THE CONNEXUS OF BUSINESS PROCESS RE-ENGINEERING AND OPERATIONAL PERFORMANCE IN THE PUBLIC SECTOR: EVIDENCE FROM GAMBIA REVENUE AUTHORITY

BY

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Abstract

The paper summarizes the arguments and counterarguments within the scientific discussion on the relationship between business process reengineering and operational performance in the Gambian public sector. In recent time, knowledge has become one of the most vital assets that guaranteed the survival of firms in the fiercely competitive environment. The emergence of knowledge-based economy has made it a strategic necessity for organisations to initiate ways to effectively acquire and manage varying organizational knowledge. For organizations to survive and excel in today's highly dynamic environment, they must continually transform their way of doing business. Business process improvement is a systematic methodology created to help organizations make significant advances in the way their business processes operate. The aim of business process improvement is to devise new ways of organizing tasks, people and resources so that organizational processes become more effective and efficient. The underlying essence of business process improvement is to improve the quality of process and service, with customer-focus, with a view of achieving and sustaining operational and service excellence. This study sought to investigate the effect of business process improvement mechanisms on operational performance. The study made used of primary data with the aid of a structured questionnaire. Descriptive and inferential statistics was employed in analyzing the data. Pearson Product Moment Correlation Coefficients was used to test the hypotheses. Findings from the study results revealed a significant positive relationship between strategic planning, organisation structure, organisation culture, organisation process as well as ICT and operational performance at GRA as indicated by correlation coefficients (89%, 95%, 91% and 94%) which were all above 50% respectively. The study concluded that strategic planning, organisation structure, organisation culture, organisation process as well as ICT played a significant role in enhancing operational performance. Based on the findings and conclusion, the study recommended that strategic management must demonstrate their commitment to BPR with resources, action, structures, systems guidelines, and activities. Management must also foster a culture that constantly ensures the enshrinement of BPR policies also continually deploy various information technologies to drive operational performance.

Keywords: Business Process, Reengineering, Operational, Performance, Public Sector, Gambia

Introduction

Business process reengineering is a management practice that aims to improve the efficiency of the business process. 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 agents of change within many organizations. Business process reengineering (BPR) is a popular management tool for dealing with rapid technological and business changes (Ranganathan & Dhaliwal, 2001). The key to business process reengineering 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. Reengineering is a fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in cost, quality, speed, and service (Chang, 2014).

The development of an organization is a continuous process but the speed of change has increased in manifolds. In a volatile global world, organizations become competitive through business process reengineering by radically redesigning selected processes. 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). Effectiveness and efficiency in public service delivery have become watchwords in today's public sector (Ndunda, 2015). Governments at both national and regional levels are continually seeking ways to improve business processes for enhanced public service delivery (Matei & Drumasu, 2015). Several techniques are being used by both the national and local authorities as part of public performance improvement strategies with BPR emerging as one of the techniques proven to be the most effective means of enhancing organizational effectiveness and efficiency (Smith & Fingar, 2013). Public revenue collection is an integral component of fiscal policy and administration in any economy because of its influence on government operations. It is the fuel of every government as it is the main instrument through which government funding is ensured (Muthama, 2013). Public revenue collection should comply with best practices of equity, ability to pay, economic efficiency, convenience and certainty (Agbedzani, 2011). For any government to match the economy's performance with the growth and expectations of its citizens, it needs to increase its fiscal depth without incurring costly recurring overheads (Kimario, 2014). According to Anderson (2013) public revenue collection refer to the processes and mechanisms by which the government through its authorized public agencies is able to raise funds from the citizens to finance its operation.

Previous researchers have investigated the principles of business process reengineering and how organizations approach this process from private organizations contexts. But only few researches tried to spotlight the issues associated with BPR implementations (Majed Al- Mashari, et al.; 2001). Furthermore, a study of the literature also reveals that despite the much research that has been done in advanced world in investigating the link between BPR and operational performance, the body of research work available in developing countries like the Gambia on BPR and performance seems to be few. That is, Gambia as a country is yet to tap into the capabilities that come up as a result of good BPR practices. Furthermore, most studies that investigated BPR nexus seems to emphasize more on private sector driven organizations. There appear to be few studies in the public sector. This study therefore attempts to fill the gap by carrying out detailed research on the impact of BPR on operational performance in GRA. Specifically, this study intended to establish the influence of business process re-engineering on the operational performance of Gambia Revenue Authority (GRA). The specific objectives are to:

Research Hypotheses

H_{O1}: Strategic planning does not have significant influence on the operational performance of Gambia Revenue Authority.
H_{O2}: Organizational structure does not have significant influence on the operational performance of Gambia Revenue Authority.
H_{O3}: Information technology does not have significant influence on the operational performance of Gambia Revenue Authority.
H_{O4}: Organizational culture does not have significant influence on the operational performance of Gambia Revenue Authority.

Literature Review

Business process reengineering is a management practice that aims to improve the efficiency of the business process. The key to business process reengineering 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. Reengineering is a fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in cost, quality, speed, and service (Chang, 2014). Gunasegaram and Kobu (2012) contended that the significant component of BPR adjustment is a result of its capacity and usage of Information Technology and calculation. It has been additionally expressed that the picking up acknowledgment of BPR as an instrument for change is because of its transparency towards the innovation. Gouranourimi (2012) further argued that business process reengineering differs from other techniques of change management in that it employs the techniques of continuous process improvement and total quality management by instituting initiatives that focus on improvement of work processes. It requires changes to be made in the organizational structure and is often measured in terms of the time required for implementation and outcomes. Business process re-engineering forms the basis upon which initiatives aimed at procedure improvement are implemented. The main aim of business process reengineering is to ensure all organizational processes are effective. It focuses more on overall performance improvement rather than any one element or measure of performance.

Many researchers and practitioners supported that organizational culture can enable the successful implementation of BPR. Culture is important for facilitating sharing, learning, and knowledge creation. In general, culture highly values knowledge, encourages its creation, sharing, application, and promotes open climate for free flow of ideas. Every organisation has its own particular culture and its own unique practices (Schein, 2004). An effective culture for BPR consists of norms and practices that promote the transfer of information between employees and across department lines. (Yeh, Lai, & Ho, 2006). Building an effective culture which people operate in an organisation is a Critical requirement for effective BPR implementation (Gupta & Govindarahan, 2000). 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 strategies must be defined in a way that enables understanding and motivation of employees in order to align the work force with them. (Naibei, 2017). Balance Scorecard Institute (2017) stated Strategic planning is an organizational management activity that is used to determine priorities, prioritize energy and resources, strengthen operations, ensure employees and other management work towards shared goals, determine decisions about desired results or outcomes, and assess and adjust organizational direction and responsiveness the possibility of a changing environment.

Information technology is considered as the major enabler for spanning processes driven organizations (Naibei, 2017). Technology is a systematic application of physical forces for production of goods and services. It is the knowledge, process, tools, methods and systems employed in the creation of goods and improving in services. Technological innovation provides the life-blood of economic activities. It is a tool for economic growth and the application of those inventions to meet emerging business opportunities, and to meet social needs, and environmental challenges (Naibei, 2017). Information and Communication Technology (ICT) has been identified as a critical component of the business process reengineering process. According to Bucic and Gudergan (2004), organizational structure is the formal system of task and reporting relationships that controls, coordinates and motivates employees so that they cooperate to achieve organizational goals. Organizational structure includes the nature of layers of hierarchy, centralization of authority, and horizontal integration. It is a multi-dimensional construct in which concerns: work division especially roles or responsibility including specialization, differentiation or departmentalization, centralization or decentralization, complexity; and communication or coordination mechanisms including standardization, formalization and flexibility.

Khuhil (2013) notes that efficiency and effectiveness are critical factors when determining the level of performance in any organization. Operational performance is the processes geared at coordination and enhancement of the work activities and the results within a given organization (Khakata, 2014). It is the appraisal of prescribed indicators or the standards of efficiency, effectiveness and accountability such as cycle time, productivity, regulatory compliance and waste management (Mungai, 2015). Organizations are aimed at converting inputs to output, utilize resources and provide products and services to customer and consequently attain their objectives in an efficient and effective manner. Every organization strives to distinguish itself from competitors' organization through unique strategies in marketing, human resource and finance (Kumar & Suresh, 2009). The main themes in operational performance are efficiency and effectiveness. According to Lee and Johnson (2013) efficiency is defined as how well a business activity is performed. It can be captured by the phrase, "doing things right". Lee and Johnson (2013) further argue that efficiency is the ability to deliver services and products without compromising on quality. On the other hand, effectiveness involves the selection of the best course of action. Consequently, it can be captured by the phrase, "doing the right thing". Effectiveness is the ability to perform a task in the best way possible in order to meet customer needs. Consequently, a firm that is effective establishes strategic goals and is efficient if it achieves its strategic goals using minimal resources (Lee & Johnson 2013).

Birger Wernerfelt (1984) built up the Resourced Based View (RBV). The Resource Based View (RBV) is a theoretical perspective widely applied to explain variations in organizational performance (Peteraf & Barney, 2012). The focus of RBV, as applied to the public sector context, is on using an organization's resources most efficiently to create public value (Bryson, Ackermann & Eden, 2013). Studies that employ RBV have generally used two constructs: resources and competencies. Resources are those assets upon which an organization might draw to achieve its goals or to perform well on its critical success factors (Saqib & Rashid, 2013). Resources can include financial, human and technological resources, physical assets and any items that can be considered strengths in a typical strength, weaknesses, opportunities and threats analysis. Resources can be tangible (such as financial resources or physical capital) and intangible (such as human capital, organizational knowledge, organizational culture or organizational networks and relationships) (Bryson et al., 2013). Conversely, competencies are a subset of resources that have transformational and managerial capabilities, such as sets of actions, technical capabilities or functional process knowledge, and that help an organization perform well on important goals or against critical success factors. Public organization competencies may include service delivery ability, procedural knowledge, taxing abilities and service responsiveness (Bryson et al., 2013) This theory argues that organizations should not try to achieve strategic fit with the external environment but aim to maximize their internal resources to create and dominate future opportunities (Armstrong, 2011). This approach assumes that the core competencies in the organization are unique; people are viewed as an investment and not a cost, learning, knowledge sharing, innovation and experimentation are encouraged and employees are involved in decision making. This theory thus assumes that an organization's workforce is a unique and inimitable resource that can generate a competitive advantage for the organization if effectively harnessed (Peteraf & Barney, 2012).

Furthermore, Bako and Banmeke (2019) conducted a study the impact of business process re-engineering on organizational performance with emphasis on Micro-finance Banks in Ilaro, Ogun state. 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 analysed 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. Naibei (2017) conducted a study business process reengineering practices and performance of pharmacy and poisons board in Kenya. This study adopted a descriptive survey design. The findings indicated that training of staff have the highest effect on Performance of Pharmacy and Poisons Board followed by Technology, then organization structure while Continuous improvement had the least effect on Performance of Pharmacy and Poisons Board. All the variables were significant as their P-values were less than 0.05. Based on the findings, it can be concluded that Pharmacy and Poisons Board has automated most of operation and hence technology is a major contributor to effective performance of Pharmacy and Poisons Board.

Noah (2019) conducted business process re-engineering and financial performance of tier one commercial banks in Kenya. The study adopted descriptive research design. The target population for this study were staff in Tier one Banks, focusing on 51 business development managers within their headquarters in Nairobi. Census technique was used to incorporate the entire target population. The study used primary data which data was collected by use of structured and semi-structured questionnaires. The questionnaire's reliability was statistically measured by measuring the internal consistency while the validity was enhanced by supervisors who acted as experts in assessing the questionnaire's content. The quantitative data was analyzed using the descriptive and inferential statistics using SPSS Version 24 software. The study indicated that there is a positive significant relationship between internet banking and financial performance of tier one Commercial banks with a regression coefficient of 0.241. The relationship between agency banking and financial performance of tier one Commercial banks was established to be positive, and statistically significant ($r = 0.518$; $p=0.011$). The study also found that there existed a positive, moderate statistically significant relationship between mobile banking and financial performance of tier one Commercial banks ($r = 0.563$; $p =0.014$). The study established that a positive, strong and statistically significant relationship existed between adoption of ATM and financial performance of tier one commercial banks in Kenya ($r = 0.449$; $p =0.021$).

Kimani (2024) conducted a study on effect of business process improvement mechanisms on revenue collection in Nairobi county government, Kenya. The study adopted a descriptive research design. The study's target population was 3,000 management staff of Nairobi County Government. The study employed stratified random sampling technique in sample selection. The study sample size was 300 respondents. A validated self-administered semi-structured questionnaire was used for primary data collection. In data analysis, quantitative data was analyzed through descriptive statistics in the form of frequencies, percentages, mean and standard deviation using the Statistical Package for Social Sciences (SPSS, version 23.0). The study also conducted regression and correlation analysis to test the relationship between the study variables. The study established that the management staff of Nairobi County Government did agree that the adopted change management practices had helped the county government enhance its revenue collection (mean = 4.262); the county government was leveraging on technology based applications to increase revenue collection (mean = 4.117); the performance management system had yielded measurable benefits to the institution such as improved morale, productivity, quality, work methods and operational performance (mean = 4.290) and that functions outsourcing had improved the county's revenue collection process (mean = 3.865). Further, the study results revealed a significant positive relationship between change management, automation, performance management as well as outsourcing and revenue collection in Nairobi County Government as indicated by beta values of 0.729; 0.806; 0.762 and 0.661 (with all having $p<0.05$), respectively. The study concluded that change management, automation, performance management and outsourcing as BPI mechanisms played a significant role in enhancing revenue collection in the Nairobi County Government.

Njeri (2023) conducted a study on business process re-engineering and performance of public service commission, Kenya. The study was anchored on Resource Based View, Open Systems, Kurt Lewin's Change Model and Dynamic Capabilities theories. The study employed a descriptive research approach, with questionnaires used to collect data and the data analysed using SPSS software. Both descriptive and inferential statistics were used in the analysis. 12 Top Management, 80 Senior Management 222 Technical Cadre and 98 Skill Operational Cadre. The sample size was 202 respondents. The researcher employed structured questionnaires as a means of collecting data from the study participants. The survey was pilot tested for reliability and validity. Twenty people, or 10% of the total sample size, were selected at random from the Commission's membership to fill out the surveys. The study found that organizational structure significantly effects changes in performance of PSC, Kenya. The study found that Information Technology significantly affects performance of PSC, Kenya. The study found that change management significantly affects organizational performance.

Methodology

This study is descriptive in nature as it seeks to describe the usual phenomenon in the field of management while looking at BPR as a focus. In addition, this study was quantitative in nature as statistical approach was employed. The population of the study constitute all the members of staff at the GRA Large Tax Unit in Kanifing. The total number of emloyees at the Kanifing LTU office was 70. Hence, the research adopted a census strategy that involved all employees participating in the research exercise. Primary source of data collection was used through a structured questionnaire. A structured questionnaire was used as instrument of data collection. Data was analysed using coding and analysis of quantitative data with descriptive statistics, frequency table and simple percentages while inferential statistics of PPMCC was used to test the formulated hypothesis in order to achieve the objectives of the research study.

Results

Table 1: Correlation Matrix showing relationship between BPR and Operational Performance

	Operational Performance	**Strategic Plan**	**Organisation Structure**	**Organisation Culture**	**Information Technology**
Operational Performance	1.0000				
Strategic Plan	0.8867	1.0000			
Organisation Structure	0.9456	0.9285	1.0000		
Organisation Culture	0.9141	0.9505	0.9530	1.0000	
Information Technology	0.9396	0.9193	0.9465	0.9138	1.0000

Source: Researcher's Analysis, 2025 Using STATA 11.0

The table shows the correlation matrix which is an indication of how the individual variables are related. It shows that BPR which entails Strategic Plan (89%), Organisation Structure (95%), Organisation Culture (91%), and Information Technology (94%) is significantly correlated to operational performance. This implies that BPR positively and significantly influence operational performance. The association between them is positive and significant.

Conclusion and Recommendations

In today's business environment, BPR is considered as the main source of competitive advantage for organizations. Knowledge is recognized as a key economic resource and thus organisations should possess the right knowledge in the desired form and content under all circumstances in order to be successful. 21st century organisations in both and public and private sector are continually striving on continuous improvement and innovation that can only be achieved with the implementation of BPR which consist of Improvement initiatives that increase successes and reduce failures. It is "a company-wide process of focused and continuous incremental innovation. Based on the findings of this study, it can be concluded that there is significant relationship between strategic plan and operational performance; there is significant relationship between organization structure and operational performance; there is significant relationship between organization culture and operational performance and there is significant relationship between information and communication technology and operational performance. The study recommends that GRA should also highly invest in development and implementation of strategies that determine changes in markets vis vis its strengths and abilities to harness its full potential. They should provide suitable infrastructure to afford a proper support framework to businesses processes that positively impact on the performance of the organization. Therefore, it is recommended that the organization implement a reengineered strategy that incorporates the adoption of technology in order to enhance service quality and increase efficiency. The 21st century organizations rely heavily on knowledge through their employees' skills and experiences; it is therefore important to create a culture to ensure successful implementation of BPR. The importance of ICT cannot be overemphasized in the 21st century. It is a fundamental and germane enabler of BPR in organizations. Given that automation positively relates to revenue collection, the study recommends that the GRA should continually invest in ICT infrastructure and finance the automation of its various functions and services especially in areas where the existing manual operations are inefficient and wasteful.

References

Agbedzani, Y. (2011). Effectiveness and efficiency of income tax collection in Berekum District TaxOffice. Unpublished CEMBA Thesis, Kwame Nkrumah University of Science and Technology.

Al-Mashari, M., Irani, Z., & Zairi, M. (2011). Business process reengineering: a survey of international experience. Business Process Management Journal, 7(5), 437-455.

Al-Mashari, M., & Zairi, M. (2001). Revisiting BPR: A holistic review of practice and development. Business Process Management, 6(1), 10-42

Anderson, J.E. (2013). Financial Controls and Revenue Collection in Copenhagen, Denmark. Public Finance Review, 10(2), 45-62.

Adeyemi, S and Aremu, M (2008). Impact Assessment of Business Process Reengineering on Organizational Performance, European Journal of Social Science, Vol.7 No. 2, pp. 7-13.

Armstrong, T. (2011). The role of performance management in the local authorities in Botswana. Journal of Strategic Human Resource Development, 11(8), 21-35.

Bako, Y.A and Banmeke, M.B. (2019): The impact of business process re-engineering on organizational performance with emphasis on Micro-finance Banks in Ilaro, Ogun state. Journal of Management and Technology Volume 5 Number 1 December 2019.

Bryson, J., Ackermann, F., & Eden, C. (2013). Putting the resource-based view of strategy and distinctive competencies to work in public organizations. Public administration review, 67(4), 702-717.

Chang, Z. (2014). Operations Management for Competitive Advantage (tenth ed.). New York: McGraw-Hill/Irwin.

Creswell, J. W., & Creswell, J. D. (2018). Research design: qualitative, quantitative, and mixed methods approach. Thousand Oaks, CA: SAGE Publications, Inc.

Eisenhardt, K. (1989). Building theories from case study research. Academy of Management Review, Vol. 14 No. 4, pp. 532-550.

Gunasegaram, K., and Kobu, G. (2012) Dynamic capabilities: Strategic Management Journal., 21(23), 1105–1121.
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, &Champy, J.(2001). Reengineering the Corporation: A Manifesto for Business Revolution. Harper Coins New York: NY.

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.

Kimani, P. 2012. East African Breweries Limited; A journey towards improved performance. Unpublished MBA Thesis, University of Nairobi.

Kimario, P. (2014). Challenges faced by local government authorities (LGAS) in implementing strategies to enhance revenues: Case of Dar es Salaam municipal councils. Unpublished MBA Thesis, Open University of Tanzania.

Kiplagat, K.D. (2008). Challenges of strategy implementation at Kenya revenue authority. Unpublished MBA Thesis, University of Nairobi.

Kohli, R. and Hoadley, E. (1997). Business process re-engineering concepts and tools effectiveness: a survey of practitioners. Knowledge and Process Management, Vol. 4 No. 4, pp. 278-85.

Kothari, C. (2009). Research Methodology: Second edition. New Age International Limited.

Mugenda O., & Mugenda, G. (2003), Research Methods: Quantitative and Qualitative methodology, Nairobi: Act press

Mukwakungu, S., Mabasa, D., Mamela, L., & Mabusa, S. (2019, May 18). The Effect of Business Processes Re-engineering on Improving Customer Satisfaction & Retention in the Manufacturing Industry. Proceedings of the International Conference on Industrial Engineering and Operations Management, Pretoria / Johannesburg, South Africa.

Murungi, E., (2017). Management of Strategic Change at Pan Africa Christian University Nairobi, Kenya. Masters' Dissertation. University of Nairobi.

Mwale. A.M. (2019). Business Process Re-Engineering and Financial Performance of Tier One Commercial Banks in Kenya (Unpublished Master's Thesis) Kenyatta University.

Noah, A. M. (2019). Business process re-engineering and financial performance of tier one commercial banks in Kenya. Unpublished Master of Science (In Finance) Of Kenyatta University.

Njeri, M (2023). Business process re-engineering and performance of public service commission, Kenya. Unpublished Master of Science (In Finance) Of Kenyatta University.

Northrop Grumman BPR Team Report (2005). Business Process Reengineering Assessment. BPR Assessment Final Report, Montana Department of Public Health & Human Services

Ozcelik, Y. (2010). Do business process reengineering projects payoff? Evidence from the United States. International Journal of Project Management, 28(1), 7–13

Ranganathan, C. & Dhaliwal, J. (2001). A Survey of Business Process Reengineering Practices in Singapore. Information Management, 39 (2), 125-134.

Roberts, L. (1994). Press Reengineering: The Key to Achieving Break through Success. Milwankee, Quality Press.

Simon, K. A. (1994). Towards a Theoretical Framework for Business Process Reengineering. A Journal Publication. U.S.A. The Internet.

Sekaran, U., & Bougie, R. (2010). Research Methods for Business. UK: John Wiley & Sons Ltd.

Wright, P., Dunford, B., & Snell, S. (2011). Human resources and the resource-based view of the firm. Journal of management, 27(6), 701-721.