High-technology banking via information technology is revolutionizing relationships between customers and financial institutions such that sustained growth requires more than just reckless risk-taking. As consumers increasingly demand for 24 h banking services from the industry, banks that must remain competitive and relevant should be ready to offer electronic services that exceed their customers' expectations. Moreover as business increasingly becomes globalised and bank customers equally spread their clientele, banks must reposition themselves to meet and exceed customer needs of fast funds movement across the globe. Banks have tried to respond to these challenges by way of re-engineering their operations and organization set ups.

In Nigeria, the liberalization of the banking sector has altered the patterns of competitive advantage in the industry. In fact, new banks have emerged that have either sent older ones out of business or made them a mere shadow of their former selves. Consequently, many of the older banks have had to re-engineer their operations in order to be able to improve their performance and compete effectively with the new banks. The First Bank of Nigeria Plc, the oldest bank in Nigeria had to toll this line as it re-engineered its operations in order to survive and remained competitive in the industry.

In the light of the forgoing, this study provides insights into the nature and extent of re-engineering done by the First Bank as well as evaluates the impact of the re-engineering of operational processes on the performance of the bank. In evaluating the impact of the re-engineering done by the First Bank Nigeria Plc, we tested the hypothesis that business re-engineering has no significant effect on the FBN's operational performance.

Literature review

Business re-engineering: evolution, concept, nature and issues: The term re-engineering comes from the process of taking apart an electronic product and designing a better version (Robbins, 1997). It was used to refer to the process of dismantling an old electronic product or machine and redesigning or refashioning a new machine

or gadget in a way that it will work more effectively and efficiently. This was the method used by Japanese companies in the development of their technology. They merely collected already-made products from other countries, dismantled them and then redesigned and reproduced them in a manner that is easier, cheaper and faster to manufacture, market and use. It was from this method that the idea of re-engineering came into the manufacturing industry.

However, the origin of business re-engineering as a concept can be traced to 1990 when it was first introduced into common usage and applied to management of organizations by Michael Hammer. Business re-engineering was defined by Hammer (1990) as radically rethinking and redesigning those processes by which value is created for customers. He believes that there is no such thing as a permanent winning formula, arguing that the hallmark of a real successful company is its willingness to abandon what has been successful in the past. In the same vein, Hammer and Champy (1993) defines re-engineering as a the fundamental rethinking and redesigning of business processes to achieving dramatic improvements in critical contemporary measures of performance such as quality, cost, service and speed.

Asekunowo maintains that corporate re-engineering is a powerful approach to aid business look at traditional roles and processes to find ways of gaining competitive advantage. He noted further that re-engineering is a tool for finding new ways of conducting an organization's business. It is a means of saying "supposing that we are starting business a new what fresh methods, processes and procedures of performing our tasks more effectively and efficiently can we adopt.

Effectiveness and efficiency are interrelated when discussing the issue of organization performance. Efficiency refers to the ability of an organization to do the things right while effectiveness is about doing the right things (Drucker, 1954). Organizational performance can be measured by the extent to which an organization achieves appropriate objectives such as profitability, improvement in quality, service, speed, customer satisfaction, loyalty and good corporate image, market share, etc.

According to Hammer (1990), the aim of business re-engineering efforts is to achieve dramatic improvements in organizational performance. To him, business re-engineering involves; obliterating outdated processes, starting over, using the power of modern information technology and radically redesigning business processes for better organizational performance. All of these elements clearly show that business re-engineering differs immensely from other simple management strategies such as re-organization, restructuring, repositioning, etc. Business re-engineering is necessary as a tool to sustain breakthrough in competitive advantage through innovative design and implementation of change in core business processes. This may involve changing the organizational structure, infrastructure, performance measure, reward system, style, values and behaviours. Asekunwo listed three basic principles of business re-engineering as follows: understanding the inherent complexity of re-engineering processes as management activity and procedures, functions like redesigning of work patterns, roles; take a comprehensive approach involves looking at all processes of the organizational as necessary for restructuring and setting a time table, there must be a target in terms of time given to achieve any given assignment both at senior management level and the line management level.

Similarly, Miers (1996) indicated a broader set of essential elements and principles of business process re-engineering which include; rethinking the Theory of business (challenging old assumptions and discarding old rules which are no longer applicable; breaking away from conventional wisdom and the constraint of organizational boundaries; letting rigid specialization give way to broad-based and cross-functional competencies and using information technology not to automate outdated processes but to redesign new ones); externally, focus on end-customers and the generation of greater value for customers, give customers and users single and accessible point of contrast through which they can harness whatever resources that are relevant to their needs and interests, internally focus on harnessing more of the potential of people and applying it to those activities which identify and deliver value to customers; be cognizance that what matter is that people and other resources can be assessed and applied where they are required and not where they are located; encourage learning and development by building creative working environment; think and execute as much activity as possible horizontally, concentration on flows and processes through the organization and remove non-value added activities, undertake parallel activities and speed up response and development times. In putting the principles to practice, Davenport (1990) prescribed five steps approach to business process re-engineering as follows:

- Develop the business vision and process objectives
- Identify the process to be redesigned
- Understand and measure the existing processes
- Identify information technology levers
- Design and build a prototype of the new process

From the foregoing, it could be deduced that to undertake business re-engineering programme, the organization in question should be looked at in its

entirety. The work processes, functions and management activities of the entire organization should be taken into account. The purpose of studying and understanding the entire organization is to discover those traditional processes, procedures and structures that are outdated so as to replace them with new ones in order to achieve radical improvement in organizational performance. Re-engineering therefore involves a significant re-assessment of what a particular organization is all about. Malhotra observed that about 70% of business re-engineering project fail. To him, the biggest obstacles that re-engineering faces are; lack of sustained management commitment and leadership; unrealistic slope and expectations and resistance to change. Also King sees the primary reason of business re-engineering failure as overemphasis on the tactical aspects and the strategic dimensions being compromised. Bashein *et al.* (1994) therefore, outlined the positive preconditions for business process re-engineering success to include; senior management commitment and sponsorship, realistic expectations, empowered and corroborative workers, strategic context of growth and expansion, shared vision, sound management practices, appropriate people participation full-time and sufficient budget.

They also identify negative preconditions related to business re-engineering as; the wrong sponsor, a do it to me attitude, cost-cutting focus and narrow technical focus. The negative preconditions relating to the organization include; unsound financial condition, too many projects underway, fear or lack of optimum and animosity toward and by IS and human resources specialists. To turn around these negative conditions, firms should do something smaller first (such as pilot project), conduct personal transformation (change mindset) and give due emphasis to change and human resource factors.

The conclusion from this is that the ultimate success of business re-engineering depends on the people who implement it and on how well they can be motivated to be creative and to apply their detailed knowledge to the redesign of business processes (Davenport, 1995; Bashein *et al.*, 1994).

Business re-engineering and organizational performance: Organizational performance is basically the measure of how efficient and effective and organization is (Stoner, 2001). In other words, how well an organization achieves its set objectives. The major objective of most business organizations is profit maximization or cost minimization. Other objectives of a firm include growth, sales maximization, increase in market share, improved productivity in terms of better quality and higher quantity of goods and services, customer satisfaction, individual enhancement and organizational development and change, etc. (Hales and Savoie, 1994; Hewitt,1995).

Blake (1998) classified the focus of organizational performance into three key areas/issues. These are namely markets, employees and investors. He asserts that the accomplishment of these three major performance objectives of markets or customer expectations and investors' expectations will most likely result in overall improvement in organizational performance. Thus, implying that not all BPR projects have been successful in achieving dramatic performance gains. However, it has been observed that the proactive implementation of BPR as part of the organization's business strategy, coupled with focusing BPR efforts on core-customer business processes are the most significant predictors of BPR success (Terziovski *et al.*, 2003). Perhaps, this observation derives from emerging empirical evidences.

Guimaraes and Bond (1996) in their study among several objectives empirically assessed the impact of business process reengineering on 586 American manufacturing firms. In the study, 12 company performance dimensions including: sales growth rate; market share operating profits rates of profits to sales; cash flow from operation; return on investment; new product development; new market development; R and D activities; cost reduction program; personnel development and political/public affairs as previously validated by Gupta and Govindarajan (1994) were used to measure the payoffs from company innovativeness. The findings from the study showed that BPR helped to a moderate extent the areas of personnel development, cost reduction, new product development and company operating profits. However, it was observed that the impact varies considerably from company to company suggesting that its implementation can be quite risky depending on company, application and project management circumstances. It was concluded that on the average BPR has had less than an impressive impact on company performance. Based on the findings as a whole, the researchers declared that it behooves top managers to engage in BPR projects only as a controlled experiment to strategically reposition the organization.

Altinkemer *et al.* (1998) investigate whether the re-engineering efforts of companies to leverage potential benefits of using Information Technology (IT) in their business processes improve their productivity and overall firm performance. They analyzed firm-level data that covers the period between 1984 and 2004 using a panel data model. They employed standard variables for measuring firm productivity and performance including labour productivity, return on assets, return on equity,

inventory turnover, profit margin, asset utilization and Tobin's q. The regression estimations show that firms' performances remain unaffected during the implementation period of the reengineering projects and on average, returns to reengineering seem to accrue 2-3 years after the end of implementation period. Shin and Jemella (2002) investigate the BPR methods best suited for financial institutions based on a case study conducted in chase manhattan bank that initiated a BPR in 1996. The research attempts to provide guidelines for BPR projects in financial institutions that will help them achieve dramatic performance gains. Chase BPR projects include four phases encompassing a wide scope of activities; energize, focus, invent and launch. As seen in Chase BPR projects such as e-fund disbursement cards and service charge reengineering, these efforts resulted in new products and services in addition to producing dramatic increases in revenue and operating savings.

Terziovski *et al*. (2003), based on a survey of 156 Australian firms belonging to the finance and insurance industry and have implemented BPR reported that BPR practices were found to explain >30% of the variance in organizational performance.

Ozcelik (2010) examines whether implementation of Business Process Reengineering (BPR) projects improve firm performance by analyzing a comprehensive data set on large firms in the United States. The performance measures utilized in the paper are labor productivity, return on assets and return on equity. The researcher reported that firm performance increases after the BPR projects are finalized while it remains unaffected during execution. He further, reported that functionally focused BPR projects on average contribute more to performance than those with a broader cross-functional scope. This was interpreted as a likely indication that potential failure risk of BPR projects may increase beyond a certain level of scope.

Lastly, Altinkemer empirically investigated whether Business Process Reengineering (BPR) is associated with enhanced firm productivity and overall performance. We analyze firm-level panel data of large U.S. firms in the Fortune 500 list that covers the period between 1987 and 2008 using fixed effects and first differencing which are standard methods to account for unobservable firm-level effects. The researchers employ standard variables for measuring firm productivity and performance. They reportedly find that one of the used key performance variables, return on assets, drops significantly during the project initiation year. According to fixed effects results, the performance and productivity measures improve (in a decreasing manner) after project initiation. It was also reported that enterprise-wide BPR projects are associated with more negative returns during project initiation. However, there is no clear evidence about their superiority over functionally-focused BPR projects in terms of performance improvements after project initiation. They opined that this may be because grand projects are risky and sometimes lead to grand failures.

Overview of history and the re-engineering process of First Bank Nigeria Plc: The history of First Bank of Nigeria Plc dated back to 1894 when it was founded and incorporated as a limited liability company on 31st March, 1894, under the corporate name of the Bank of British West Africa (BBWA) with a paid up capital of 12,000 pounds sterling. At that time, it operates in Lagos but has its head office in Liverpool. It also absorbed its predecessor, the African banking corporation which was established in 1892. The bank worked closely with the colonial government to the extent of performing the traditional functions of a Central Bank in the West African sub-region.

The bank began international banking operation in 1896 when a branch was opened in Accra, Gold Coast (now Ghana) and another in Freetown, Siera Leone in 1898. The 2nd branch of the bank in Nigeria was in the old Calabar in 1900. And from 1902, its services were extended to Northern Nigeria. As at year end 2009, the First Bank of Nigeria Plc had a network of 558 branches throughout the federation including the one in the city of London. It had the largest branch network in the industry and is considered by a significant number of Nigerians as the safest banks. It is been listed on the Nigerian Stock Exchange (NSE) since, March 1971.

The bank clocked 100 years in 1994. The leadership of the bank in the midst of the centenary celebrations also reflected on the need for a strategic change so it can purposefully face the next 100 years. In the light of this, a critical look was taken in examining the strengths and weaknesses of the bank. They appraised both against the backdrop of what every other banks were experiencing and was about to be experienced, namely globalisation backed by liberalisation of financial services under the World Trade Organisation (WTO), the challenges of the new millennium and the dramatic changes in Nigeria's banking terrain with significant impact on all financial institutions in the country and First Bank of Nigeria Plc in particular.

Against the background, the board and management of the bank decided to radically transform the orientation and operations of the bank. In order therefore, maintain and strengthen her competitive edge in the market place, FBN in 1996, adopted a radical re-engineering strategy code-named Century II Project with a view to repositioning the bank for the next millennium. The aim of the initiative is to significantly increase productivity,

optimise shareholders' value, eliminate unnecessary levels and processes, upgrade skills/consolidate functions and achieve quantum results. The conception and planning of the project was strategized for about a year while its implementation began in 1997. The essential elements of the re-engineering process are downsizing of the staff strength, staff training and the deployment of advance information and communication technologies in operations. The re-engineering process was immediately faced with two major challenges. These include effecting the right attitudinal change in the staff and obtaining the right technology and maintaining it. To address these challenges, a number of measures were reportedly taken. These are used internationally recognised consultants to assist in effecting the right staff attitude; deployed the most appropriate technology for services and improved maintenance culture.

MATERIALS AND METHODS

This study is aimed at evaluating the impact of the re-engineering of operational processes on the performance of the bank. To do this we tested the hypothesis that business re-engineering has no significant effect on the FBN's operational performance. To test this hypothesis, we measured the operational performance of the bank through three major indicators namely growth, profitability and the extent of financial intermediation. Growth of the bank was measured using three alternative but complementary measures. These are annual changes in gross earnings, total assets and total deposit mobilized. Profitability was assessed with profit margin, return on assets and return on equity. The extent of financial intermediation by bank was ascertained through the loans and advances to total deposit ratio and loans and advances to total asset ratio.

Data on these indicators were obtained for 22-11 years prior to the re-engineering project (1986-1996) and 10 years after (1998-2008). Being the year 1997, the re-engineering project was implemented is the demarcating year. So, the years 1986-1996 constitute the pre-engineering period while 1998-2008 is the post re-engineering period.

The data of pre and post re-engineering are then used to test the hypothesis that the re-engineering project has no significant effect on the operational performance of the bank. The data were obtained from the annual reports and statement of accounts of the bank for the various years. The data collected were analyzed through both descriptive and inferential analysis. The descriptive analysis was used to organize and characterized the data while the inferential analysis (t-test) was used to validate the study hypothesis.

RESULTS AND DISCUSSION

Descriptive analysis: The pre and post re-engineering growth performances of the bank are shown in Table 1. It

Table 1: Pre and post re-engineering growth performance of First Bank Nigeria Plc

Years	Gross earnings (₦)	Total asset (₦)	Total deposit (₦)	Growth rate of gross earnings (%)	Growth rate of total asset (%)	Growth rate of total deposit (%)
Pre re-engineering period						
1986	571,484	5,995,762	4,412,745	-	-	-
1987	692,723	6,776,874	5,010,455	21.2	13.0	13.5
1988	860,274	7,071,807	5,646,396	24.2	4.4	12.7
1989	1,151,494	8,492,320	5,785,210	33.9	20.1	2.5
1990	1,433,440	8,481,579	6,585,178	24.5	-0.1	13.8
1991	1,678,000	11,727,000	8,564,000	17.1	38.3	30.0
1992	2,928,000	17,668,000	12,358,000	74.5	50.7	44.3
1993	5,390,000	26,186,000	17,864,000	84.1	48.2	44.6
1994	5,914,000	36,831,000	25,022,000	9.7	40.7	40.1
1995	8,980,000	63,872,000	43,464,000	51.8	73.4	73.7
1996	10,995,000	77,269,000	58,214,000	22.4	21.0	33.9
Average	3,690,401	24,579,213	17,538,726	36.3	31.0	30.9
Post re-engineering period						
1998	12,957,195	102,418,215	70,697,599	-	-	-
1999	16,865,372	137,784,067	89,868,366	30.2	34.5	27.1
2000	29,757,000	194,744,000	138,003,000	76.4	41.3	53.6
2001	32,291,000	224,007,000	155,598,000	8.5	15.0	12.7
2002	46,267,000	290,593,000	178,603,000	43.3	29.7	14.8
2003	50,597,000	409,083,000	269,584,000	9.4	40.8	50.9
2004	51,318,000	384,211,000	255,491,000	1.4	-6.1	-5.2
2005	57,255,000	470,839,000	332,196,000	11.6	22.5	30.0
2006	67,440,000	616,824,000	448,915,000	17.8	31.0	35.1
2007	91,163,000	911,427,000	599,689,000	35.2	47.8	33.6
2008	155,293,000	1,527,542,000	700,197,000	70.3	67.6	16.8
Average	55,563,961	479,042,935	294,440,179	30.4	32.4	26.9

First Bank of Nigeria Plc's annual reports and statement of accounts, various issues

Table 2: Pre and post re-engineering profitability performance of First Bank Nigeria Plc

Years	Profit before tax (₦)	Profit after tax (₦)	Profit before tax (%) gross earnings	Profit after tax (%) gross earnings	Return on asset 1 (%)	Return on asset 2 (%)	Return on equity (%)
1986	145,848	86,625	25.5	15.2	2.4	1.4	28.0
1987	106,013	68,013	15.3	9.8	1.6	1.0	18.0
1988	124,375	74,224	14.5	8.6	1.8	1.0	17.0
1989	163,044	105,946	14.2	9.2	1.9	1.2	20.0
1990	-205,428	-205,428	-14.3	-14.3	-2.4	-2.4	0.0
1991	-10,000	-10,000	-0.6	-0.6	-0.1	-0.1	0.0
1992	433,000	378,000	14.8	12.9	2.5	2.1	37.0
1993	1,196,000	741,000	22.2	13.7	4.6	2.8	42.0
1994	1,179,000	756,000	19.9	12.8	3.2	2.1	33.0
1995	1,238,000	1,009,000	13.8	11.2	1.9	1.6	15.0
1996	1,385,000	1,202,000	12.6	10.9	1.8	1.6	16.0
Average	523,168	382,307	12.5	8.1	1.7	1.1	20.5
1998	2,835,089	2,027,000	21.9	15.6	2.8	2.0	19.0
1999	4,267,813	3,347,520	25.3	19.8	3.1	2.4	30.0
2000	5,767,000	4,739,000	19.4	15.9	3.0	2.4	29.0
2001	6,715,000	5,066,000	20.8	15.7	3.0	2.3	27.0
2002	6,172,000	4,776,000	13.3	10.3	2.1	1.6	24.0
2003	14,420,000	11,010,000	28.5	21.8	3.5	2.7	40.0
2004	14,853,000	11,483,000	28.9	22.4	3.9	3.0	28.0
2005	16,808,000	13,234,000	29.4	23.1	3.6	2.8	27.0
2006	21,833,000	17,383,000	32.4	25.8	3.5	2.8	24.0
2007	25,854,000	20,636,000	28.4	22.6	2.8	2.3	22.0
2008	47,694,000	36,540,000	30.7	23.5	3.1	2.4	10.0
Average	15,201,718	11,840,138	25.4	19.7	3.1	2.4	25.5

First Bank of Nigeria Plc's annual reports and statement of accounts, various issues; return on asset 1 = Profit before (%) total asset; return on asset 2 = Profit after tax (%) total asset

Table 3: Pre and post re-engineering financial intermediation performance of First Bank Nigeria Plc

Years	Loans and advances to total deposit ratio (%)	Loans and advances to total assets ratio (%)
1986	42.4	31.2
1987	40.9	30.2
1988	39.9	31.9
1989	41.5	28.3
1990	25.1	19.5
1991	19.8	14.5
1992	19.8	13.8
1993	18.1	12.4
1994	24.6	16.7
1995	29.1	19.8
1996	29.3	22.1
Average	30.0	21.8
1998	40.2	27.8
1999	38.1	24.8
2000	27.8	19.7
2001	32.2	22.4
2002	37.2	22.8
2003	22.4	14.8
2004	32.7	21.7
2005	37.2	26.3
2006	39.5	28.7
2007	36.4	23.9
2008	65.6	30.1
Average	37.2	23.9

First Bank of Nigeria Plc's annual reports and statement of accounts, various issues

is seen that growth of the bank, measured by annual changes in gross earnings averaged 36.3% before the re-engineering project while it averaged 30.4% post re-engineering. Similarly, the pre re-engineering period growth rate of total deposit surpassed that of post re-engineering period. Average growth rate of total deposit stood at about 31% pre re-engineering while it averaged about 27% post re-engineering period or years. Unlike the pattern for the growth rates of gross earnings and total deposits, the average growth rate of total assets was slightly higher post re-engineering relative to the pre re-engineering period. It is about 32 and 31% for the post and pre re-engineering periods, respectively. From these results, it appears that the re-engineering project had no impact on the growth performance of the bank.

Table 2 provides information on the pre and post re-engineering profitability performances of the bank. From the Table 2, the post re-engineering profitability performances are generally better than the pre re-engineering period performances. Starting with profit before tax as percentage of gross earnings, it averaged 12.5% pre re-engineering and 25.4% post re-engineering. For profit margin measured as profit after tax as percentage of gross earnings, it averaged about 8% pre re-engineering while it is about 20% post re-engineering. Coming to measures of return on assets, it averaged 1.7, 1.1, 3.1 and 2.4% pre and post re-engineering, respectively. Return on equity averaged 20.5 prior to re-engineering but increased slightly to 25.5 after. The extent of financial intermediation by the bank pre and post re-engineering is shown in Table 3. With loans and advances to total deposit ratio, Table 3 shows a higher average ratio of 37.2% post re-engineering period compared to 30% prior to re-engineering. The post

Table 4: Paired samples statistics

Indicators	Situation	Mean	No. of paired observations	SD	SEM
Growth rate of gross earnings	Pre	33.04	11	26.41	7.96
	Post	27.65	11	26.48	7.98
Growth rate of total asset	Pre	28.15	11	23.91	7.21
	Post	29.46	11	21.16	6.38
Growth rate of total deposit	Pre	28.10	11	22.12	6.67
	Post	24.49	11	18.84	5.68
Profit before tax (%) gross earnings	Pre	12.54	11	11.09	3.34
	Post	25.36	11	5.83	1.76
Profit after (%) gross earnings	Pre	8.13	11	8.52	2.57
	Post	19.68	11	4.68	1.41
Return on asset 1	Pre	1.76	11	1.79	0.54
	Post	3.13	11	0.49	0.15
Return on asset 2	Pre	1.12	11	1.39	0.42
	Post	2.43	11	0.40	0.12
Return on equity	Pre	20.55	11	13.63	4.11
	Post	25.45	11	7.43	2.24
Loans and advances to total deposit ratio	Pre	30.05	11	9.52	2.87
	Post	37.21	11	10.84	3.27
Loans and advances to total assets ratio	Pre	21.85	11	7.38	2.22
	Post	23.91	11	4.38	1.32

Table 5: Paired samples (pre and post re-engineering performance indicators) t-test results

Pairs	t-statistics	Probability value	Remarks
Growth indicators			
Pre and post growth rate of gross earnings	0.435	0.674	Not significant
Pre and post growth rate of total asset	-0.143	0.890	Not significant
Pre and post growth rate of total deposit	0.456	0.659	Not significant
Profitability indicators			
Pre and post profit before tax (%) gross earnings	-4.419	0.001	Significant
Pre and post profit after (%) gross earnings	-5.588	0.000	Significant
Pre and post return on asset 1	-3.034	0.013	Significant
Pre and post return on asset 2	-3.821	0.003	Significant
Pre and post return on equity	-0.973	0.354	Not significant
Financial intermediation indicators			
Pre and post loans and advances to total deposit ratio	-1.698	0.120	Not significant
Pre and post loans and advances to total assets ratio	-0.833	0.424	Not significant

re-engineering period average loans and advances to total assets ratio is also higher. It is therefore, suggestive that financial intermediation by the bank improved following re-engineering.

Test of significance between pre and post re-engineering performance indicators: As indicated before, the t-test was used to validate the study hypothesis that there is no significant difference in the pre and post re-engineering performance of the bank. Given that we used alternative measures as well as several indicators of assessing the banks performance, we conducted paired t-test between pre and post re-engineering performance for each of the measures and/or indicators that we used. The paired samples statistics and results obtained are shown in Table 4 and 5, respectively.

From Table 5, given the t-statistics and the probability values, it is seen that there is no significant difference between the pre and post re-engineering growth performance indicators of the bank. This therefore, implies that the bank neither grew better during the pre re-engineering period nor during the post re-engineering years. Coming to profitability and its indicators, Table 4 shows that there are significant differences between the pre and post re-engineering period's performances for all the indicators except return on equity. By and large, it can be inferred that the re-engineering project positively improved the profitability of the bank. Lastly, on the extent of financial Intermediation, the results show that there is no significant difference between the pre and post re-engineering period. In other words, the re-engineering project made no significant improvement on financial intermediation by the bank.

CONCLUSION

In this study, the impact of the re-engineering of operational processes on the performance of the First Bank Nigeria Plc was evaluated. The hypothesis was that the re-engineering project has had no significant effect on the operational performance of the bank. This hypothesis was tested by using data from the banks annual reports and statements of accounts for various years. The performance of the bank was alternatively assessed through growth, profitability and the extent of financial intermediation by the bank. The analysis of the da ta showed that the re-engineering project significantly improved the profitability performance of the bank but not for growth and the extents of its financial intermediation.

REFERENCES

Altinkemer, K., A. Chaturvedi and S. Kondareddy, 1998. Business process reengineering and organizational performance: An exploration of issues. Int. J. Inform. Manage., 18: 381-392.

Bashein, B.J., M.L. Markus and P. Riley, 1994. Preconditions for BPR success and how to prevent failures. Inform. Syst. Manage., 11: 7-13.

Blake, C., 1998. Improving organizational performance. A Watson Wyatt Presentation on Business Driven Incentives, June.

Davenport, T., 1990. The new industrial engineering: Information technology and business process redesign. Sloan Manage. Rev., 31: 11-27.

Davenport, T.H., 1995. Business Process Reengineering: Where It's Been, Where It's Going. In: Business Process Change: Concepts, Methods and Technologies, Grover, V. and W.J. Kettinger (Eds.). Idea Publishing, Harrisburg, Pennsylvania, pp: 1-13.

Drucker, P.F., 1954. The Practice of Management. Harper and Row, New York.

Guimaraes, T. and W. Bond, 1996. Empirically assessing the impact of BPR on manufacturing firms. Int. J. Operations Prod. Manage., 16: 5-28.

Gupta, A.K. and V. Govindarajan, 1994. Alternative Value Chain Configurations for Foreign Subsidiaries: Implications for Coordination and Control within MNCs. In: Building the Strategically Responsive Organization, Thomas, H., D. O'Neal and R. White (Eds.). John Wiley and Sons, Chichester, UK., pp: 375-392.

Hales, H.L. and B.J. Savoie, 1994. Building a foundation for successful business process reengineering. Ind. Eng., 26: 17-19.

Hammer, M. and J. Champy, 1993. Re-engineering the Corporation: A Manifesto for Business Revolution. 1st Edn., Hapercollins, New York, USA., ISBN-13: 978-0887306402, pp: 1-240.

Hammer, M., 1990. Re-engineering work: Don't automate, obliterate. Harvard Bus. Rev., 68: 104-112.

Hewitt, F., 1995. Business process innovation in the mid-1990s. Integr. Manuf. Syst., 6: 18-26.

Miers, D., 1996. Use of Tools and Technology within a BPR Initiative. In: Business Process Re-engineering, Coulson-Thomas, C. (Ed.). Kogam Page Ltd., London.

Ozcelik, Y., 2010. Do business process reengineering projects payoff: Evidence from the United States. Int. J. Project Manage., 28: 7-13.

Robbins, S.P., 1997. Essentials of Organizational Behaviour. 5th Edn., Prentice Hall, Inc., New Jersey.

Shin, N. and D.F. Jemella, 2002. Business process reengineering and performance improvement: The case of chase Manhattan bank. Bus. Process Manage. J., 8: 351-363.

Stoner, J.A.F., 2001. Management. 6th Edn., Prentice Hall, Inc., Englewood Cliffs, New Jersey.

Terziovski, M., P. Fitzpatrick and P. O'Neill, 2003. Successful predictors of Business Process Reengineering (BPR) in financial services. Int. J. Prod. Econ., 84: 35-50.