

THE IMPACT OF BUSINESS PROCESS RE-ENGINEERING ON ORGANIZATIONAL PERFORMANCE (A STUDY OF COMMERCIAL BANKS AND MICRO-FINANCE BANKS IN ILARO)

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Abstract *The researcher examined the Impact of Business Process Reengineering (BPR) has on Organizational Performance focusing on Commercial Banks and Micro-finance Banks in Ilaro, Ogun state. The objective of the study is to uncover how BPR can help to effect innovative and strategic changes in the organization, to determine the impact of BPR on organizational performance; to assess the roles of information technology in the implementation of BPR for an organization to attain its goals and to determine how BPR can affect the service rendered by an organization. The data for this research work were obtained through primary and secondary source where respondents were selected using simple random sampling technique and a survey was carried out on the staff of commercial banks and micro-finance banks in Ilaro. 124 answered questionnaires were returned by the respondents. The data was analyzed using multinomial regression analysis. From the findings, it showed that if returned P-value of multinomial regression model result is <0.05 (0.05 being the level of significance) and vice versa, the returned P-value for all hypotheses tested was <0.05. So all the four alternative hypotheses tested were accepted. Therefore, business process reengineering has positive impact on organizational performance. The study recommended that the organization's incentive and reward system should be changed by considering benefits in respect of salary increment, promotion, empowerment and compensation.*

Keywords: Business Process, Business Process Reengineering, Organizational, Performance and Information Technology

INTRODUCTION

The rapidly growing markets, information and awareness in the world demand organizations to change their operational processes to compete globally. People have more knowledge, more information in these days and this has compelled banks of many countries to advance the quality of their customer service, lesson their operating cost and improve their performance especially in the developing countries. In order to create a dramatic increase in efficiency, productivity or profitability, a drastic change in the design of the organization's processes is required. That is why Graham (2010), says reengineering is a useful tool that has been adopted by and hailed as one of the current major agent of change within many organizations.

Business process reengineering is playing a vital role in the enhancement of productivity and efficiency of many organizations. A crowd of interrelated tasks that creates value is called a business process (Habib, 2013). Business process reengineering (BPR) is a popular management tool for dealing with rapid technological and business changes (Ranganathan & Dhaliwal, 2001). It was first introduced by Hammer (1990), as a radical redesign of processes in order to gain significant improvement in cost quantity and service (Ozcelik, 2010).

Business process reengineering creates in people (Behaviour and culture), process and technology. (Al-Mashari, Irani & Sari, 2010), it does not seek to alter or fix existing process but it forces companies to ask, whether or not a process is necessary. And then seeks to find a better way to do it. BPR integrates all departments into a complete process which have been designed to fulfill a specific business goal (Cheng, Tsai & Xiao, 2006), Successful implementation of BPR enable organization to achieve dramatic gain in business performance.

Business process reengineering helps banks to deal with new economic challenges and change the traditional process to improve their customer's satisfaction. Business process reengineering is a management discipline in analyzing and then redesigning current business process and their component in terms of efficiency, effectiveness and added value to the objectives of the business. The conduct of business process reengineering steps is planned to gather and process business requirements in support of a moderation effort for defined area. The BPR start with planning activities that include the creation of business process reengineering team.

Statement of the problem

The decline in operational performance efficiency of Nigeria banks in terms of return of assets, equity and operating cost requires urgent attention of the banks to re-strategize for process performance improvement. Poor operational performance indices of Nigerian financial institutions were due to inadequate and inflexible operational processes. This was part of the revelations of the special audit for all the Nigerian banks conducted jointly by Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NIDC) in July 2009, for commercial banks and in February, 2010, for Microfinance banks.

In Nigeria banking industry, managers realized the effectiveness of BPR for gaining competitive advantage even though it is new, but they do not fully understand what business process reengineering is all about and critical success factors that drive the successful implementation of the BPR project. Another issue is that processes must not only be efficient, but also must be made more customer friendly too, while communicating the necessity for change with employees.

Objectives of the study

The purpose of this research is to analyze the impact of business process reengineering on the performance of Nigerian banking sector based on a survey within Commercial Banks and Microfinance Banks in Ilaro. The specific objectives are as follows:

1. To uncover how BPR can help organization to effect innovative and strategic changes in the organization.
2. To determine the impact of BPR on organizational performance
3. To assess the roles of information technology in the implementation of BPR for an organization to attain its goals.
4. To determine how business reengineering process can affect the service rendered by an organization

Research questions

This research work seeks to provide answers to the following questions:

1. Does business process reengineering affect innovative and strategic changes in the organization?
2. Does business process reengineering (BPR) have any impact on organizational performance?
3. Does information technology has impact on the implementation of business process reengineering?
4. Does business process reengineering affect the services rendered by an organization?

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Research hypotheses

In light of the above questions raised, the following were theorized:

H₁: Business process reengineering does not affect innovative and strategic changes in the organization.

H₂: There is no significant impact of business process reengineering on organizational performance.

H₃: There is no significant relationship between information technology implementation of BPR and organizational goals.

H₄: Business process reengineering does not have effect on quality service rendered by an organization.

Literature Review

Conceptual Review

To broaden the understanding of the subject under discuss, the following concepts are briefly and concisely discussed:

Innovative rethinking: This is a process that itself utterly dependent on creativity, inspiration and old- fashioned luck. Drucker (1993) argues that this paradox is apparent only no real most of what happens in successful innovation is not the happy occurrence of blinding flash of insight but rather, the careful implementation of unspectacular but systematic management discipline.

Process function: Taking a systematic perspective, Hammer and Champy (1993) describes process function as a collection of activities that take one or more kinds of input and creates an output that is of value to the customer. Typical process of this includes ordering of organizational structure, manufacturing, production, development, delivery and invoicing

Radical change: In radical change, a key business process is the transformation of organizational element it is essential to an organization survival. Change leads to new ideas, technology, innovation and improvement. Therefore it is important that organizations recognize the need for change and learns to manage the process effectively (Pamela et al, 1995).

Organizational development and performance: It takes a look at the firm's level of efficiency and way to improve its current activity level in order to meet up to standards and survive the

competitive pressure. One way to judge the performance of an organization is to compare it with other unit within the company. Comparison with outsiders however can highlight the best industrial practices and promote their adoption. This technique is commonly term “bench breaking” (Robberts, 1994).

Relationship between Business Process Reengineering (BPR) and Information Technology (IT)

Hammer (1990), considers information Technology (IT) as the key factor in BPR for organization that want to witness a ‘radical change’ in its operation. He prescribes the use of IT to challenge the assumption whereat in the work processes that have existed since long before the advent of modern computer and communications technology. He argues that at the head of reengineering is the notion of discontinuous thinking of or recognizing and breaking away from the outdated rules ad fundamental assumptions underlying operations. These rules of work design are based on assumptions about Technology, people and organizational goals that no longer hold Aremu and Saak (2006), argued that information technology is a strategic resource that facilities major changes in competitive behavior, marketing and customer service. In essence, it enables a firm to achieve competitive advantage.

Information Technology (IT) and Business Process Reengineering (BPR) have recursive relationship. IT capabilities should support business process and business should be in terms of the capabilities information Technology can provide. Davenport and Short (1990), refer to this broadened, recursive view of IT and BPR as the new industrial engineering business process represent a new approach to coordination across the firm

Theoretical Review

Administrative Management Theory

The theory of Henri Fayol which formed the foundation of this work is administrative management theory. The concept of reengineering traces its origin back to management theories developed as early as the nineteenth century. Fayol published an article called ‘*administration industrielle et generate*’ which explained how managers would organize and interact with staff. This principle was one of the earliest theories of management to be created and remains one of the most comprehensive. It propagates that responsibility and authority must come together, there must be order, unity of diversion, sub-ordination of individual interest, discipline, initiative, equity and spirit-de-corps etc, are needed for BPR success. It echoes the classical belief that there is one best way to conduct talks. During Taylor’s time, technology did not allow large companies to design processes in a cross- functional or cross- departmental manner specialization was the state of the art method to improve efficiency given the technology of the time. In the early 1900’s, Fayol initiated the concept of reengineering to conduct the undertaking toward its objectives by seeking to derive optimum advantage from all available resources. Although the technological resources of our time have changed, the concept still holds.

BPR was generally concerned by Simon (1994), as consisting of four elements to be considered as there as strategies, processes, technology and people. Strategies and process are building the ground for the enabling utilization of technologies and the redesign of the human activity system.

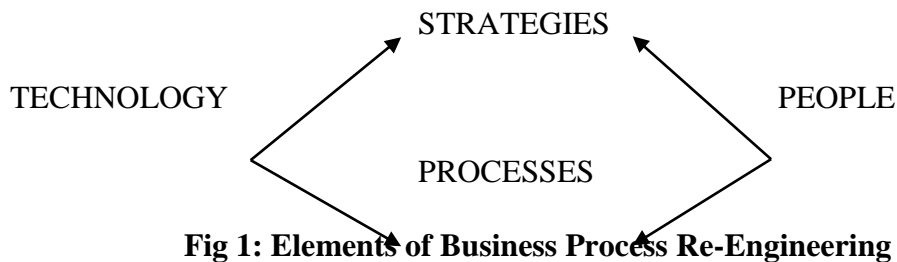


Fig 1: Elements of Business Process Re-Engineering

Source: (Simon 1994)

The elements are briefly discussed below:

Strategies: The strategy dimension has to do with the strategies within the other areas under concern, which are organization strategy, technology strategy and human resources strategy. The determination of all strategies has to be performed with respect to the dynamic market places the organizations is acting on and is not focused on internalities, but the eternal presumptions for successful acting on markets. Above that, strategies have to be current and relevant to the organizations vision, as well as to internal and external constraints, which implies, that a reconsideration and redefinition of strategies might be a presumption for further change. The strategies must be defined in a way that enables understanding and motivation of employees in order to align the work force with them.

Processes: Processes can be defined on different levels within the organization. The issue is, to identify core processes which are satisfying customer needs and add value for them. It is important to point out, that processes are not determined by internal organizational requirements, but by customer requirements, even though organizational constants have to be taken under consideration. The shift from functional departments to inter- functional processes includes a redesign of the entire organizational structure and the humor activity system and implies instead of fast optimization.

Technology: Information technology is considered as the major enabler for spanning processes driven organizations. However, the point is not to use IT as in improper for existing activities, as which it often has been conceived, but as enabler for the new organization. This includes using new technology such a groupware, as well as new methods for using them as acceptance of technological changes and the fact that information technology will be shaping the future.

People: The human activity system within the organization is the most critical factor for reengineering. While top management support for reengineering efforts is rather simple to ensure, the real change agents, middle management are far harder to win due to the fact that they have to identify change opportunities and perform them, while they are the group facing most threats as BPR as often is used for cutting hierarchies and reducing the workforce. The other critical factor is to align the work force with the strategies defined and to address the variables of cultural and environmental contexts within the organization. Finally, flattering implies decision making to be moved down to the organization and empowerment of the employees taking them. This requires training and education as well as motivation and trust from top management that people are able

willing to take responsibility a fact that is rather contradictory to the trust is good, is better way of thinking.

Empirical Review

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Ikon, Onwuchekwa and Nwoye (2018) conducted a study on BPR and competitive advantage in a recessed economy using some selected brewing firms in Anambra State, Nigeria as a study. The study used a descriptive and survey design. Data was collected and analyzed with the use of correlation analysis using Pearson's Product Moment Correlation Co-efficient. The findings of the study revealed a significant positive relationship between management commitment and innovative strength where management commitment is an indicator of BPR and innovative strength is an indicator of competitive advantage. The study recommended among other things that management commitment of the focused firms should lead the change processes by example so as to motivate their followers to buy into the idea.

Taiwo (2017) carried out a study on BPR and organizational performance in order to determine the relationship that exist between them using United Bank for Africa (UBA) as a study. The study collected and analyzed data through SPSS using Chi-square. The findings of the study revealed that BPR is a useful weapon for any organization that is seeking to improve its performance. The study went further to recommend that re-engineering process remains an effective tool for organizations striving to operate effectively and efficiently.

Nzewi, Nzewi and Moneme (2015) investigated the effect of BPR on performance of courier service organizations in Anambra State, Nigeria. The study employed descriptive research design. The data collected by the study was analyzed using Principal Component Analysis and Multiple Regression Analysis. The result of the analysis revealed that a significant relationship exist between BPR factors (change management, process redesign, management commitment and IT infrastructure) and overall organizational performance of the selected courier service organization. The study concluded that BPR is a vital model for improvement in firm's operational performance and achievement of long term growth and competitive advantage. The study recommended that IT strategy must be aligned with organization's business strategies, training and education of employees on newly introduced operational processes.

Aregbeyen (2011), carried out a study on Business Reengineering and organizational performance in Nigeria: A case study of First Bank Nigeria Plc., (FBN). He used the paired data samples method between 1986 and 2008. The study was aimed at evaluating the impact of the reengineering of operational process on the performance of the bank. The results revealed after the necessary period. It can be inferred that the reengineering project positively improved the profitability of the bank. The reengineering project made on significant improvement of financial intermediation by the bank.

Ringim, Razali and Hasnan (2011), carried out a study on aspect of Business Process Reengineering Factors on organizational performance of Nigerian banks: information Technology capability as the moderating factor. The results show that the dimensions of BPR are reliable and valid. In addition BPR implementation was found in various operations processes in Banks.

Habib (2013), carried out a study on understanding critical successes and failure factors of Business Process Reengineering in Pakistan. The used of explorative survey methods to carry out his study. The results revealed that companies are shifting from product centered approach to customer oriented approach.

Mlay, Zlotinikova and Watundu (2013), carried out a study on A Quantitative Analysis of Business Process Reengineering and organizational Resistance: The case of Uganda. They concluded that many organizations in Uganda need to reengineer their processes to improve on efficiency. They recommended that organizations intending reengineer processes should put a lot of emphasis on soft issues of the BPR implementation.

Findings of empirical research have explicit the usefulness of BPR when employed by Commercial banks. However, there has not been an investigation into the effect of BPR on Micro-finance banks' performance. This is an identified gap that this study seeks to fill.

Methodology

Research Design

The research is designed to be a survey type which allows information to be obtained from the people directly through the asking of questions.

Population of the study

The population used in this research work are staffs of all Commercial Banks and Micro-finance Banks in Ilaro name. Research shows that there are 143 members of staffs in the management level of the selected banks under the study.

Sample size and sampling technique

Seven banks were selected using simple random sampling techniques. The size of a sample depends on the total population. In determining the sample size, some factors must be put into consideration by a practical researcher. Therefore, the sample size is the whole population of the study

Method of Data Collection

The data for this research work was obtained through primary and secondary source. The primary data which was collected through the use of questionnaire administered on the sample while the secondary data on the other hand were collected from materials and journals from the internet and textbooks.

Validity and Reliability

Content validity was used for this study. This refers to the match between test questions and the content or subject area to be tested. The content validity for the instrument was ensured by presenting the instrument to experts in the field for assessment. The Cronbach's alpha value is 0.712 which shows that the questionnaire is valid because of the high value.

Method of Data Analysis

The collected data was analyzed using the Statistical Packages for Social Sciences (SPSS) and Multinomial Regression Analysis was used to test the hypotheses.

The model is stated as follows:

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$$\pi^{\wedge} = \frac{\exp(\beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \dots + x_i)}{1 + \exp(\beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \dots + x_i)}$$

Data Presentation

The table below shows the demographic information of the respondents.

Table: Demographic information of respondents

Variable	Frequency	Percentage
<u>Gender</u>		
Male	82	66.1
Female	42	33.9
Total	124	100.0
<u>Age</u>		
20-30	59	47.6
31-40	48	38.7
41 and above	17	13.7
Total	124	100.0
<u>Marital Status</u>		
Single	73	58.9
Married	45	36.3
Divorce	6	4.8
Total	124	100.0
<u>Working Experience</u>		
0-5	71	57.3
6-10	50	40.3
11-15	3	2.4
Total	124	100.0
<u>Educational Qualification</u>		
NCE/OND	21	16.9
HND/BSc	80	64.5
MSc and Above	23	18.5
Total	124	100.0
<u>Position</u>		
Top-level management	6	4.8
Middle-level management	68	54.8
Lower-level Management	50	40.3
Total	124	100.0

Source: Field Work, 2019

Test of Hypotheses

Hypothesis I:

Page | 10 **H₀₁: Business process reengineering has no significant effect on innovative and strategic changes in the organization.**

Table: Multinomial regression model result

Variables	Estimator	Estimates (-2log-likelihood)	Significance
Model information	Intercept only		
Constant			
BPR	β_0	114.570	
WBPR	β_1	131.247	0.002
	β_2	142.080	0.001

Source: STATA computation

Where,

BPR= Business Process Reengineering (Item 7).

WBPR= Without Business Process Reengineering (Item 9).

Hypothesis II:

H₀₂: There is no significant impact of business process reengineering on organizational performance.

Table: Multinomial regression model result

Variables	Estimator	Estimates (-2log-likelihood)	Significance
Model information	Intercept only		
Constant			
BPPE	β_0	45.828	
	β_1	92.012	0.000

Source: STATA computation

Where,

BPR= Business Process Reengineering

Hypothesis III:

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H₀₃: There is no significant relationship between information technology implementation of BPR and organizational goal.

Table: Multinomial regression model result

Variables	Estimator	Estimates (-2log-likelihood)	Significance
Model information	Intercept only		
Constant	β_0	46.533	
IT	β_1	68.055	0.001
IIA	β_2	77.918	0.000

Source: STATA computation

Where,

IT = Information Technology (Item 17).

IIA= Innovative Application of Information technology (Item 18).

Hypothesis IV:

H₀₄: Business process reengineering does not have effect on quality service rendered by an organization.

Table: Multinomial regression model result

Variables	Estimator	Estimates (-2log-likelihood)	Significance
Model information	Intercept only		
Constant	β_0	47.862	
BPR	β_1	75.319	0.001
RIB	β_3	65.633	0.007

Source: STATA computation

Where,

RIB= Business Process Reengineering, Inefficiency.

Discussion of results

Based on the results obtained from the tested hypothesis one, the significance levels of the parameters are less than 0.05, we can conclude that the final model (model with parameter) is better than the null (the model without the parameter). Hence, we reject the null hypothesis and conclude by accepting the alternative hypothesis that business process reengineering has significant effect on innovative and strategic changes in the organization.

Similarly, the result of hypothesis two, the significance levels of the parameters are less than 0.05, we can conclude that the final model (model with parameter) is better than the Null (the model without the parameter). Hence we also reject the null hypothesis and conclude by accepting the alternative hypothesis that business process reengineering has significant effect on organization performance.

The outcome of the result of the test of hypothesis three revealed that the two factors have their significance values less than 0.05. Since the significance levels of the parameters are less than 0.05, we can conclude that the final model (model with parameter) is better than the Null (the model without the parameter). Hence, we can conclude by accepting the alternative hypothesis that business process reengineering has significant effect on organizational goal.

Finally, the test of hypothesis four, revealed a significant effects of the factors on quality service rendered by an organization. The two factors have their significance values less than 0.05. Hence we can conclude by accepting the alternative hypothesis that business process reengineering has significant effect on quality service rendered by an organization.

Conclusion

Based on the findings of the study, the following conclusions were reached:

- i. Business process reengineering has significant impact on the performance of all commercial banks and micro-finance banks in Ilaro.
- ii. From the analysis, it was revealed that innovative and strategic changes, business reengineering process, information technology and service quality majorly determine the success of the organizational performance.
- iii. Business process reengineering has become useful weapon for any corporate organizations that is seeking for improvement in their current organizational performance and intends to achieve cost leadership strategy in its operating industry and environment.
- iv. Finally, re-engineering process remains an effective tool for organizations striving to operate in the competitive world organizations are required to reengineering their business process in order to achieve breakthrough performance and long-term strategy for organizational growth.

Recommendations

- i. In view of the perceived positive impact of BPR on corporate performance, there is the need for actors in the banking sector to internalize the change process in order to reduce the cost associated with BPR.
- ii. It should also be mentioned that reengineering is a continuous process consequently there is the need for organizations to establish a business and strategy service unit vested with the responsibility of identifying, formulating, implementing and evaluating the change process.

- iii. Furthermore, there is the need to be cautious in embracing reengineering, it must be adequately integrated with the human resource function of the organization. It is pertinent to mention that reengineering must not be misconstrued with downsizing of the workforce. However, if it becomes necessary to downsize, the out placed employees should be re trained to fit into other areas in the organization rather than discarding them completely.

References

- Al-Mashari, M., Irani, Z. & Sari, M. (2010). Business process Reengineering: A survey of international experience. *Business process management journal*, 7 (5), 437-455.
- Aregbeyen, O. (2011). Business Reengineering and Organizational performance in Nigeria: A case study of First Bank of Nigeria Plc. *Medwell Journals of International Business Management*, 5(2), 151-158.
- Aremu, M.A & Saka, S.T. (2006). The Impact of Information Technology on Library Management: *A Marketing Perspective in Advances in Management*, A Publication of Department of Business Administration, University of Ilorin, Nigeria, 5(1), 141-150.
- CBN. (2008) Central Bank of Nigeria Annual Report and Account as at 31st December. Abuja: Central Bank of Nigeria.
- Cheng M.Y, Tsai MH, Xiao Z.X. (2006). Construction Management Process Reengineering: *Organizational Human Resource Planning for Multiple Projects*. Autom, Construction. (15), 785-799
- Davenport T. (1993). *Process Innovation: Reengineering work through Information Technology*. Harvard Business School Press, Boston.
- Drucker, P. (1993). The Discipline of Innovation. *Harvard Review*, 13 – 24.
- Graham, R.S., (2010). Business Process Reengineering: Strategies for Occupational Health and Safety. *Journal of Management*, 2(1), 15-19.
- Habib, M.N (2013). Understanding Critical Success and Failure Factors of Business Process Reengineering, *International Review of Management and Business Research*, 2(1), 1 – 10.
- Hammer, M (1990). Reengineering Work: Don't Automate Obliterate *Harvard Business Review*, 104 – 112.
- Hammer, M. & Champy, J. (1993). *Reengineering the Corporation: A Manifesto for Business Reduction*. London: Harper Collins
- Ikon, M. A., Onwuchekwa, F.C. & Nwoye, C.O. (2018). Business Process Reengineering (BPR) and Competitive Advantage in a Recessed Economy. A study of Selected Brewing Firms in Anambra State, Nigeria. *International Journal of Management Technology*, 5 (2): 1-15.
- Mlay S.V, Zlotnikova L. & Watnudu, S (2013). A Quantitative Analysis of Business Process Reengineering and Organization Resistance. The Case of Uganda. *The African Journal of Information Systems*, 5(1) 1 – 26.
- Nzewi, H, N., Nzewi, U. C., & Moneme, P. (2015). Business Process Reengineering and Performance of Courier Service Organizations in Anambra state, Nigeria. *American Journal of Social and Management Sciences*, 6(1), 24-33.
- Ozcelik, Y. (2010). Do Business Process Reengineering Projects Pay Off? Evidence from the United States. *International Journal of Project Management*. (28), 7-13.
- Pamela S.L. & Stephen H.G (1995). *Management Challenges in the 21st Century*. West publishers.

- Ranganathan, C. & Dhaliwal, J. (2001). A Survey of Business Process Reengineering Practices in Singapore. *Information Management*, 39 (2), 125-134.
- Ringim K.J, Razalli M.R. & Hasnan, N. (2011). Effect of Business Process Reengineering Factors on Organizational Performance of Nigerian Banks. Information Technology Capability as the Moderating Factor. *International Journals of Business and Social Science*, 2(13), 198-201.
- Roberts, L. (1994). *Press Reengineering: The Key to Achieving Break through Success*. Milwaukee, Quality Press.
- Simon, K. A. (1994). Towards a Theoretical Framework for Business Process Reengineering. A *Journal Publication. U.S.A. The Internet*.
- Taiwo, A.A. (2017). Business Process Reengineering and Organizational performance. *Paper presented at the 11th annual National Conference of School of Management Studies, Federal Polytechnic, Ilaro, Ogun State held on 28th-30th November, 2017.*