

**BUSINESS PROCESS RE-ENGINEERING AND ORGANIZATIONAL  
PERFORMANCE OF COMMERCIAL STATE CORPORATIONS IN KENYA**

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**DECLARATION**

This research project is my original work and has not been submitted for a degree in any university.

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## **DEDICATION**

To my daughter Elsie and to my comrades with whom we sail in this same boat

## **ACKNOWLEDGEMENT**

My sincere thanks, gratitude and appreciation, first, to the Almighty Everlasting God, the giver of life, strength and wisdom and from whom all good things come, for being with me always. Secondly, to my humble Supervisor Dr. Magutu P. Obara of the University of Nairobi for his fruitful advice and direction and to Mrs. Zipporah Kiruthu whose moderation efforts were beyond words. Finally, much thanks to my family members and my colleague, Sam Ochieng, for their patience, support and encouragement that contributed towards making this work a success.

## ABSTRACT

The business environment is constantly changing and so it is imperative that organizations adapt to changes that can support its survival and prosperity (Johnsons and Scholes, 2008). The core outcomes of BPR activities are improvement profit maximization and cost reduction (Al-Mashari and Zairi, 2001). The success of every organization begins by recognition of customers and their input to the firm. This is achieved through re-engineering the core business processes in an organization with the main motive of improving shareholders value perceived through increased ROI, Market Share, Debt to Asset Ratio and Profitability. Business Process Re-engineering therefore ensures that customers are served faster and that they get the best value for money and that products and services required are delivered in a manner most convenient to them while minimizing cost and maximizing on profitability enhanced leading to improved organizational performance. (Hammer and Champy, 2001). The study investigated the extent to which Business Process Re-engineering implementation affect Commercial State Corporations in Kenya. It also looked into the relationship between Business Process Re-engineering and organizational performance of Commercial State Corporations in Kenya. The study adopted a census in which the entire population was considered. Both primary and secondary data sources were used. The target population was the 24 Commercial State Corporations in Kenya listed under State Corporations Act and recognized in the Kenya Gazette. The data was collected by use of semi-structured questionnaires and respondents were management of commercial state corporations. The quantitative data generated were analyzed with the aid of Statistical Package for Social Sciences (SPSS). The study findings revealed that there is a significant relationship between BPR Methodologies and organizational performance. The study used Pearson's correlations as model of analysis. These results found imply that PADM BPR Methodology contribute more to the organizational performance of commercial state corporation followed by Davenport's & Short's BPR Methodology, OO-BEM BPR Methodology, Hammer & Champy BPR Methodology and finally Integrated BPR Methodology. BPR Methodology collectively accounts for 70.5% of change in organizational performance of commercial state corporations in Kenya. It is recommended that all the commercial state corporations to embrace BPR Methodology that best improve on their ROI, Profitability, Market share and Debt & Liquidity ratio. The commercial state corporations also need to adopt BPR Methodology that addresses the trendy emerging issues within their respective industries to boost organizational performance.

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## **LIST OF ABBREVIATIONS**

BPR	Business Process Re-engineering
GOK	Government of Kenya
ICT	Information and Communication Technology
OM	Operations Management
OO-BEM	Object Oriented Business Engineering Methodology
PADM	Process Analysis and Design Methodology
ROI	Return on Investment
SPSS	Statistical Package for Social Sciences

## CHAPTER ONE: INTRODUCTION

### 1.1 Background

The business environment and process is constantly changing and so it is imperative for organizations to adapt to these changes in order to survive and prosper (Johnsons and Scholes, 2008). Operations Management (OM) as a business function is responsible for planning, coordinating, and controlling the resources needed to produce products and services for a company (Magutu, P. O., Nyamwange, S. O., Kaptoge, G. K, 2010). Its activities include design, operation, and improvement of systems that create a firm's primary products and services. The fundamental purpose of OM is to deliver value to customers through the improvement in operating system. The core outcomes of OM activities are improvement in cost, quality, speed and flexibility. This translates to low cost production, faster delivery, product/service variety and superior customer service (Al-Mashari and Zairi, 2001). Customer value is the base for every organization's success and it is therefore important for the management to design and develop customer service operations that support customer acquisition, retention, cost management and profitability for more Efficiency and Effectiveness. This may take one or more of the following approaches: Automation, Process improvement, Paradigm shift and Business Process Re-engineering

The success of every organization begins by recognition of customers and their input to the firm. Customers would be more willing to remain tied to a firm only when they get what they want from it. As the business environment changes, so is the customers need and therefore a firm also need to adapt to the dynamics in order to be at par with its customers' requirements. This is achieved through re-engineering the core business processes in an organization with the main motive of improving the value of products and services as perceived by the firm's internal and external customers. This involves complete overhaul of a firm's old ways of carrying out its processes and replacing them with new ways which are more effective and more efficient. This is aimed at reduction in cost of production and production time while increasing the quality and variety of products and services. Business Process Re-engineering therefore ensures that customers are served faster and that they get the best of whatever products and services they require and in the manner most convenient to them. In this sense, customer value is enhanced leading to improved organizational performance. (Hammer and Champy, 2001).

### **1.1.1 Business Process Re-engineering**

Business Process Re-engineering (BPR) is a Radical redesign of core business processes to achieve dramatic improvements in cost, quality, service, speed, cycle time and overall productivity. It is a process that cuts across an organization's various levels with the main focus on satisfying customer requirements and expectations. It calls for an organization to completely abandon its old ways of operations and adapt to new ways of thinking for improved organizational performance (Hammer and Champy, 2001).

The most common methodologies applied towards BPR implementation include the following: Hammer and Champy methodology based on business processes, jobs, managers and values as the four points of business system diamond. Davenport's and Short's methodology emphasizes on Information Technology as an integral part of BPR. Object Oriented Business Engineering Methodology (OO-BEM) by Jacobson that begins by envisioning and reverse engineering to forward engineering. A fourth methodology, the Process Analysis and Design Method (PADM) features a framework of tools and techniques for iterative activities. All these methodologies follow the basic phases of defining the business vision, process selection, analysis, design, implementation and review for continuous improvement. An integrated BPR methodology by Muthu, Whitman and Cheraghi, gives a similar approach and consolidates the key steps in BPR (Muthu, Whitman and Cheraghi, 2004).

An organization would be driven to re-engineer its processes due to various factors. Where there is a substantial gap between stake-holders expectation and actual organizational performance in business processes such as production quality and customer care services. Quality of output may be improved by ensuring better input materials while for customer care, this may involve hiring professionally qualified customer care personnel with excellent skills. Organizations would be compelled by both internal and external forces to reengineer their processes. These are organizations that are either in deep financial crisis, just about to fall or those that are aggressive and ambitious to prosper in business. Successful implementation of BPR methodologies leads an organization to improve on efficiency and effectiveness of its processes, reduction in operational costs, faster service delivery due to reduction in throughput time, higher flexibility in terms of alternatives and high quality service hence increasing customer value (Muthu, Whitman and Cheraghi, 2004).

### **1.1.2 Organizational performance**

The fundamental purpose of Operations Management is to deliver value to customers through improvement in operating system Efficiency and Effectiveness. This in turn leads to Organizational performance improvement driven by increased customer value. Customer value refers to a customer perceived preference for a product and evaluation of that product's attributes, performance and consequences arising from its use that facilitates achieving the customer's goals and purpose in using the product. Low cost production, faster delivery, product/service variety and superior customer service increase customer value (Sekeran, 2000).

Organizational performance encompasses financial performance as measured by Return on Investment (ROI), product market performance and shareholder return (Richard et al, 2009). It is the actual output or result of an organization measured against its goals and objectives. ROI is measured in terms of profits from an investment less total costs and divided by total costs. The formula is:  $ROI = (\text{Investment Revenue} - \text{Investment Cost}) / \text{Investment Cost}$ . The main reason for this measure is to help a firm benchmark against the entire industry hence realize its areas of weaknesses towards customer satisfaction and for the firm to adjust accordingly for better organizational performance. It acts as a control measure that is also vital in planning decisions. The balanced scorecard is a tool that may be applied in measuring organizational performance based on its four main perspectives: Financial, Learning and growth, Internal Business Process and Customer perspective. The customer has the upper hand in today's business especially with the introduction of diverse product alternatives to choose from. The customer being more informed, dictates what to be produced, quality of the product and the price he or she is willing to pay (Hammer and Champy, 1993). A satisfied customer may be noted by his/her repetitive purchases and through customer satisfaction survey reports. The number of repeat purchases would indicate the level of a customer's loyalty to a firm (Reichheld, 2000).

This measure enables a firm to determine its probable sales, planning and decision making. A firm uses this measure to adjust on its products and services to match its customer requirements, increase sales hence improve organizational performance. High customer value increases market share of a firm, attracts more investments hence overall growth of the firm. Low customer value translates to reduced sales which may finally make an organization to collapse.

### **1.1.3 Commercial State Corporations in Kenya**

The Kenyan Commercial State Corporations enable the citizens to acquire vital services that may not be given easily by the private institutions. Commodities like water, electricity, education etc may be well acquired through the state rather than the private institutions. Kenyan State Corporations comprises of the Local government, Central government and the Parastatals. In Kenya, there are about 170 state corporations, both Commercial and Non-commercial, categorized under various ministries for efficient management. These are headed by the respective chairpersons and executive directors charged with ensuring their efficient, effective and successful operations (State Corporations Act Chapter 446, Laws of Kenya, Revised 2012).

For a long time the state has faced challenges in funding basic education, health and infrastructural development to the required standard, and has had to undertake an ambitious privatization program which has inevitably led to massive lay-off and high unemployment in an economy in which the state and civil service was previously a major employer. The population continues to grow with additional citizens requiring more and more services from every sector of the economy. However, a big challenge faces the state in offering these services to its citizens. This is because of the nature of civil service; the bureaucratic processes, public service structure, culture, political interference, leadership and commitment of the government to reforms. This has translated to poor services offered to the citizens. In an effort to change the face of these corporations, some such as Kenya Airways, have settled on unfriendly strategies like restructuring and laying off employees to reduce expenditure on high wage bills. Despite this prevailing situation and the allegations, the government has always maintained that it is doing its best to improve these institutions through reform programs. By this study, it would be worth finding out whether the government's position is genuine as the public continues to demand for better services from these sectors (GOK Economic Recovery Strategy, 2003).

Several people find themselves flocking long queues in waiting to buy postage stamps from the post offices, acquire title deeds from lands offices, and acquire birth certificates and national identification cards from the national registry offices. In an attempt to make services more accessible to the citizens, The Kenya government has created Huduma Kenya as service points where citizens can get help for their various needs (Asman, 2013).

## **1.2 Research Problem**

Implementation of Business Process Re-engineering (BPR) especially in the Commercial State Corporations is a key factor for enhancing customer value. Commercial State Corporations have close interaction with citizens who are the customers for whom value addition is important for prosperity of the corporations. These corporations contribute greatly to the economic development by offering vital services in the sectors of Transport and Infrastructure, Tourism and Wildlife, Trade and Industry, Youth affairs, Gender, Sports and Cultural development. The core functions of these institutions being to improve the living standards of the citizens and promote economic development. Citizens pay taxes with the hope of receiving valuable services from the Government through these corporations. It would therefore be worth to determine whether the recipients of these services are contented or not (Njiru, 2008).

Institutions need to have the necessary requirements that match BPR implementation. Business Process Re-engineering would be the best to use because of its gradual and step by step implementation. They offer appropriate strategy for customer value creation and enhancement as it seeks to counteract the day to day challenges of resource management in these corporations by first determining a firm's vision, designing the process and final implementation. The methodologies also emphasize on organizational performance review and continuous improvement of the processes. This is necessary for a firm's growth and development. In order to survive and prosper, a firm needs to undergo at least one major change almost every five years. Business Process Re-engineering is considered a strategic tool for an organizational change (Cackowski, 2012).

Several empirical studies have put forward fundamental principles, concepts and models in an effort to explain Business Process Re-engineering, and their impact on organizational performance. Studies done on BPR have focused on BPR and firm efficiency (Yuri and Federico, 2012) but not the use of BPR and organizational performance. Another study on BPR impact to Banks and other Financial Institutions narrows down to Pakistan (Nadeem and Ahmad, 2016) but does not widen up to the methodologies applied by the Commercial state corporations. BPR has improved the performance of Banks in Pakistan and for other locations in different business environments, this is yet to be confirmed. BPR methodology has enhanced Spanish university systems and this can be applied to multiple industries. This study is politically tilted and narrows down on Spain (Adenso-Diaz and Canteli, 2001).

Reengineering the open government concept (Emad, 2015), breaks down three pillars of open government into sub dimensions of research framework, participation, collaboration, transparency, accountability, empowerment and empirical tests as necessary for process reengineering. However this study does not focus on BPR methodologies and organizational performance. A study done by Andrea Gazora (2015) focuses on application of concepts and methods on process approach towards increasing business process efficiency.

In Kenya, a study on Business Process Re-engineering implementation and organizational performance of Kenya Revenue Authority (Odede, 2013) looks at the reform initiatives on tax collection put in place such as the Revenue Administration Reform and Modernization Program. It does not focus on BPR methodologies and performance of other commercial state corporations in Kenya. Determinants of BPR success have been examined by Owino (2015). It study focuses on thirty selected companies in Nairobi and whose respondents are solely the managers. Achieng (2000) also looked at BPR and Financial performance of an organization, specifically Kenya Commercial Bank. These studies are not exhaustive as they concentrate only on specific regions and not Kenyan Commercial State Corporations. A gap that exists from these past researches calls for a study that concentrates particularly on Business Process Re-engineering and organizational performance of Commercial State Corporations in Kenya. Is Business Process Re-engineering being implemented by these Kenyan Commercial State Corporations and is there any relationship between BPR and organizational performance of Commercial State Corporations in Kenya?

### **1.3 Objective of the Study**

The objective of this study was therefore to;

- 1) To determine the extent of Business Process Re-engineering implementation by Commercial State Corporations in Kenya.
- 2) To determine the relationship between Business Process Re-engineering and organizational performance of Commercial State Corporations in Kenya.



#### **1.4 Value of the Study**

These study findings are expected to provide important insight to the management of Kenyan Commercial State Corporations in providing a well informed and the best ways and techniques to put in place to achieve the best organizational performance amidst adoption of BPR Methodologies. This is vital to the government considering that it mandated to take services back to the citizen through service recovery and also reducing cost and solving myriad service failure experienced in the past. The study stands to assist the government in knowing the problems facing its citizens.

The finding of this study is expected to assist academicians with available information and serve as reference points during their research. It is expected to add to the body of knowledge through building on the field of operations as well as the strategic management and theories supporting the study. It is entrusted to contribute to the field of operations management at large.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter documents literature review that used in the study. The specific areas to be covered here are review of empirical studies, theories and industry organizational performance.

### **2.2 Theories supporting the study**

Business Process Re-engineering is based on certain fundamental theories that support its implementation for an overall achievement of an organization goals and objectives. This study relates BPR Methodologies to the theory of constraints and theory of organizational change.

#### **2.2.1 Theory of Constraints**

Theory of Constraints identifies the most important limiting factor in achieving an organization's goal and improving that constraint until it is no longer the limiting factor (Goldratt, 1984). In this regard, an organization identifies its core business processes requiring dramatic improvement and redesigns them accordingly. The theory of constraints recognizes an organization as a system of interlinked processes, it is the weakest link that is a constraint and needs to be improved.

Business Process Re-engineering prioritizes core business activities and addresses the constraints in them. A Five Focusing Step approach suggests for improvement in a particular recognized constraint to reasonable level before moving on to the next constraint. It employs a Thinking Process that enables the implementers to find out the areas that call for change, how to make the change and the outcome or results to expect. The results are finally measured by way of Throughput Accounting as a guide to management decisions.

#### **2.2.2 Theory of organizational change**

Change in an organization is a process that involves series of steps (Lewin, 1995). In his Stage Theory of Organizational Change, Kurt Lewin gives four stages undergone by an organization through its change process. These include Awareness creation, Decision to adopt, Implementation and Institutionalization. Implementation of BPR follows closely this theory as it calls for identifying the core business processes, making decision to redesign and implementation. Organizations are perceived as systems reflecting interactivity and openness to their dynamic environment. Change happens because the environment demands change for survival (Morgan, 1986).

### **2.2.3 Balanced Scorecard**

Business Process Re-engineering also finds its roots on Balanced Scorecard, a strategic planning and management systems approach that provides measurable perspectives in order to balance on overall business organizational performance. The Internal Business Process Perspective and Customer Perspective are so much interlinked that existence of one is a complete indicator of the other. When fully deployed, the balanced scorecard provides a framework that is not only for organizational performance measurement but also helps planners identify what should be done and measured (Muthu et al, 2004).

### **2.3 Business Process Re-engineering**

Business Process Re-engineering (BPR) is a Radical redesign of core business processes to achieve dramatic improvements in cost, quality, service, speed, cycle time and overall productivity (Magutu et al, 2010). The ultimate goal of all organizations whether private or public is growth and development. This can only be achieved when customers are satisfied leading to increased revenue and profitability. Organizations which are either in deep trouble, foresee trouble or those that are aggressive and ambitious would be compelled to reengineer their activities to achieve these goals. Implementation of BPR cuts across an organization's processes at various levels with the main focus of satisfying customer requirements and expectations. This is may take various methodologies majority of which share common important features especially in the initial stages. The most common methodologies applied towards BPR implementation include the following:

#### **2.3.1 Hammer and Champy methodology**

Hammer and Champy methodology is based on business processes, jobs, managers and values as the four points of business system diamond. This is done in five main phases: The first phase, introduction involves preparing a case for action and vision statement for an organization. A case for action describes an organization's current situation and the need for change while a vision statement describes the results that the firm wants to achieve. Setting a firm's vision is one of the main tasks of the top management. It can only be achieved through proper planning and strategies. The second phase involves identifying the core business processes that would call for redesign, presentation of these core processes in form of process maps for better understanding by all the stakeholders within and outside the firm. The process maps would show the level of interaction between the processes and the outside world. Selection is done on the processes

identified to be core, problematic and having high impact on customers. These must be those processes that are likely to contribute positively to an organization's objectives. The third phase calls for a thorough organizational performance analysis of the selected processes for better understanding before redesigning. A redesign phase would create completely new rules, techniques, components or ways of carrying out the process. The final phase is implementation and review of the reengineered process. The success of implementation relies heavily on the preceding phases (Hammer and Champy, 2001).

### **2.3.2 An integrated BPR methodology by Muthu, Whitman and Cheraghi**

This gives a similar approach that consolidates the key steps to implementation and continuous improvement of the processes. The five steps begin by preparation for Reengineering by identifying customer objectives and developing strategic purpose. It is important to involve all the key stakeholders and inform all functional teams of the intended change. In the second step, the existing process is mapped and analyzed as it is on the basis of time, cost and other resources. The third step involves designing the process to be by benchmarking and performing trade-off analysis. Benchmarking calls for comparing the organizational performance of the processes with those of competing firms in the same industry. An implementation plan is then rolled out in readiness for the actual transition. After successful implementation, the methodology emphasizes on performance review of the processes and continuous improvement. This is vital in order for any firm to survive and prosper in the dynamic business environment (Muthu et al, 2004).

### **2.3.3 Davenport's and Short's methodology**

This emphasizes on Information Technology as an integral part of BPR. This methodology introduces identification of IT levers and capabilities as its fourth step before design and implementation. Information Technology is regarded as vital for effective communication and efficiency in the reengineering process. The methodology recognizes that IT capabilities are transactional, geographical, informational, analytical, sequential, managerial, trackable and parts knowledge. Apart from IT, this methodology also recognizes the use of the traditional management principles such as planning, organizing, supervising, directing and controlling of activities. Davenport and Short recognizes the vital input from human resource through a firm's management for continuous process improvement. (Davenports, 1993).

#### **2.3.4 Object Oriented Business Engineering Methodology (OO-BEM) Methodology**

Jacobson et al came up with Object Oriented Business Engineering Methodology (OO-BEM) that begins by envisioning and reversing existing business processes and engineering the new business through forward engineering to the final installation and review of the new business processes (Jacobson et al, 1992).

#### **2.3.5 Process Analysis and Design Methodology (PADM)**

This is an offspring of Process Modelling Cookbook is a framework of tools and techniques featured by iterative activities for continuous improvement. The method recognizes close relationship between technology and processes. McKinsey BPR Methodology simplifies the process into three steps i.e. diagnostic of existing process, redesign and testing of new process and implementation of the new process throughout the firm (McKinsey, 2000). Other methodologies such as Accenture, Kodak, Manganeli and Klein methodologies may also be used towards ensuring successful implementation of BPR in an organization but it is worth noting that all follow the basic phases of defining the business vision, process selection, analysis, design, implementation and review for continuous improvement.

The foregoing paragraph gives the reasons as to why an organization would decide to re-engineer its processes. Where there is a substantial gap between stake-holders expectation and actual organizational performance, an organization would find it necessary to reengineer its core business processes such as production quality and customer care services. Quality of output may be improved by ensuring better input materials while for customer care, this may involve hiring professionally qualified customer care personnel with excellent skills. Organizations would be compelled to reengineer their processes by both internal and external forces. These are organizations that are either in deep financial crisis, just about to fall or those that are aggressive and ambitious to prosper in business. Successful implementation of BPR leads an organization to improve on efficiency and effectiveness of its processes, reduction in operational costs, faster service delivery due to reduction in throughput time, higher flexibility in terms of alternatives and high quality service. All these would result in increasing customer value hence improving customer satisfaction. A satisfied customer would have a reason to stick to his/her supplier and even invite others. This finally increases an organization's sales and revenue. An organization becomes stable, survives and prospers to realize its objectives.

## **2.4 Organizational performance**

Organizational performance encompasses financial performance, product market organizational performance and shareholder return (Richard et al, 2009). It is the actual output or result of an organization measured against its goals and objectives. It is measured in terms of profits gross of interest, depreciation and taxes. Several profitability ratios including Return on Investments (ROI) and Return on total Assets are computed and are used to benchmark a firm to the entire industry. The main reason for this measure is to help a firm realize its areas of weaknesses towards customer satisfaction and for the firm to adjust accordingly for better organizational performance. It acts as a control measure that is also vital in planning decisions. The balanced scorecard is a tool that may be applied in measuring organizational performance based on its four main perspectives: Financial, Learning and growth, Internal Business Process and Customer perspective. This measure enables a firm to determine its probable sales, planning and decision making. A firm uses this measure to adjust on its products and services to match its customer requirements, increase sales hence improve organizational performance. The value that is added by re-engineering core business processes is fundamental to most organizations in that the specialty performs the traditional managerial functions that include planning, organizing, directing, and controlling on the organisation's operations (Lowson, 2002).

Managerial thought is critical to processes of strategy formulation and implementation. This requires managers to envision and prioritize future states that are appropriate and proper. Similarly, managerial thought is critical to environmental analysis which requires managers to forecast and make predictions. These tasks all depend on individual cognitive capabilities such as attention, perception, reflection, and understanding. Successful process reengineering ultimately comes down to the ability of the management and all stakeholders to create more value to firm's customers than the competitors. A firm's processes are complex and interdependent. This requires the top management to have an appropriate and effective strategy towards re-engineering the core processes in order to be successful and remain on top of its competitors. Operations managers and senior executives confront the problem of determining the configuration yielding the greatest value for the end-user and each trading partner. Despite the need to measure and align organizational performance across multiple firms, most managers view organizational performance from an internal perspective, or at best, how it is affected by their immediate upstream or downstream trading partners (Hunt & Phillips, 2003).

## **2.5 Empirical Literature Review**

Al-Mashari and Zairi (2001) suggests that successful BPR implementation is highly dependent on an effective BPR programme management which includes: adequate strategic alignment; effective planning and project management techniques; Identifying organizational performance indicators; resource capacity; using the right methodology; training, orientation and learning; effective consultancy; effective process vision, mission and redesign; integration of BPR with other improvement techniques and last but not least, identification of value of BPR. Implementation of Business Process Re-engineering methodologies calls for incorporation of Information and communication technology (ICT). This is necessary since the two go together. Implementation of BPR methodologies has the objective towards quantum leaps in organizational performance measures all through to the six sigma. BPR methodologies focus on attaining overall customer satisfaction. It calls for an organization to completely abandon its old ways of operations and adapt to new ways of thinking for improved organizational performance. Undertaking Business Process Reengineering has a framework that include Organizing work around outcomes not tasks, multiple versions of the same processes should be created, compensation shifts from activity to results, structure diminishes in importance, abandon outdated rules and assumptions, reduce checks and controls, staff changes from controlled to empowered, managers must have strong interpersonal skills, managers must move closer to real work, employees have to be multi-skilled, managers' role changes from supervisor to coach and outsourcing of non-core activities (Zairi, 1995).

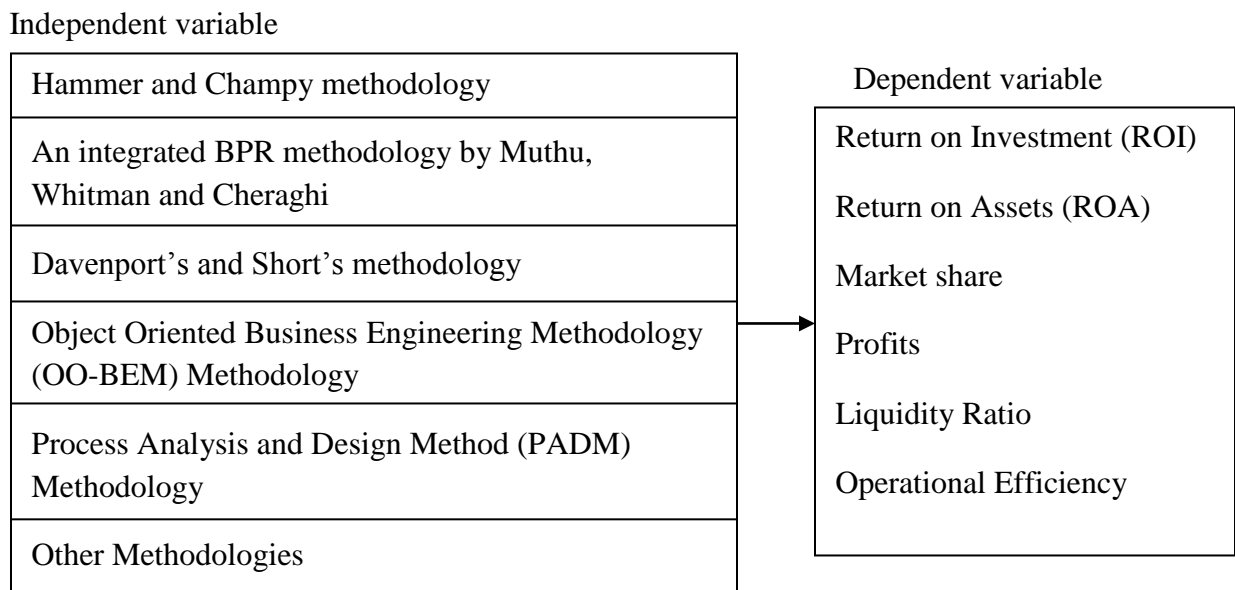
Business Process Re-engineering is done in levels. The first level of BPR is concerned with localized exploitation of information technology (IT) within an organization's functions. It involves development of applications meant to improve efficiency in operations. The top management recognizes the need for change, develops an understanding of what is BPR, and how they plan to achieve the change. The second level is a logical extension of the first level. This is because the potential of IT within activities that occurred in the organization's processes, is reflected on both efficiency and effectiveness of these processes. A clear vision is created. It is the responsibility of the top management to find out and select the core business processes that call for re-engineering based on the vision of the organization. The management defines clear, measurable objectives and forms the re-engineering project team to carry out the task in their close supervision. At the third level, Business Process Re-design which exploits Information

Technology fully. This level reflects an active, planned and conscious effort towards aligning the processes of an organization with Information Technology. Evaluation and documentation of the current processes is done with the intention of uncovering bottlenecks, and establishing benchmarks to use for continuous improvement. At level four, business network re-designs incorporates Information Technology to redesign the network of exchange existing between the firms processes. It involves actual transformation to the reinvented process or organization which takes place as a pilot study. The fifth phase constitutes full implementation and integration of the re-engineered processes into the organization. The final phase of the model involves evaluating the success of the re-engineering efforts against the organizational performance objectives established in phase two. Hence should the re-engineering efforts not achieve the desired goals, it should be redesigned and modified accordingly (Alavi and Yoo, 1995).

## 2.6 Conceptual Framework

Business Process Re-engineering implementation calls for a practical framework as a guideline to the management. The BPR methodologies discussed in this study have a common series of steps in the six main phases that include understanding, initiating, programming, transformation, implementation and review for continuous improvement. The final output of the processes should be an overall improvement in performance. This may be depicted as shown below.

**Fig: 2.1 Conceptual Framework**





## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter introduces the methodologies that were used in the study towards determining Business Process Re-engineering Methodologies and Organizational performance of commercial state corporations in Kenya. The methodology focused on the research design, data collection, population, sampling, data analysis techniques and presentation methods to be used in the study.

### **3.2 Research Design**

The study used descriptive design, a method that describes variables by first collecting appropriate data, tabulating this data and deriving frequencies and determining any existing correlation (Ngechu, 2004). Descriptive design is cross sectional as per the selected sample and deviates from random sampling. It is more standardized and allows for easy comparison of data for effective research decision making. It was found to be the most suitable to use considering the quantitative and qualitative nature of the variables in this study i.e. Business Process Re-engineering and Organizational performance at Commercial State Corporations in Kenya.

### **3.3 Population**

Population refers to all individuals in an area of study from which a researcher generalizes his/her result (Mugenda and Mugenda, 2003). In Kenya, there are over 170 state owned corporations both commercial and non-commercial. These fall into categories of Banks and other Financial Institutions, Development Authorities and Corporations, Research, Regulatory, Processing and Training. This study will focus only on the commercial state corporations in Kenya which are twenty four (Performance Evaluation Report, 2010/2011). A census was therefore used as the appropriate method of study. Census calls for complete enumeration of the entire population of study. It is more intensive and results in higher degree of accuracy (Mugenda and Mugenda, 2003).

### **3.4 Data Collection**

This study incorporated both primary data and secondary data. Collection of primary data was done by use of questionnaires and physically visiting the collection points for face to face interaction with open ended questions. The researcher personally handed in the questionnaires to the respondents at their various institutions and some were transmitted electronically to those far away institutions which were not reachable within the time frame of this study. The target

respondents were the Managers. The questionnaire was found to be the most suitable for collecting primary data and was formatted to agree with the topic of the study to gather responses from the intended respondents. Secondary data comprised of those from the internet, journals and other published documented sources such as economic surveys.

### **3.5 Data Analysis and Presentation**

The data collected was cleaned, coded and edited for errors, consistency and completeness. The incorporated descriptive statistics in finding measures of means and standard deviation of the inferences. Statistical Program for the Social Sciences (SPSS) was used as a tool for data analysis. The frequencies of occurrences reflect the extent of Business Process Re-engineering implementation by the Commercial State Corporations in Kenya. This helped in summarizing and analyzing the data gathered thus enabling the researcher to obtain underlying features of Commercial State Corporations. The Pearson's correlation was used to find out the relationship between BPR Methodologies and organizational performance of Commercial State Corporations in Kenya. The final results have been presented in both statistical tables and diagrams for better understanding and decision making.

## CHAPETR FOUR: DATA ANALYSIS, INTERPRETATION AND PRESENTATION

### 4.1 Introduction

This chapter outlines data analysis, presentation of the finding and interpretation of result. In order to simplify the discussion of the findings, the researcher presented tables and figures that summarize the collective reactions and views from the respondents. The chapter is organized as follows; first it looked at the rate of response and demographic analysis, followed by analysis of various BPR Methodologies and finally the relationship between BPR Methodologies and organizational performance of commercial state corporations in Kenya.

### 4.2 The Response Rate

The unit of analysis was 24 Commercial State Corporation. Out of the 24 questionnaires sent to the Corporations, 21 were fully marked and returned showing 88% response rate. According to Kothari (2008), a response of 70% and above is good for data generalization. This means that the response for this study was excellent and therefore adequate for data analysis and interpretation.

### 4.3 Reliability Analysis

The pilot study was conducted to pretest and ascertain the legitimacy and reliability of the data collection instrument, the 2 questionnaires before the main study. These 2 questionnaires were later on included to add to the number of the unit. The reliability of the questionnaires was established using Cronbach's alpha value and the results are as shown in table 4.1. The result tabled gives an analysis of the outcome where the Cronbach's Alpha values were averaged to 0.71 to reflect the scale. This is up-scaled as acceptable according to George and Mallery, (2003). It is also closer to 1.0 denoting greater internal consistency of the elements under consideration.

**Table 4.1: Reliability Coefficients**

Scale	Cronbach's Alpha	No. of Items
Hammer and Champy	0.57	21
Integrated BPR Methodology	0.69	21
Davenport's and Short's	0.80	21
OO-BEM	0.67	21
PADM	0.81	21

The finding shows that the instrument constantly gave far above the ground results and the scores averaging to 0.7100 accepted as good and highly within the required Cronbach's alpha coefficient of over 0.7 which give an assurance of an instrument's consistency and dependability.

Nachmias and Nachmias, (2006); Kothari, (2008) and Sekaran, (2006) note that a research instrument that has a comparatively high internal regularity with reliability coefficient of 0.7100 or higher is well thought-out as acceptable in most social science research scenarios.

#### 4.4 Demographic Characteristics

The demographic characteristics of the Commercial State Corporation were analyzed and obtained in the form of tables showing their frequency along with cumulative percentages. The demographic characteristics included Industries, Position, and Experience. Table 4.2 shows results of the demographic findings. The industry, position and work experience were important indicators for the study as they helped in understanding the dynamics of the commercial state corporation in adopting the most appropriate BPR so as to improve business performance.

**Table 4.2: Commercial State Corporation**

<b>Characteristic</b>	<b>Frequency</b>	<b>Percent</b>
<b>Industry</b>		
Banking	4	19.0
Trade	2	9.5
Publishing	1	4.8
Transport	2	9.5
Media	1	4.8
Energy	3	14.3
Estate	1	4.8
Food	2	9.5
Finance	1	4.8
Agriculture	1	4.8
Tourism	1	4.8
Housing	1	4.8
Info and Comm.	1	4.8
<b>Total</b>	<b>21</b>	<b>100</b>
<b>Respondent's Position</b>		
Operations Manager	1	4.8
General Manager	2	9.5
Supervisor	9	42.9
Other	9	42.9
<b>Total</b>	<b>21</b>	<b>100</b>
<b>Years of Work Experience</b>		
Less than 5 years	1	4.8
5-10 years	13	61.9
11-20 years	5	23.8
Above 20 years	2	9.5
<b>Total</b>	<b>21</b>	<b>100</b>

The finding in Table 4.2 indicates the various industries in which the research study was based with Banking forming (19.0%), Energy (14.3%), Food, Transport and Trade (9.5%) while the rest; Publishing, Media, Estate, Finance, Agriculture, Tourism, Housing, Info & Comm. form (4.8%). The results indicate that the industry is majorly populated by banks, followed by Energy, Food and Trade and the rest follow among the commercial state corporation therefore they give a proper understand the cross cuttings and how the BPR methodologies are used in order to have competitive advantage.

Study findings shows that the respondents were the operations managers (4.8%), general managers (9.5%), supervisors (42.9%) and other (42.9%). The respondents were therefore from same management levels and all were related to management of the organization. This implies that they have a clear picture of the effect of BPR on the organizational performance of their respective commercial state corporation.

The study further sought after establishing the period of continuous service to the commercial state corporation as a respondent basing on worked experience. The result in table 4.2 indicates that 4.8% of the respondents have been working in the commercial state corporation for a period below 5 years and 61.9% of the respondents have worked between 5-10 years. The 23.8% of the respondents indicated their duration of service is between 11-20 years and 9.5% indicated that their duration of service is more than 20 years. This shows that majority of the respondent have worked at their respective commercial state corporation for a period of 5-10 years and have enough understanding of their organization's working and operations.

#### **4.5 The Extent of Business Process Re-engineering (BPR) Implementation**

The first objective was to determine the extent of Business Process Re-engineering implementation by Commercial State Corporations in Kenya. The respondents' feedback on the extent to which BPR affect organizational performance have been analyzed and presented in tables illustrating their respective means and standard deviations. The major focus was on the BPR Methodologies; Hammer and Champy, Integrated BPR Methodology, Davenport's and Short's, OO-BEM and PADM

##### **4.5.1 Hammer and Champy BPR Methodology**

Table 4.3 presents the frequency distribution of respondents' opinion on the extent to which Hammer and Champy BPR Methodology has contributed to the organizational performance of the commercial state corporation.

**Table 4.1: Hammer and Champy BPR Methodology**

<b>Hammer and Champy BPR Methodology</b>	Mean	Std. Deviation
State Corporation has vision statement on business process Improvement.	4.76	.436
Commercial state Corporation does select core business process that has impact on customers.	4.00	.316
State Corporation does thorough performance analysis.	3.76	.625
Commercial state corporation do implement, monitor and evaluate processes.	4.10	.436

The result in Table 4.3 shows that Hammer and Champy methodology influence organizational performance, it is depicted by vision statement and the implementation (mean=4.76), it shows how the Commercial state Corporation do select core business process that has high impact on customers (mean=4.00), it reveals how State Corporation does thorough performance analysis of BPR Methodology (mean=3.76) and Commercial state corporation do implement, monitor and evaluate processes (mean=4.10), this is supported by (Hammer and Champy, 2001) methodology that is based on business processes, jobs, managers and values as the four points of business system diamond. This is done in phases; action and vision statement for an organization down to implementation.

#### **4.5.2 Integrated BPR Methodology**

The determinants and elements of Integrated BPR Methodology in Table 4.4 presents the frequency distribution of respondents' opinion on the extent to which Integrated BPR Methodology has contributed towards performance of commercial state corporation.

**Table 4.4: Integrated BPR Methodology**

<b>Integrated BPR Methodology</b>	Mean	Std. Deviation
The firm identifies customer requirements and develops a strategic purpose	4.38	.498
State Corporation maps and Analyze existing process	3.86	.655
The firm design and benchmarks with the other industry players	3.81	.512
The firm do roll out process implementation	4.00	.447
The corporation implements new processes and conduct performance review	4.19	.512

The results in Table 4.4 indicates that most state commercial corporations in their respective industries adopts Integrated BPR Methodology which requires that the firm identifies customer requirements and develops a strategic purpose (mean = 4.38); State Corporation maps and Analyze existing process (mean = 3.86), the firm design and benchmarks with the other industry best players (mean = 3.81), The firm do roll out on process implementation (mean = 4.00) The corporation implements new processes and conduct performance review (mean = 4.19). From the results, Integrated BPR Methodology has enabled business performance among the corporations, through Benchmarking that calls for comparing the organizational performance of the processes with those of competing firms in the same industry. An implementation plan is then rolled out in readiness for the actual transition. After successful implementation, the methodology emphasizes on performance review of the processes and continuous improvement. This is vital in order for any firm to survive and prosper in the dynamic business environment (Muthu et al, 2004).

#### 4.5.3 Davenport’s and Short’s BPR Methodology

Table 4.5 denotes the frequency distribution of respondents showing their opinion as to what extent does Davenport’s and Short’s BPR Methodology contributes towards organizational performance of the commercial state corporation in Kenya.

**Table 4.5: Davenport’s and Short’s BPR Methodology**

<b>Davenport’s and Short’s BPR Methodology</b>	<b>Mean</b>	<b>Std. Deviation</b>
The state corporation has a vision statement for business process improvement	4.38	.498
The firm do carry out performance analysis on existing processes	3.86	.655
The firm identifies ICT capabilities that is vital for BPR	3.81	.512
The firm designs process and roll out implementation plan based on key principles	4.00	.447
The corporation implements new processes and carry out performance audit	4.19	.512

The result in table 4.5 shows that Davenport's and Short's BPR Methodology has enable the commercial state corporation to attain the technological prowess by; aligning the firm's ICT processes with the vision statement for business process improvement (mean=4.38), the firm do carry out system audit on existing processes for better performance (mean=3.86), The firm designs process and roll out implementation plan based on key principles, The firm is able to identify ICT capabilities that is vital for BPR (mean=4.00) and The corporation implements new processes and carry out performance audit for better business performance (mean=4.19) this concurs with the views of (Davenports, 1993) who assert that, this methodology introduces identification of IT levers and capabilities as its fourth step before design and implementation. Information Technology is regarded as vital for effective communication and efficiency in the reengineering process. The methodology recognizes that IT capabilities are transactional, geographical, informational, analytical, sequential, managerial, and traceable and parts knowledge.

#### 4.5.4 OO-BEM BPR Methodology

Object Oriented Business Engineering Methodology (OO-BEM) begins by envisioning and reversing existing business processes and engineering the new business. Table 4.6 denotes results of the findings from the respondents on their views and level of agreement basing on various aspects of OO-BEM BPR Methodology used by various corporations to achieve business performance,

**Table 4.6: OO-BEM BPR Methodology**

<b>OO-BEM BPR Methodology</b>	<b>Mean</b>	<b>Std. Deviation</b>
Our firm has clear vision, mission and corporate objective for successful performance	4.52	.512
The firm does reverse reengineering by identifying failures in the processes	3.62	.498
The corporation does forward reengineering through selection of processes and redesign processes for better performance	3.62	.740
The firm carries out pilot study to test run the processes	3.67	.658
The corporation implements new processes and conduct performance review for improvement	4.14	.359



The results in Table 4.6 shows that OO-BEM BPR Methodology increases organizational performance through setting out clear vision, mission and corporate objectives for successful performance (mean = 4.52), The firm does reverse reengineering by identifying failures in the processes so as to increase performance (mean = 3.62), Through forward reengineering and selection of processes, the firm redesign processes to improve performance (mean = 3.62), in carrying out pilot study to test run the processes countrywide, the firm increases performance (mean = 3.67) and enhances ROI through implementing of new processes (mean = 4.14).

#### 4.5.5 PADM BPR Methodology

Table 4.7 presents the frequency distribution of respondents' opinion on the extent to which PADM BPR Methodology has contributed to the organizational performance of the commercial state corporation.

**Table 4.7: PADM BPR Methodology**

<b>PADM BPR Methodology</b>	<b>Mean</b>	<b>Std. Deviation</b>
The state corporation has a vision statement for business process improvement.	4.52	.512
Commercial state Corporation does select core business process that has impact on customers.	4.00	.548
The firm incorporates IT as part of analysis and design processes to be reengineered	3.67	.577
The corporation implement new processes by creating new operating rules and techniques	3.95	.498
The corporation does performance review interactively to continuous improvement	3.95	.218

The result in Table 4.7 shows how PADM BPR Methodology influences organizational performance, it is depicted by vision statement and the implementation (mean=4.52), it shows that the Commercial state Corporation do select core business process that has high impact on customers (mean=4.00), it reveals high return when the corporation incorporates IT as part of its analysis and design processes (mean=3.67), there is high performance when the corporation implements new processes by creating new operating rules and techniques(mean=3.95) and Commercial state corporation do implement, monitor and evaluate processes and the corporation do perform at optimum when it does performance review interactively (mean=3.95). This is

supported by McKinsey BPR Methodology simplifies the process into three steps i.e. diagnostic of existing process, redesign and testing of new process and implementation of the new process throughout the firm (McKinsey, 2000). On the extent to which Business Process Re-engineering implementation is adopted by the Commercial State Corporations in Kenya, the finding shows that Hammer and Champy tops the list with Mean=4.16, both Davenport's and Short's & Integrated BPR Methodology (Mean=4.05), PADM (Mean=4.02) and finally OO-BEM with Mean=3.91.

#### 4.6 Inferential Statistics Analysis on Relationship

The data obtained from summarizing the responses obtained from the research questions were further analyzed by use of Pearson's correlation model. The findings are summarized to showing the relationship between Business Process Re-engineering and organizational performance of Commercial State Corporations in Kenya as follows.

##### 4.6.1 Correlation of Main Variables

The Pearson Correlation analysis was conducted at 95% confidence level ( $\alpha = 0.05$ ) to find out the correlation between the variable under study. The statistical analysis was done using summated scales for both the BPR Methodologies and organizational performance as variables. The results in table 4.8, shows that the correlation coefficients denoting the relationships between the variables (Independent and dependent) are above 0.4 and below 0.8 (Pearson, 1990). This shows that the strength of the correlations is medium to strong. The highest correlation coefficient was at 0.740 which is less than 0.8; therefore there is no multi-collinearity problem in this study.

**Table 4.8: Pearson Correlation Analysis**

<b>BPR Methodology</b>	<b>Organizational Performance</b>	
		Pearson Correlation
Hammer and Champy		0.46
	Sig. (2-tailed)	0.04
Integrated BPR Methodology	Pearson Correlation	0.41
	Sig. (2-tailed)	0.06
Davenport's and Short's	Pearson Correlation	0.73
	Sig. (2-tailed)	0.00
OO-BEM	Pearson Correlation	0.56
	Sig. (2-tailed)	0.03
PADM	Pearson Correlation	0.74
	Sig. (2-tailed)	0.00

The outcome in table 4.8 shows that all the independent variables that is; (Hammer and Champy, Integrated BPR Methodology, Davenport's and Short's, OO-BEM and PADM) have a strong positive correlation on the dependent variable (organization performance). PADM had the strongest correlation on organization performance with ( $r = 0.758$ , and  $p < 0.05$ ) while Integrated BPR Methodology had the weak correlation to organizational performance with a correlation of ( $r = 0.410$ ,  $p < 0.05$ ) meaning that if PADM tops the BPR Methodology and is aligned in tune with the industry performance, it can account for increase in ROI, Profitability, Liquidity, Debt to Asset Ratio and Market Share modeled with dynamic technological innovations to leverage on performance. The finding further shows that all the variables were significant at 95% level of confidence at an interval level of 2-tailed. This shows that all the forecasted variables under contemplation had a positive relationship with the dependent variable hence firms need to emphasize on the BPR Methodologies to enhance organizational performance.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION**

### **5.1 Introduction**

This chapter presents the final piece of the study. This chapter articulates the summarized findings from chapter four and relates them to the concepts and literature discussed in chapter two. It then highlights the conclusions based on specific research questions and the recommendations made thereof in the line of inferential outcome. It finally exudes the suggestions for further research beyond the variable and elements under consideration.

### **5.2 Summary of the findings**

The study investigated the Business Process Re-engineering implementation and how it influence Commercial State Corporations in Kenya. The study was informed by two research questions, namely; to what extent does BPR Methodologies affect Organizational performance. It also looked into the relationship between Business Process Re-engineering and organizational performance of Commercial State Corporations in Kenya The study adopted a descriptive research design. The unit of analysis was the 24 commercial state corporations in Kenya based on the report from the registrar of companies (2015) and gazette State Corporation, it adopted a census and the entire population was considered for analysis. The respondents were the management of various commercial state corporations who were given the questionnaires provided overwhelming response.

The response rate for the study was 86%. The quantitative data was analyzed using descriptive statistics, Pearson correlation model was used to find the relationships. The data was organized according to the research objectives and presented using tables. The following are the summary of the key findings. The PADM BPR Methodology influenced organizational performance, it depicts by vision statement and the implementation, it further shows that the Commercial state Corporation do select core business process that has high impact on customers, it reveals high return when the corporation incorporates IT as part of analysis and design processes, there is also high performance when the corporation implements new processes by creating new operating rules and techniques and finally, the Commercial state corporation do implement, monitor and evaluate processes as well as perform at optimum when it does performance review interactively.

The Davenport's and Short's BPR Methodology has enabled the commercial state corporation to engage their technological prowess by aligning the firm's ICT processes with the vision statement for business process improvement, the firm is also able carry out system audit on existing processes for better performance, The firm designs process and roll out implementation plan based on key principles, The firm is able to identify ICT capabilities that is vital for BPR and finally the corporation implements new processes and carry out performance audit for better business performance this is supported by (Davenports, 1993) who assert that This methodology introduces identification of IT levers and capabilities as its fourth step before design and implementation. Information Technology is regarded as vital for effective communication and efficiency in the reengineering process. The methodology recognizes that IT capabilities are transactional, geographical, informational, analytical, sequential, managerial, and traceable and parts knowledge.

The OO-BEM BPR Methodology has increased organizational performance through setting out clear vision, mission and corporate objectives for successful performance; the firms often do reverse reengineering by identifying failures in the processes so as to increase performance, through forward reengineering and selection of processes, the firm redesign processes to improve performance. In carrying out pilot study to test run the processes countrywide, the firm increases performance and hence enhanced ROI through implementing of new processes and by conducting performance review.

The Hammer and Champy methodology influence organizational performance, it is depicted by vision statement and the implementation, it shows how the Commercial state Corporation do select core business process that has high impact on customers, it reveals how State Corporation does thorough performance analysis of BPR Methodology and finally, Commercial state corporation do implement, monitor and evaluate processes, this is supported by Hammer and Champy methodology that bases the business processes on; jobs, managers and values as the four points of business system diamond. This is done in phases; action and vision statement for an organization down to implementation (Hammer and Champy, 2001).

Finally, the Integrated BPR Methodology has enabled business performance among the corporations through Benchmarking that calls for comparing the organizational performance of the processes with those of competing firms in the same industry. A corporation is then able to implement plans then roll it out in readiness for the actual transition. After successful

implementation, the methodology emphasizes on performance review of the processes and continuous improvement. This is supported by (Muthu et al, 2004), who opined that an implementation plan is then rolled out in readiness for the actual transition. After successful implementation, the methodology emphasizes on performance review of the processes and continuous improvement. This is vital in order for any firm to survive and prosper in the dynamic business environment.

The result shows that BPR has significant effects on organizational performance with a strong positive significance. PADM BPR Methodology, Davenport's & Short's BPR Methodology, OO-BEM BPR Methodology, Hammer and Champy BPR Methodology and finally Integrated BPR Methodology which form the core a building BPR Methodologies. It shows that commercial state corporations in Kenya use BPR Methodologies at different wavelength in order to boost their organizational performance and this is evidenced on the findings. The BPR Methodologies collectively account for 70.5% of change in performance of the commercial state corporations in Kenya. The other remaining percentage of 29.5%, being accounted for by other factors not considered in this study. It is eminent that further research should be conducted to probe the other factors that account for the remaining (29.5%) that seems to affect organizational performance of commercial state corporations in Kenya.

The BPR Methodologies (PADM BPR Methodology, Davenport's & Short's BPR Methodology, OO-BEM BPR Methodology, Hammer and Champy BPR Methodology and Integrated BPR Methodology) have a strong positive correlation on the dependent variable (organization performance). PADM had the strongest correlation on organization performance with ( $r = 0.758$ , and  $p < 0.05$ ) while Integrated BPR Methodology had the weak correlation to organizational performance with a correlation of ( $r = 0.410$ ,  $p < 0.05$ ) meaning that if PADM tops the BPR Methodology and is aligned in tune with the industry performance, it can account for increase in ROI, Profitability, Liquidity, Debt to Asset Ratio and Market Share modeled with dynamic technological innovations to leverage on performance. The finding further shows that all the variables were significant at 95% level of confidence at an interval level of 2-tailed. This shows that all the forecasted variables under contemplation had a positive relationship with the dependent variable hence firms need to emphasize on the BPR Methodologies to enhance organizational performance.

### **5.3 Conclusion**

Business Process Re-engineering (BPR) is a Radical re-designs of core business processes to achieve dramatic improvements in cost, quality, service, speed, cycle time and overall productivity. It is a process that cuts across an organization's various levels with the main focus on satisfying customer requirements and expectations. It calls for an organization to completely abandon its old ways of operations and adapt to new ways of thinking for improved organizational performance. (Hammer and Champy, 2001).

The most common methodologies applied towards BPR implementation include the following: Hammer and Champy methodology based on business processes, jobs, managers and values as the four points of business system diamond. Davenport's and Short's methodology emphasizes on Information Technology as an integral part of BPR. Object Oriented Business Engineering Methodology (OO-BEM) by Jacobson that begins by envisioning and reverse engineering to forward engineering. A fourth methodology, the Process Analysis and Design Method (PADM) features a framework of tools and techniques for iterative activities. All these methodologies follow the basic phases of defining the business vision, process selection, analysis, design, implementation and review for continuous improvement. An integrated BPR methodology by Muthu, Whitman and Cheraghi, gives a similar approach and consolidates the key steps in BPR.

The study found out that most Commercial state corporations in Kenya have adopted BPR Model at different wave length in order to increase their organizational performance. These range from PADM BPR Methodology, Davenport's & Short's BPR Methodology, OO-BEM BPR Methodology, Hammer and Champy BPR Methodology and Integrated BPR Methodology with each having positive significance on ROI, Market Share, Profitability, Debt and Liquidity Ratio and equally on organizational performance as a whole. In conclusion, there is a strong positive relationship between BPR Methodology and organizational performance of the commercial state corporations in Kenya therefore the corporations need to fully carry out market analysis so as to understand the media market, develop and implement BPR Models that embraces the crop of methodology that fit into a given industry for competitive advantage hence achieving organizational performance

#### **5.4 Limitations of the Study**

The study focused and delved on one respondent from each commercial state corporation, this put probable limitation in terms of generalizing the results to substantiate those other firms or departments in contexts. The whole selection was skewed towards the generalization of results to the overall population. The narrowness and specificity of this study means that the results were based only on the commercial state corporations which may not be of much help to other sectors in terms of national and international contexts.

#### **5.5 Recommendation**

The study found out that BPR Methodology tremendously affects organizational performance and that there is a strong positive relationship between BPR Methodology and organizational performance. These put in to perspective the (BPR) models namely; PADM BPR Methodology, Davenport's & Short's BPR Methodology, OO-BEM BPR Methodology, Hammer and Champy BPR Methodology and Integrated BPR Methodology. The commercial state corporation should intensify their style of research and development thereby adopting the best fit of a model that are realistic and time bound to increase organizational performance but with caution to ensure that control and sobriety is observed within industry so as not to exploit the consumers in the name of wanting to maintain surplus or achieve ROI. There are a lot of old and dying commercial state corporations that are struggling financially as it has been evidenced, the best BPR model basing on the finding of the study is therefore recommended for implemented to save the state resources.

The BPR is a tool towards organizational prowess as indicated in the findings. Besides, from qualitative data gathered it showed that different commercial state corporation have often used the wrong tactics in the hope of beating competition but the result has always been negative, therefore there is a sense in which the (BPR) models namely; PADM BPR Methodology, Davenport's & Short's BPR Methodology, OO-BEM BPR Methodology, Hammer and Champy BPR Methodology and Integrated BPR Methodology should be implemented to improve organizational performance. The study findings call for the government to adopt BPR methodologies so as to bring strategic changes in the commercial state corporation. It also invite academicians recast strategically on the methodologies and their rightful applicability in order to contribute to the line of operations management.



## **5.6 Suggestions for further Research**

The objectives mainly focused on the variables under study, they tried to successfully delve and accomplished the intended purpose but these were only skewed to the extent and relationship that existed between the variables. Several areas that were not covered remained unclear and these require further research;

First, data was collected and were limited to only 24 commercial state corporations in Kenya. The study further proposed that further research should be carried out to not only look into the limited commercial state corporation but also other organizations at a broader spectra that uses BPR Methodology to enhance their performance and which might have been left out during the study due to scope

Second, since data collection was only limited to the use of semi-structured questionnaires, observations and interviews as the main tools, more advanced data collection methods are therefore recommended for future research namely, comparative research, case study and sample study

There is a dire need to do more research on other factors that affect organizational performance which could be used alongside BPR Methodologies that might contribute to ROI, Profitability, Market Share and Liquidity ratio in the commercial state corporations in Kenya.

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## **APPENDICES**

### **APPENDIX I: Letter of Introduction**

George Ouma Ogada  
University of Nairobi  
P.O. Box 30197 – 00100  
Nairobi

October, 2017

To whom it may concern,

#### **RE: REQUEST TO CARRY OUT A RESEARCH STUDY**

I am a student at the University of Nairobi Main Campus taking Masters in Business Administration degree course. My specialization is Operations Management and I am carrying out a research study on Business Process Re-engineering and Organizational performance of Commercial State Corporations in Kenya.

The study requires me to collect data for analysis in order to make reliable conclusion. As one of my preferred participants, I am kindly requesting for your input by going through the attached questionnaire and answering the questions to your level best. Kindly be assured that the information you give will only be used for academic purposes and will be treated with utmost confidentiality.

Thank you in advance for taking your time towards making this study successful.

Yours sincerely,

George Ouma Ogada

## APPENDIX II: Questionnaire

### Part A: Background information

1. Kindly state the name of your organization: \_\_\_\_\_
2. In which industry is your organization: \_\_\_\_\_
3. What is your current position?
  - Chief Executive Officer            ( )
  - Operations Manager                ( )
  - General Manager                    ( )
  - Supervisor                            ( )
  - Other (Please specify)              \_\_\_\_\_
4. For how long have you been working in this organization?
  - Less than 5 years                    ( )
  - 5 – 10 years                            ( )
  - 11 – 20 years                          ( )
  - Above 20 years                        ( )

### Part B: Business Process Re-engineering implementation

Kindly select on a scale of 1 – 5 where: 5 - Very Strong, 4 – Strong, 3 - Moderate, 2 - Weak and 1 – None

5. **To what extent has your state corporation implemented the following aspects of Hammer and Champy BPR Methodology?**

Use of Hammer and Champy BPR Methodology	1	2	3	4	5
The state corporation has a vision statement on business process improvement					
Our firm do select core business processes having high impact on customers					
The corporate does thorough performance analysis of the selected processes for BPR					
Our organization do implement, monitor and evaluate the re-engineered processes against the objectives for continuous improvement					

Kindly select on a scale of 1 – 5 where: 5 - Very Strong, 4 – Strong, 3 - Moderate, 2 - Weak and 1 – None

**6. To what extent has your state corporation implemented the following aspects of An Integrated BPR Methodology?**

<b>Use of An Integrated BPR Methodology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The firm identifies customer objectives and develops strategic purpose involving all stakeholders					
The state corporation maps and analyzes existing process to establish the constraints and bottlenecks					
The firm designs the process to be and benchmarks it to the whole industry					
The firm management do roll out process implementation as per developed plan					
The state corporation implements the new process and does performance review for continuous improvement					

**7. To what extent has your state corporation implemented the following aspects of Davenport’s and Short’s BPR Methodology?**

<b>Use of Davenport’s and Short’s BPR Methodology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The state corporation has a vision statement on business process improvement					
The firm do carry out performance analysis on existing processes and selects core business processes having high impact on customers					
The firm identifies and recognizes the IT levers and capabilities as vital elements for BPR process					
The firm designs process to be and rolls out implementation plan based on key management principles					
The state corporation implements the new process and does performance review for continuous improvement					

Kindly select on a scale of 1 – 5 where: 5 - Very Strong, 4 – Strong, 3 - Moderate, 2 - Weak and 1 – None

**8. To what extent has your state corporation implemented the following aspects of Object Oriented Business Engineering Methodology (OO-BEM)?**

<b>Use of OO-BEM</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Our firm has a clear vision, mission and corporate objectives for successful performance					
Our firm does reverse engineering by identifying failures in the existing processes					
The state corporation does forward engineering through selection and subsequent redesign of the process to be					
Our firm carries out a pilot study as a test run on the reengineered process before implementation					
The state corporation implements the new process and does performance review for continuous improvement					

**9. To what extent has your state corporation implemented the following aspects of Process Analysis and Design Methodology (PADM)?**

<b>Use of Process Analysis and Design Methodology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The state corporation has a vision statement on business process improvement					
The state corporation selects core business processes to be reengineered					
The firm incorporates IT as an integral part in analysis and design of process to be reengineered					
The corporate implements the new process by creating completely new rules, techniques or ways of operation					
The state corporation does performance review iteratively for continuous improvement					

**Part C: Measurement of Organizational Performance**

Kindly indicate on a scale of 1 – 5 where:

5 – Strongly agree, 4 – Agree, 3 - Moderate, 2 - Disagree and 1 – Strongly disagree

**10. To what extent do you concur with the following aspects on Organizational Performance in your corporation**

<b>Aspect of Organizational performance</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Our organization generates more revenue at minimized cost for the last five years					
The Return on Investment (ROI) has increased as compared to the previous periods					
The state corporation has experienced increased market share over the previous years					
The firm’s Profitability, Debt and Liquidity Ratios have improved over the previous years					
There is more Efficiency and Effectiveness in operations due to eliminated constraints and bottlenecks					
There is optimum use of resources with reduced wastages					
There is an improved firm productivity due to top management involvement in BPR implementation					
Tasks have become more automated and more efficient leveraging on organization performance					

*Thank You*



### **APPENDIX III: List of Commercial State Corporations in Kenya**

1. Cooperative Bank of Kenya
2. Industrial and Commercial Development Corporation
3. Industrial Development Bank
4. Jomo Kenyatta Foundation
5. Kenya Airways plc.
6. Kenya Broadcasting Corporation
7. Kenya Electricity Generating Company Ltd
8. Kenya Electricity Transmission Company Ltd
9. Kenya Industrial Estates
10. Kenya Meat Commission
11. Kenya National Trading Corporation
12. Kenya Pipeline Company Ltd.
13. Kenya Ports Authority
14. Kenya Post Office Savings Bank
15. Kenya Power
16. Kenya Railways Corporation
17. Kenya Revenue Authority
18. Kenya Seed Company Ltd
19. Kenya Tourist Development Corporation
20. Mumias Sugar Company Ltd
21. National Bank of Kenya
22. National Housing Corporation
23. New Kenya Cooperative Creameries Ltd.
24. Postal Corporation of Kenya

Source: (Performance Evaluation Report, 2010/2011)