EFFECT OF BUSINESS PROCESS IMPROVEMENT MECHANISMS ON REVENUE COLLECTION IN NAIROBI COUNTY GOVERNMENT, KENYA

By

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTERS OF BUSINESS ADMINISTRATION (CORPORATE MANAGEMENT OPTION) IN THE SCHOOL OF BUSINESS AT KCA UNIVERSITY

NOVEMBER, 2017

DECLARATION

This research project is my original work and has not been submitted for an award of a degree in any other University.

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This research project has been submitted for examination with my approval as the University Supervisor

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DEDICATION

I dedicate this research project to my family, the supportive rock that my life revolves around for their immense support during my entire studies.

ACKNOWLEDGEMENT

The completion of this research project would have been impossible without the material and moral support from various people. First and foremost, I thank the Almighty God for keeping me in good health throughout the entire course.

Special thanks to my supervisor Dr. Abraham Rotich for his effective supervision, guidance, availability and professional advice as I undertook this work. I also extend my gratitude to all lecturers who taught me in the MBA programme, therefore enriching my research with knowledge.

My appreciation also goes to my family and friends for their moral support during my entire studies. Lastly and not least, I thank my fellow classmates, with whom I weathered through the storms, for this worthy cause.

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LIST OF ABBREVIATIONS AND ACRONYMS

BPI	Business Process Improvement
BPR	Business Process Reengineering
ERP	Enterprise Resource Planning
ICT	Information and Communication Technology
IT	Information Technology
IGFs	Internally Generated Funds
KES	Kenya Shillings
KNBS	Kenya National Bureau of Statistics
KRA	Kenya Revenue Authority
LAs	Local Authorities
NCG	Nairobi County Government
SPSS	Statistical Package for Social Science
USA	United States of America

DEFINITION OF TERMS

Automation: This refers to the use of Information and Communication technology based platforms that facilitate the processing and flow of organizational information to ensure effective delivery of products and/or services to organization's customers/clients (Davenport, 2013).

Business process improvement: This refers to the mechanisms of standardizing an organization's operations with the aim of achieving an effective balance between operational efficiency, effective service, resource optimization, lower costs and organizational agility (Van Der Aalst, 2013).

Change management: This is the process of restructuring and redesigning organizational activities in order to keep abreast of emerging challenges in the operating environment and to meet the needs of customers (Selvadurai, 2013).

Performance management: This refers to the activity and set of processes that aim to maintain and improve employee outcomes in line with the organisational goals and objectives (Abiola & Asiweh, 2012).

Revenue collection: This refers to the processes and mechanisms by which the government through the authorized public agencies is able to raise funds from the citizens to finance its operation (Anderson, 2013).

Outsourcing: This refers to the transfer of certain functions/operations of an entity to an external service provider with a view to save costs, improve efficiency or to allow the organization focus on its core business (Fontes, 2010).

ABSTRACT

For organizations to survive and excel in today's highly dynamic and competitive business 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 determine the effect of business process improvement mechanisms on revenue collection in Nairobi County Government. Specifically, the study explored the effects of change management, automation, performance management and outsourcing on revenue collection in Nairobi County Government. 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. The study recommended that to make the change management process successful, the Nairobi County Government should ensure proper planning and communication of the change process as well as ensure adequate participation of all the stakeholders. Further, the study recommends that the Nairobi County Government should continually finance the automation of its various functions and services especially in areas where the existing manual operations are inefficient and wasteful. In addition, the Nairobi County Government should embrace and promote the use of performance contracting measures among its staff in order to enhance employee productivity while also being able to identify possible areas of improvement in the employees' work.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Before the emergence of BPI, organizations would divide works into small and simple tasks. This led to dominance of functional structured organizations which thereafter encountered problems due to a dynamic competitive operating environment coupled with changing consumer tastes (Aalst, 2013). These problems have forced modern day organizations to identify techniques that would enable them cope with the changing business environment and complex taste of customers (Ozcelik, 2010). Organizational success requires the ability to set the right balance between efficiency and effectiveness and BPI methodologies are helping modern organizations achieve that (O'Neill & Sohal, 2009).

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 Business Process Improvement (BPI) emerging as one of the techniques proven to be the most effective means of enhancing organizational effectiveness and efficiency (Smith & Fingar, 2013).

According to Brown and Osborne (2012), integration of BPI methodologies in revenue collection has a positive impact on the cost of tax administration, effectiveness of revenue collection, duration of revenue collection and revenue collection compliance rates. Further, use of the BPI techniques in revenue collection would help the governments in being able to modernize their revenue collection systems, audit their revenue collection systems, curb tax evasion, increase agility in revenue collection, broaden the revenue base and increase

efficiency and effectiveness in revenue collection which would in turn occasion higher revenue collections (Van Der Aalst, 2013).

1.1.1 Business Process Improvements

The concept of business process improvement (BPI) was developed by Harrington in 1990 and he described it as a systematic methodology created to help an organization make significant advances in the way its business processes operate (Al-Mashari, Irani & Zairi, 2011). Generally the concept of BPI revolves around identifying how business processes currently operate, establishing the business process changes required to eliminate redundant effort and improve efficiency and deciding how to implement the process changes in order to achieve organizational efficiency and competitiveness (Jeston & Nelis, 2014). According to Buavaraporn (2010), the aim of BPI is to devise new ways of organizing tasks, people and resources so that organizational processes become more effective and efficient. The underlying essence of BPI is to improve the quality of process and service, with customer-focus, with a view of achieving and sustaining operational and service excellence (Dumas, La Rosa, Mendling & Reijers, 2013).

Business process improvement works by defining the organization's strategic goals and purposes, determining what the organization's stakeholders are expecting, and aligning the business processes to meet those requirements (Rashid & Ahmad, 2013). BPI aims to improve productivity and competitiveness of the organization with the end result being a superior intrinsic value for the organization and greater customer satisfaction (Xiaoli, 2011). BPI is often seen as a way of standardizing business operations and reducing operational costs (Al-Mashari et al., 2011). BPI aims at achieving an effective balance between operational efficiency, effective service, resource optimization, lower costs and organizational agility (Aalst, 2013).

BPI as a concept comprises various constructs that support the redesigning of organizational processes to eliminate redundant effort and improve efficiency while also focusing on implementation of the process changes in order to help the organization gain competitiveness (Xiaoli, 2011). Such constructs include automation which entails movement of processes from manual based systems to ICT based systems (Davenport, 2013); performance management which entails regular review of the existing processes with a view of identifying possible areas of improvement (Hederson, 2015); change management which entails the restructuring and redesigning of the organizational activities in order to keep abreast of changes in its operating environment (Nadeem & Ahmad, 2016); outsourcing which entails engaging third parties to perform certain tasks or services on behalf of the organization with a view to save costs, improve efficiency or to allow the organization focus on its core business (Fontes, 2010).

Numerous organizations have reported dramatic benefits gained from the successful implementation of BPI including cost reductions, increases in employee productivity, a higher quality of goods and services offered, higher flexibility, increased tasks coordination and a simplified organizational structure (Nadeem & Ahmad, 2016). However, despite the significant growth of the BPI concept, not all organizations embarking on BPI initiatives achieve their intended result (Dumas et al., 2013). Gregor, Philipp and Susanne (2011) estimate that as many as 70 percent do not achieve the dramatic results they seek. This mixture of results makes the issue of BPI implementation critical. The BPI concept has great potential for increasing firm productivity through reduced process time and cost, improved quality, and greater customer satisfaction, though it often requires a fundamental organizational change to ensure successful implementation (Kemal, Alok & Kondareddy, 2014).

1.1.2 Revenue Collection

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. Kimario (2014) viewed public revenue collection as being the set of activities aimed at helping governments raise incomes from individual persons and businesses for financing the provision of public goods and services. Ngugi (2016) was of the view that revenue collection refers to the funding received by an entity to support its functioning while Zhou and Madhikeni (2013) opined that revenue collection is the processes and procedures employed by an organization to mobilize financial resources required to support its operations.

Inability to optimally collect requisite revenues, on the part of the Nairobi County Government, implies that the residents of Nairobi County suffer poor delivery of essential public services. Adoption of various BPI initiatives by the county government of Nairobi in the area of financial management aims at helping it achieve efficiency and effectiveness in revenue collection (Ndunda, 2015). For the purpose of this study, revenue collection referred to the amounts collected by the Nairobi County Government in accordance with existing laws

to finance its operation and service delivery to the county's residents. The revenue collection was measured by ascertaining the amounts of funds collected by the Nairobi County Government over a period of 3 years between 2014 and 2016.

1.1.3 An Overview of Nairobi County

Nairobi County is one of the 47 counties in Kenya and was established in 2013 based on the boundaries of the former Nairobi Province. The county has an estimated population of 7.5 million people and covers an area of approximately 269 square miles (KNBS, 2015). Baringo County is one of the 47 counties of Kenya. The county hosts the capital city of Kenya and accounts for upto 60% of Kenya's GDP. The economic mainstay of Nairobi County is commercial activities. Nairobi County is culturally diverse with all the major Kenyan ethnic groups represented in the county. Nairobi County is bounded by Machakos County to the East, Kiambu County to the North and West and Kajiado County to the South.

The over-reliance on the National Government for funds to the point of the county governments in Kenya calling for a national referendum to have their allocation increased clearly indicates that there exists a myriad of challenges in revenue collection at the county level (Ngugi, 2016). Non compliance to remission of taxes and other fees levied to the residents of the Nairobi County coupled with high levels of corruption and inefficient revenue collection processes have been identified as key factors adversely affecting the levels of revenue collection in the county (Muli, 2014). As of 2015, the Nairobi County government was only able to meet 60-65 percent of its revenue collection projections implying that a significant amount of revenue remained uncollected (Odede, 2013).

1.2 Statement of the Problem

The Nairobi County Government has had serious challenges of public service delivery and this has been attributed insufficient county revenues. In a bid to address its revenue collection challenges, the NCG has adopted various BPI initiatives but as to whether these BPI initiatives have yielded the intended results remains untested. To maximize revenue collection, it is important that the county governments become efficient and effective in their revenue collection practices as the monies raised are required to meet the needs of the taxpaying public (Kimario, 2014). One major administrative problem today for most of the county governments, Nairobi included, is their inability to collect adequate revenue (Mburugu, 2016). The adoption of BPI methodologies provides a mechanism through which the governments can strengthen their revenue collection strategies (Kemal *et al*., 2014). This is usually done through improved efficiency in the revenue collection chain which improves accountability and minimizes wastage (Anderson, 2013).

The Nairobi County Government has adopted the BPI process in an effort to increase the county's revenue collection. Some of the prominent BPI initiatives that the county government of Nairobi has undertaken include; automation of its revenue collection processes, staff rationalization, regular and continuous staff performance review, outsourcing of certain functions and strengthening of enforcement and compliance mechanisms. In spite of all these efforts, the county had not been able to collect all the revenue that is due to it. For instance, in 2014/15, the Nairobi county government's total internal revenue was KES 11.4b against a target of KES 13.3b; in 2015/2016 the total revenue collected was 12.2b against a target of 15.9b (KNBS, 2015). From this, it was clear that despite Nairobi County Government having embraced BPI, revenue collection had remained low.

Locally, several studies have focused on business process improvement. For instance, Mturi (2014) studied the effect of business process reengineering on staff turnover using a case of KK Security Group of Companies and reported that effective communication, ICT resources, team work and employee attitudes towards change as having played an important role in the BPR implementation in the KK group of companies. Odede (2013) focused on business process re-engineering implementation and organizational performance in Kenya Revenue Authority and established a positive relationship between BPR implementation and performance of KRA with improvements noted in areas of customer service, process turnaround time, cost reduction, improved technology, competitiveness and revenue growth.

Gachoka (2015) did a study on the application of business process re-engineering as a strategic planning tool by the Kenyan Judiciary and established that change management especially through embracing IT came out strongly as a factor to their success. On his part, Okwena (2015) studied factors influencing performance of BPR projects in Kenya Commercial Bank and found that management commitment, communication of change, processes and systems management and monitoring and evaluation significantly influenced the performance of BPR projects at the bank. Existing local studies on BPI had not focused on the effect of BPI on revenue collection in the county governments in the country and therefore a knowledge gap existed. To fill this research gap the current study sought to investigate the effect of business process improvement mechanisms on revenue collection in Nairobi County Government.

1.3 Research Objectives

This study sought to determine the effect of business process improvement mechanisms on revenue collection in Nairobi County Government.

The following are the specific objectives;

i. To examine the effect of change management on revenue collection in Nairobi County Government.

ii. To investigate the effect of automation on revenue collection in Nairobi County Government.

iii. To establish the effect of performance management on revenue collection in Nairobi County Government.

iv. To establish the effect of outsourcing on revenue collection in Nairobi County Government.

1.4 Research Questions

i. What is the effect of change management on revenue collection in Nairobi County Government?

ii. What is the effect of automation on revenue collection in Nairobi County Government?

iii. What is the effect of performance management on revenue collection in Nairobi County Government?

iv. What is the effect of outsourcing on revenue collection in Nairobi County Government?

1.5 Significance of the Study

The study may benefit the administration of Nairobi County Government as it would be able to appreciate the effect of business process improvement mechanisms on its revenue collection efforts. This may in turn inform the kind of BPI policies they need to institute to drive growth in the county's revenue collection agenda.

The findings of this study may also be of benefit to the policy makers at the national level by providing insights as to the role of business process improvement techniques on the country's general fiscal performance. This may in turn inform the formulation of effective public policies and regulations to govern adoption of BPI initiatives in the various government ministries and agencies.

The desire to optimize revenue collection is not limited to the Nairobi County Government and therefore other county governments in the country would benefit from this study as it highlights the significance of BPI on their revenue collection performance. This may in turn inform their decisions on policies required for effective implementation of BPI initiatives to support their revenue collection programmes.

This research adds to the existing body of knowledge on business process improvement and public revenue collection. It therefore provides other interested scholars and academicians with a basis for further research on the subject.

1.6 Scope of the Study

The study was limited to the Nairobi County Government as the study unit with the management staff of the county government being the target population of the study. Revenue collection being the dependent variable of the study was evaluated over a period of

three years, between 2014 and 2016. The choice of the 3-year period was so as to enable the researcher to discern the effect of BPI on the county's revenue collection.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter presents the theoretical framework of the study, empirical review based on the study objectives, conceptual framework of the study and operationalization of variables.

2.2 Theoretical Review

This section includes a review of theories that guided the study. The study was guided by four theories namely; Resource Based View Theory, Technology Acceptance Model Theory, Goal-setting Theory and Agency Theory. The theories are as described in the subsequent subsections.

2.2.1 The Resource Based View Theory

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 (Lockett, Thompson & Morgenstern, 2011). 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 (Wright, Dunford & Snell, 2011). 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).

Based on the resource based view theory, the human resource policies and values of an organization constitute an important non-imitable resource and this is achieved by ensuring that; - the firm has higher quality people than its competitors, organization learning is encouraged, organization-specific values and a culture exist which bind the organization together (and) gives it focus, and the unique intellectual capital possessed by the business is developed and nurtured (Wright *et al*., 2011). Critiques of this theory argue that the effectiveness of the resource based approach is inextricably linked to the external context of the firm and that the resource based approach provides more value when the external environment is less predictable (Bratton & Gold, 2012). This theory was relevant to the study given that business process improvement mechanisms can provide a powerful tool through

which the Nairobi County Government can enhance its revenue collection. Change management as a BPI construct is an important element that can help an organization align its internal systems and processes to the changes happening in the external environment.

2.2.2 Technology Acceptance Model Theory

The Technology Acceptance Model (TAM) was developed by Davis in 1989. This model relates the individuals' behavioral intentions and his/her ICT use. It is suggested that, the actual behavior of a person is determined by his behavioral intention to use, which is in turn influenced by user's attitude toward and perceived usefulness of the technology. However attitude and perceived usefulness are both determined by ease of use (Pedersen *et al*., 2012). The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, and most notably perceived usefulness which is the degree to which a person believes that using a particular system would enhance his or her job performance. Adopting the TAM model requires the understanding of end-users requirements regarding usefulness and user friendliness (Pedersen *et al*., 2012).

From this model, usefulness and user friendliness affect users' attitudes towards adoption of any service (Davenport, 2013). Davis thus suggests that it is important to value user requirements based on perceived usefulness and the user friendliness of the technology rather than other objective measure. Critiques of this model are directed to its inclination to the technological/technical aspects of the technology in question ignoring other factors such as social aspect of the users. In practice, constraints such as limited ability, time, environmental or organizational limits and unconscious habits will limit the freedom to act (Olumide, 2016).

The Technology Acceptance Model has been widely criticized, despite its frequent use, leading the original proposers to attempt to redefine it several times. Criticisms of TAM as a "theory" include its questionable heuristic value, limited explanatory and predictive power, triviality, and lack of any practical value, as for revenue system, its practical means .i.e. as per this research taxation is an integral part of countries' development policies, interwoven with numerous other areas, from good governance and formalizing the economy, to spurring growth through, for example, promoting activities such as export activities system for revenue collections (Chuttur, 2009). Davenport (2013) suggests that TAM "has diverted researchers' attention away from other important research issues and has created an illusion of progress in knowledge accumulation. This theory was relevant to the study given that most of the BPI initiatives are ICT supported and hence automation is at the epicenter of organizational restructuring. In this light, the study sought to explore the effect of automation, as a BPI construct, on revenue collection in Nairobi County Government.

2.2.3 Goal-setting Theory

Goal-setting theory was developed by Latham and Locke in 1968. The theory highlights four mechanisms that connect goals to performance outcomes, including: i) direct attention to priorities; ii) stimulate effort; iii) challenge people to bring their knowledge and skills to bear to increase their chances of success; and, iv) the more challenging the goal, the more people will draw on their full repertoire of skills (Locke & Latham, 2013). The basic premise of goal setting theory is that a person's conscious intentions (goals) are the primary determinants of task related motivation since goals direct our thoughts and actions'. Having goals impels individuals to review the consequences of their behaviour. If they conclude that their goals will not be achieved by their current behaviour, they will either modify their behaviour, or choose more attainable goals (Locke & Latham, 2013).

This theory underpins the emphasis in performance management on setting and agreeing objectives against which performance can be measured and managed. Goal theory supports the agreement of objectives, feedback and the review aspects of performance management (Seniwoliba, 2015). Goal-setting theory asserts that people with specific and challenging goals perform better than those with vague goals, such as 'do your best', specific easy goals or no goals at all. Thus, goal setting theory assumes that there is a direct relation between the definition of specific and measurable goals and performance: if managers know what they are aiming for, they are motivated to exert more effort, which increases performance (Locke & Latham, 2013). The reason why goal-setting has a positive effect on performance is that a specific high goal affects choice, effort and persistence. In other words, a specific goal or target increases a person's focus on what is to be accomplished as opposed to putting it off until a later date. Commitment to a specific high goal also leads to persistence until the goal is achieved (Armstrong & Taylor, 2014).

A good performance management system needs to be underpinned with good objective setting, and organization structure. Individuals need to be clear on what the key results areas are for each position and what is expected of them. Goal setting must also facilitate a bottom-up process, whereby individuals are given the opportunity to agree the goals through open dialogues, and to formulate their own goals within the overall performance management framework (Jackson & Sirianni, 2012). This theory was relevant to the study given that improving employee outcomes in line with organizational goals and objectives is one of the reasons behind adoption of BPI. BPI initiatives are intended to not only achieve efficiency and effectiveness in service delivery but also to enhance employee productivity. Through performance management, an organization is able to identify areas of weaknesses in the employees' skills and knowledge and can therefore be able to institute staff development

programs aimed at addressing the competency gaps. In light of this, the study sought to explore the effect of performance management, as a BPI construct, on revenue collection in Nairobi County Government.

2.2.4 Agency Theory

The agency theory with its roots in economic theory was exposited by Alchian and Demsetz in 1972 and further developed by Jensen and Meckling in 1976. The theory defines the relationship between the principals who are mainly the shareholders and agents who are mainly the company executives and managers. In this theory, the principals delegate the running of business to the directors or managers, who are the shareholder's agents (Clarke, 2004). According to Daily, Dalton and Canella (2013) the theory reduces the corporation to two participants - managers and shareholders. Agency theory states that shareholders expect the agents to act and make decisions in the principal's interest. However, this is not always the case as the managers of organizations can be self-interested (Mello, 2010).

On the contrary, the agent may not necessarily make decisions in the best interests of the principals. Such a problem was first highlighted by Adam Smith in the 18th century and subsequently explored by Ross in 1973, and the first detailed description of agency theory was presented by Jensen and stakeholder theory is less of a formal unified theory and more of a broad research tradition, incorporating philosophy, ethics, political theory, economics, law and organizational science (Matei & Drumasu, 2015). Donaldson and Preston (1995) opined that this theory focuses on managerial decision making and the interests of all stakeholders have intrinsic value, and no sets of interests are assumed to dominate the others. This theory was relevant to the study given that agency related problems may arise out of the outsourcing contracts entered into between the NCG and engaged third parties. In light of this, the study

sought to explore the effect of outsourcing, as a BPI construct, on revenue collection in Nairobi County Government.

2.3 Empirical Review

This section includes a review of past studies in relation to the effect of business process improvement on revenue collection. The section is structured based on the study objectives and therefore includes sections on change management, automation, performance management and outsourcing and their effect on revenue collection.

2.3.1 Change Management and Revenue Collection

The effect of change management on revenue collection is well documented in literature. According to Altamony, Al-Salti, Gharaibeh and Elyas (2016), a successful change management strategy consists of three phases which include preparing to change, implementation of the change and measuring the impact on user. Preparing the change requires identification of tasks and processes which require to be redesigned and identifying the resources that will be needed to effect the redesign while change implementation entails effecting the agreed changes. Once the changes have been implemented, it is important to continually assess their impact on the organization members to ensure harmony (Altamony *et al*., 2016). Selvadurai (2013) argued that employees' perception was the leading strategy required to create change in the public sector in Canada. These views were however opposed by Emeka, Eze and Ugwu (2013) who argued that employees' perception was not a major factor of change management but rather the major challenges facing organization in management of change are lack of planning, lack of communication, group conformity, resistance to change, conflicts and lack of resources.

To manage organizational change effectively, effective planning and communication, human resources strategy, creating distinctive capabilities, staff motivation and participation are necessary (Adeniji *et al*., 2013). Similarly, while evaluating the effect of change management on the performance of government institutions in Rwanda, Ndahiro, Shukla and Oduor (2015) found that open communication, effective information flows, teamwork, shared vision and responsibility and sound leadership were the key success factors behind the implementation of change management initiatives at the Rwandan Revenue Authority. On their part, Mugo (2014) and Jepkorir (2016) were of the view that the poor success rate of effective change management at Kenya Revenue Authority could be attributed to poor planning of the change process, ineffective leadership, lack of involvement of key stakeholders, employees' resistance to change and inflexibility of organization structures in responding to emerging national economic policy changes.

Adequate and early planning of change, inclusivity, enhancing leadership skills, adequate resource mobilization, performance management and risk management were identified as the main strategic change management practices adopted by Telkom Kenya Limited (Muteti, 2013). Similar views were indicated by Ng'eno (2012) who investigated strategic change management practices and organization performance at the Kenya Commercial Bank and established that Kenya Commercial Bank had adopted various strategic change management practices including effective leadership, continued staff development, effective communication, a learning culture and a sound organization structure which helped it improve its performance. From the above, it was clear that majority of the studies indicated that change management positively influenced organizational performance and thus the study hypothesis was:

$H_{01.}$ Change management has no significant effect on revenue collection in Nairobi County Government.

2.3.2 Automation and Revenue Collection

The effect of automation on revenue collection is well documented in literature. For instance, Olushola (2011) observed that the level of effectiveness of revenue collection in Nigeria increased as a result of use of ICT in company income tax collection. This was attributed to the elimination of leakages and human error and simplicity in making tax payments to the Central Bank of Nigeria. On his part, Mutisya (2014) studied the effects of an integrated revenue collection system and challenges facing its implementation in Machakos County in Kenya. The study established that implementation of integrated revenue collection system positively influenced revenue collection in the county. However, Ndunda (2015) observed that if poorly implemented, automation of revenue collection systems may have opposite effects of adversely affecting revenue collection performance especially where the adopted ICT systems are complex and hence not easy to use on the part of the tax payers.

Following the modernization of the revenue collection system at Kenya Revenue Authority, Muthama (2013) observed that the number of tax payment transactions and the revenue collected by Kenya Revenue Authority increased after the implementation of the new system (referred to as 'Simba System') compared to the years before its implementation. Similar sentiments were expressed by Murage (2016) who noted that the revenue collected by Kenya Revenue Authority was directly related to the number of transactions executed but inversely related to inflation, operating costs and exchange rates and that there was a strong positive relationship between system modernization and revenue collection at the Kenya Revenue Authority in Kenya particularly with regard to the use of the Simba System.

In a review of the determinants influencing revenue collection performance of Kenya Revenue Authority, Mburugu (2016) found that ICT adoption was a key determinant that influenced revenue collection performance at Kenya Revenue Authority. Allocation of more human and financial resources to strengthen the organization's ICT based revenue collection system as well as continued public awareness on the functioning of the Simba System were identified as key to enhancing the institution's capacity in its revenue collection mandate. Similarly, in a review of the effect of Information Systems on revenue collection by Local Authorities in Homa Bay County in Kenya, Odoyo *et al*. (2013) found that there existed a significant positive relationship between adoption of Information Systems and both efficiency and effectiveness in revenue collection in the Local Authorities in the county. While investigating the effect of automating the public sector and performance of public entities, Smith, Noorman and Martin (2010) observed that there seemed to be a general consensus that application of automated revenue collection systems positively related with the levels of revenue collected by such entities. This empirical review indicated that automation positively influenced the performance of revenue collection agencies and thus the following hypothesis was proposed:

> $H_{02.}$ Automation has no significant effect on revenue collection in Nairobi County Government.

2.3.3 Performance Management and Revenue Collection

Existing studies on the effect of performance on revenue collection seem to suggest that effective performance management strategies may boost revenue collection performance. Through performance management, the revenue collection agencies are able to get feedback on the performance of existing revenue collection systems which may in turn inform the systems' improvement efforts (Abiola & Asiweh, 2012). In an investigation of the role of

performance management in the local authorities in Botswana, Armstrong (2011) observed that performance management's main aim was to improve performance through an ongoing process of establishing desired outcomes, setting performance standards, then collecting, analyzing and reporting on streams of data to improve individual and collective performance of current and future roles effectively.

One of the challenges that affect the performance of ICT based systems of revenue collection is the low level of technological know-how on the part of the taxpayers. This was evident in a study conducted by Ndonye (2012) who found that 65% of the respondents making online applications in the Ministry of State for Immigration and Registration of Persons (MSIRP) in Kenya had challenges accessing the services due to lack of technological knowledge. In an evaluation of performance management practices at Kenya Revenue Authority, Kariuki (2013) observed that KRA adopted various performance management practices such as performance based pay, goal-setting, staff training and development and performance feedback mechanisms with a view of enhancing its performance. According to Njau (2010), performance management initiatives should be aimed at enhancing staff's competency while identifying possible areas of continued improvement.

In view of performance management practices adopted by East African Breweries Limited in its reform and modernization programme, Odundo (2011) observed that a lot of changes had been initiated in the firm and that had helped the management to improve on the firm's performance. Such included, creation of new departments while others were either merged or split in a bid to deliver better services to clients. Further, resistance to change was effectively managed by the firm's management. The sentiments were shared by Kimani (2012) who noted that majority of the changes at East African Breweries Limited sought to specifically address the issue of performance management. For instance, through its strategic plan, East

African Breweries Limited had laid down the objectives that each department was to channel its resources and energy towards. From the above, it was clear that majority of the studies were of the view that performance management positively influenced the performance of revenue collection agencies and thus the following hypothesis was proposed:

> $H_{03.}$ Performance management has no significant effect on revenue collection in Nairobi County Government.

2.3.4 Outsourcing and Revenue Collection

Organizations are motivated to outsource services by factors such as cost saving, focus on organization's core business, improvement of technology and service quality, access to knowledge and technology that the organization does not have among others (Agbedzani, 2011). Some of the common expected benefits sought from outsourcing include: cost savings, reduced capital expenditure, capital infusion, transfer fixed costs to variable, quality improvement, increased speed, greater flexibility, access to skills, talent and latest technology, increased focus on core functions, get rid of problem functions, better accountability and management (Arrfelt, 2015; Kremic *et al*., 2016). Kakabadse and Kakabadse (2010) asserted that all these reasons can be classified into three major categories: cost, strategy, and politics. The first two drives outsourcing by private industry while political agendas often drive outsourcing by public organizations.

Cost savings, increased efficiency, focus on core areas, access to skilled resources and decreasing the lead time in service/product delivery were identified as the key benefits attributable to outsourcing among firms in Copenhagen, Denmark (Bers, 2012). Similar views were expressed by Kakabadse and Kakabadse (2010) who posited that outsourcing provides specialization and economies of scale thereby saving on indirect costs. This was

however contrasted by Bettis (2012) who argued that outsourcing disadvantages the firm in that it leads to loss of in-house expertise, that is, the ability of the organization to provide services in the future is diminished as in-house expertise is lost. The frequent absence of formal guidelines can allow the incremental loss of key competence to take place and hence undermine capability leading to a loss of critical skills, cross function working and creation of the "hollow corporation (Bettis, 2012).

The need to reduce an organization's workforce has been identified as one of the reasons behind outsourcing. While reviewing strategic outsourcing and performance of revenue collection in United Kingdom, Fontes (2010) discovered that, through outsourcing, having fewer employees required less infrastructure and support systems which may result in a more nimble and efficient organization. This observation was however disputed by Koszewska (2014) who argued that despite all, it is not a guarantee that cost savings will be achieved after outsourcing. The effects of outsourcing on an organization's cost are not yet fully understood and perhaps the variables and their relationships are more complex than expected (Koszewska, 2014). Quinn (2009) argued that from a strategic perspective, the most often cited strategic reason for outsourcing is to allow the organization to better focus on its core competencies while Xiao (2014) added that due to intense competition, organizations are forced to reassess and redirect scarce resources to where they will make the greatest positive impact, which is the organizations core functions.

In an investigation of the role of risk and return in Information Technology outsourcing decisions, Jurison (2015) observed that outsourcing brings client firms advantage related to technology as these organizations can have access to specialized state-of-the-art technology supplied to them by their providers. This was supported by Arrfelt (2015) who argued that outsourcing paves way to a more specialized IT management as the provider firm finds itself

in a better position to select, train and manage its technological staff thus the clients can have at their disposal high level specialists without them having to be permanent members of their staff. This view was however disputed by Ogunsanmi (2013) who argued that outsourcing technology contributes to high unemployment which can adversely affect the economy of the country. From the above, it was clear that majority of the studies were of the view that outsourcing had positive implications on service delivery and thus the following hypothesis was proposed:

$H_{04.}$ Outsourcing has no significant effect on revenue collection in Nairobi County Government.

2.4 Knowledge Gap

Public revenue collection is an integral component of fiscal policy and administration in any economy and has significant influence on government operations. It is the fuel of every government as it is the main instrument through which government funding is ensured. For any government to effectively meet the needs of its citizens, it needs to increase its fiscal depth without incurring costly recurring overheads. Today, more than ever before, there is an increasing need for the governments to collect as much revenue as is possible to face the increasing financial expenditures in their countries. For instance, in Kenya, according to a 2014 Transition Authority report titled 'Public Finance Building Blocks for Devolution', the counties have weak revenue bases, lack internal audits, have poorly trained personnel and use manual revenue collection systems and this has negatively impacted on revenue collection within the counties. Majority of the counties in the country are unable to raise sufficient internal revenues to finance their operation.

In view of this, application of BPI solutions provides a key step towards transforming governments into entities that can keep abreast of the needs, requirements and expectations of today's modern world. Application of BPI in revenue collection can help the county governments in reducing the costs of tax and other charges administration, ease the burden of over-staffing, track payments real-time, increase the levels of efficiency and effectiveness in revenue collection and reduce leakages in the revenue collection systems leading to improvements in revenue collection.

2.5 Conceptual Framework

The conceptual framework provides a diagrammatic representation of the relationship between the study variables. The conceptual framework presents a visual overview of the study's independent variable(s) and the dependent variable and thus helps to provide a quick glimpse of the study's key variables (Mugenda & Mugenda, 2003). For the purpose of this study, the dependent variable was revenue collection which was analyzed using the amount of funds collected by the Nairobi County Government while the independent variable was business process improvement which was analyzed using its constituent constructs which include; change management, automation, performance management and outsourcing. This is as illustrated in Figure 2.1.

Independent variables **Dependent variable**

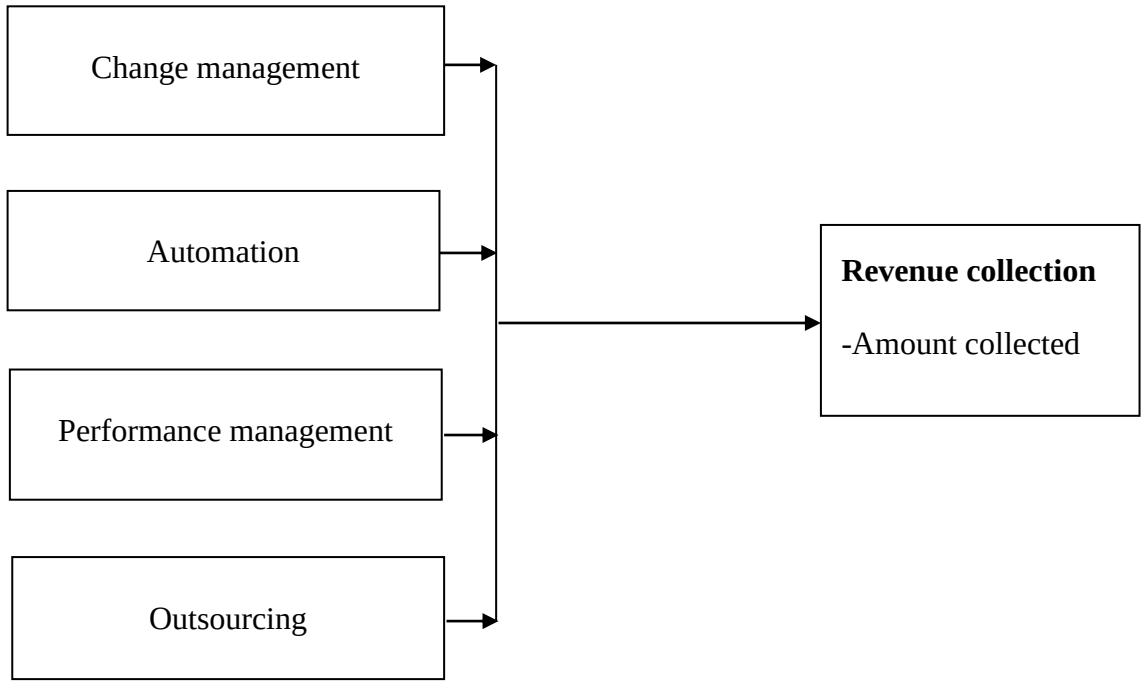

Figure 2.1 Conceptual framework

2.6 Operationalization of Variables

The operationalization of variables is a description of how the study variables are measured. The dependent variable in this study was revenue collection which was measured by ascertaining the amounts of funds collected by the Nairobi County Government over a period of 3 years between 2014 and 2016. The independent variable of the study was business process improvement which was analyzed using its constituent constructs which include; change management, automation, performance management and outsourcing.

These 4 constructs of BPI and which formed the study's independent variables were measured using Likert-scale based structure rated 1-5 and which contained various statements on each of the constructs to which the respondents were required to state their level of

agreement with those statements where 1= strongly disagree, 2-disagree, 3-neutral, 4-agree and 5= strongly agree. The operationalization of the study variables was as summarized in Table 3.1.

Table 3.1 Operationalization of Variables

Study variable type	Variable	Operationalization	Measurement scale	Hypothesized direction
Dependent variable	Revenue collection	Amounts collected - Growth - Slump	Ratio	-
Independent variables	Change management	- Change planning - Change implementation - Change impact review	Ratio	Positive
	Automation	- Level of operations computerization - Level of ICT user support - Systems' maintenance	Ratio	Positive
	Performance management	- Setting standards and desired outcomes - Performance appraisal	Ratio	Positive
	Outsourcing	- Greater flexibility & speed - Reduced expenditure - Better service quality	Ratio	Positive

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that the researcher used to conduct the study. The research methodology is presented in the following order: research design, target population, sampling and sampling procedure, research instrument, validity and reliability of the instrument, data collection procedure and data processing and analysis.

3.2 Research Design

This study adopted a descriptive research design. Descriptive research design is a scientific method which involves observing and describing the behavior of a subject in an accurate way (Mugenda & Mugenda, 2003). This is because descriptive research design is appropriate where the study seeks to describe the characteristics of certain groups, estimate the proportion of people who have certain characteristics and make predictions (Cooper and Schindler, 2011). The design was suitable for the current study as it helped the researcher to describe the state of affairs with respect to application of business process improvement mechanisms and their effect on revenue collection by the Nairobi County Government as it exists without manipulation of variables.

3.3 Target Population

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated. The target population of this study was the management staff of Nairobi County Government (NCG). Currently, Nairobi County Government has 3,000 employees in various management positions (NCG, Human Resource, 2016). This formed the study's target population. The choice of the

management staff as the study respondents was based on the appreciation that strategic decisions on the kinds of BPI initiatives that the county should adopt were discussed and made at the management levels in the Nairobi County Government.

3.4 Sampling and Sampling Procedure

The sampling design of this study was based on Mugenda and Mugenda (2003) hypothesis which postulates that a sample of 10-30% of the target population is representative and sufficient for statistical reporting. Therefore, the sample size for this study was 300 management staff (representing 10% of the target population) of Nairobi County Government.

The study employed stratified random sampling techniques to select the study sample. Stratified random sampling procedure was used to categorize the employees into the top, middle and low management levels while at the same time according each element in the population an equal chance of being sampled hence eliminating representative biasness. According to Mugenda and Mugenda (2003), stratified sampling technique is useful for heterogeneous samples that require grouping into distinct categories/cadres for easier analysis.

The sample size distribution was as shown in Table 3.2.

Table 3.2 Sample size distribution

Management levels	Target population	Target population %	Sample size	Sample size %
Top	300	10	3	10
Middle	900	30	90	10
Low	1,800	60	180	10
Total	**3,000**	**100**	**300**	**10**

3.5 Research Instrument and Data Collection

The study used primary data which was collected using a self administered questionnaire (Appendix I). The questionnaire contained close ended questions based on the study objectives. According to Mugenda and Mugenda (2003), a questionnaire is appropriate for data collection from a large number of respondents as it helps to save on time spent in data collection. The questionnaire was sub-divided into six sections where Section A was on the demographics of the study respondents, Section B contained questions on change management, Section C contained questions on automation, Section D contained questions on performance management, Section E contained questions on outsourcing while Section F contained questions on revenue collection. The reason for choosing the questionnaire as the data collection instrument for this study was primarily due to its practicability, applicability to the research problem and the size of the population. It was also cost effective (Denscombe, 2014).

Validity of the research instrument indicates the degree to which an instrument measures what it is supposed to measure; the accuracy, soundness and effectiveness with which an

instrument measures what it is intended to measure (Kothari, 2004) or the degree to which results obtained from the analysis of the data actually represent the phenomena under study (Mugenda & Mugenda, 2003). The research instrument was availed to the supervising lecturer in KCA and peers who helped establish its content and construct validity to ensure that the items were adequately representative of the subject under study.

Reliability of the research instrument is a measure of the degree to which a research instrument yields consistent results after repeated trials (Nsubuga, 2006). Using data from the pilot study, the reliability of the research instrument was estimated using Cronbach's Alpha Coefficient which is a measure of internal coefficient. A reliability of at least 0.70 at α=0.05 significance level of confidence (Kothari, 2004) was accepted. Adjustments were made accordingly where a low co-efficient was obtained in order to improve on the research tool.

For the purposes of data collection, the researcher obtained approval from KCA and Nairobi County Government to conduct the study. The study also sought informed consent from the study respondents as was necessary after explaining the purpose of the study to the respondents. The study participants were informed that participation was purely on voluntary terms and that there would be no penalties for withdrawal of consent at any stage of the data collection. In addition, the study participants were assured that all information provided would be handled and processed confidentially and any emerging issues would only be cited anonymously. The questionnaires were administered using the drop and pick later method with a lapse period of 2 weeks to allow the respondents enough time to respond to the questionnaires in order to enhance the response rate. Prior to the actual data collection, the researcher conducted a pilot study of 10% of the sample size in order to ensure that the questions were well constructed, understood and to eliminate ambiguity hence refining the

research tool. The pilot study involved employees of NCG who did not form part of the main study.

3.6 Data Analysis and Presentation

3.6.1 Diagnostic Tests

As part of data analysis and presentation, the researcher conducted various diagnostic tests with a view of ascertaining the appropriateness of the study data for regression analysis. These tests were critical in ensuring that the study data met the specific assumptions underlying regression analysis. The researcher performed normality, homoscedasticity and multicollinearity tests. These were as described below:

3.6.2 Normality Test

As part of exploratory data analysis, tests for normality of distribution of the response variable were conducted. Normality of the data was tested using the Shapiro – Wilk test. The significance level for this study was $\alpha = 5\%$. Normality was assumed if $P \geq 0.05$ while for $P < 0.05$ deviation from normality was assumed. In case the data was found not to be normal, the study would perform a non-parametric version of the test, which did not assume normality (Ghasemi & Zahediasl, 2012).

3.6.3 Heteroscedasticity

Heteroscedasticity is a situation where the variability of a variable is unequal across the range of values of a second variable that predicts it (Vinod, 2008). In this study Heteroscedasticity was tested using the Breuch-pagan / cook-weisberg test. For the Breusch-Pagan / Cook-Weisberg test, the null hypothesis is that the error variances are all equal while the alternative hypothesis is that the error variances are a multiplicative function of one or more variables.

Homoscedasticity is evident when the value of "Prob > Chi-squared" is ≥ 0.05 (Bera & Jarque, 2012). To deal with the heteroskedasticity problem if detected, the researcher would try to respecify the model or transform the variables given that sometimes heteroskedasticity results from improper model specification evidenced by choice of wrong variables or using variables whose effects may not be linear (Garson, 2012).

3.6.4 Multicollinearity

Multicollinearity in the study was tested using Variance Inflation Factor (VIF) and Tolerance. The reciprocal of tolerance known as the Variance Inflation Factor (VIF) shows how much the variance of the coefficient estimate is being inflated by multicollinearity. A VIF for all the independent and dependent variables less than 3 (VIF ≤ 3) indicated no multicollinearity while a VIF of ≥ 3 indicated collinearity and more than 10 indicated a problem with multicollinearity (Maddala & Lahiri, 1992). The Tolerance Statistics values below 0.1 indicated a serious problem while those below 0.2 indicated a potential problem. To deal with the problem of multicollinearity if detected, the researcher obtained more data on the variables concerned if possible or ultimately removed the highly correlated predictors from the model (Garson, 2012).

Once the diagnostic tests were conducted, the researcher proceeded with the data analysis and presentation as outlined below:

Data collected was coded and classified into different components to facilitate a better and efficient analysis. The quantitative data gathered through close ended questions was analyzed through descriptive statistics using the Statistical Package for Social Science (SPSS version 23.0) and presented through percentages, frequencies, mean and standard deviation. Tables and figures were used to present the study findings.

For the purpose of analyzing the relationship between the study variables, the study used both correlation and regression analysis. However before running the regression model, the study performed various diagnostic tests on the study data including normality, homoscedasticity and multicollinearity tests to ascertain the appropriateness of the study data for the regression analysis.

Regression analysis was useful to the study as it helped the researcher to analyze the existing relationship between the study's independent variables and the dependent variable. The key benefit of using regression analysis lies in its ability to indicate the extent to which changes in the independent variables affect the dependent variable. It is also able to indicate the relative strength of the different independent variables' effects on a given dependent variable.

Correlation analysis was applied in the study as it allowed the quantification of the strength of the relationship between the independent variables and dependent variable. This enabled the researcher to establish how the independent variables of the study related with the study's dependent variable.

The regression model used in the study was as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;

Y = Revenue collection (which is the dependent variable)

X_1 = Change management

X_2 = Automation

X_3 = Performance management

X_4 = Outsourcing

β_0 = Constant

$\beta_1 - \beta_4$ = Coefficients of independent variables

ε = Error term

Further, the t-test with a critical value of 1.96 and a p value of 0.05 was used to test the significance of change management, automation, performance management and outsourcing on revenue collection performance of the Nairobi County Government. According to Kothari (2004) an independent variable has a significant effect if the t statistics is greater than + or – 1.96 or if the p value is less than 0.05.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the analysis and findings of the study as set out in the research methodology. The results were presented on the effect of business process improvement mechanisms on revenue collection in Nairobi County Government.

4.1.1 Response Rate

The study targeted 300 management staff of Nairobi County Government as the study respondents. Out of the 300 questionnaires administered, 214 were adequately filled and returned contributing to a response rate of 71.3% (Table 4.3). This response rate was sufficient and representative and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting, a rate of 60% is good while a response rate of 70% and over is excellent.

Table 4.3 Response rate

	Frequency	**Percent**
Responses received	214	71.3
No response	86	28.7
Total	**300**	**100.0**

4.2 Demographic Information

The study sought to establish the demographic profile of the respondents. The results are as described in the subsequent subsections.

4.2.1 Gender Distribution of the Respondents

The study sought to establish the gender of the respondents. The findings are as shown in Figure 4.2.

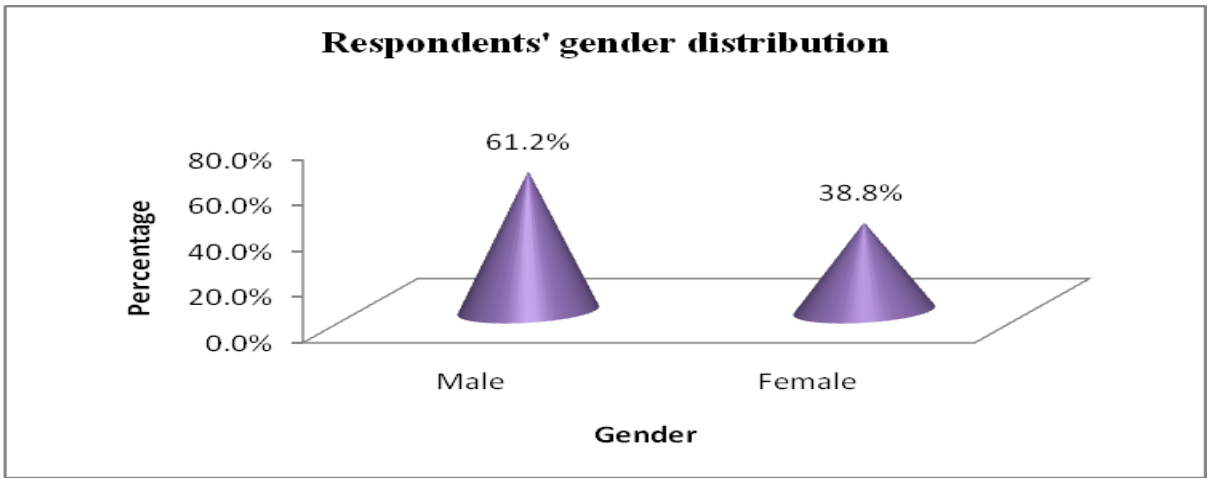

Figure 4.2 Respondents' gender distribution

Based on Figure 4.2 above, majority (61.2%) of the respondents were male while 38.8% were female. This showed that the study did not suffer from gender biasness as it involved both male and female respondents though the majority of the study respondents were male.

4.2.2 Age Distribution of the Respondents

The study sought to establish the age of the respondents. Findings are shown in Table 4.4.

Table 4.4 Respondents' age distribution

Age	**Frequency**	**Percent**
Less than 30 years	28	13.1
30-39 years	59	27.6
40-49 years	74	34.6
50 years and above	53	24.8
Total	**214**	**100.0**

Based on Table 4.4 above, 34.6% of the respondents were aged between 40-49 years, 27.6% were aged between 30-39 years, 24.8% were aged 50 years and above while 13.1% of the respondents were aged below 30 years. These depicted that majority of the management staff of the Nairobi County Government were aged 30 years and above and as such were old enough to fully appreciate the effect of business process improvement mechanisms on revenue collection in Nairobi County Government.

4.3.3 Education Level of the Respondents

The study sought to establish the education level of the respondents. The findings are as shown in Figure 4.3.

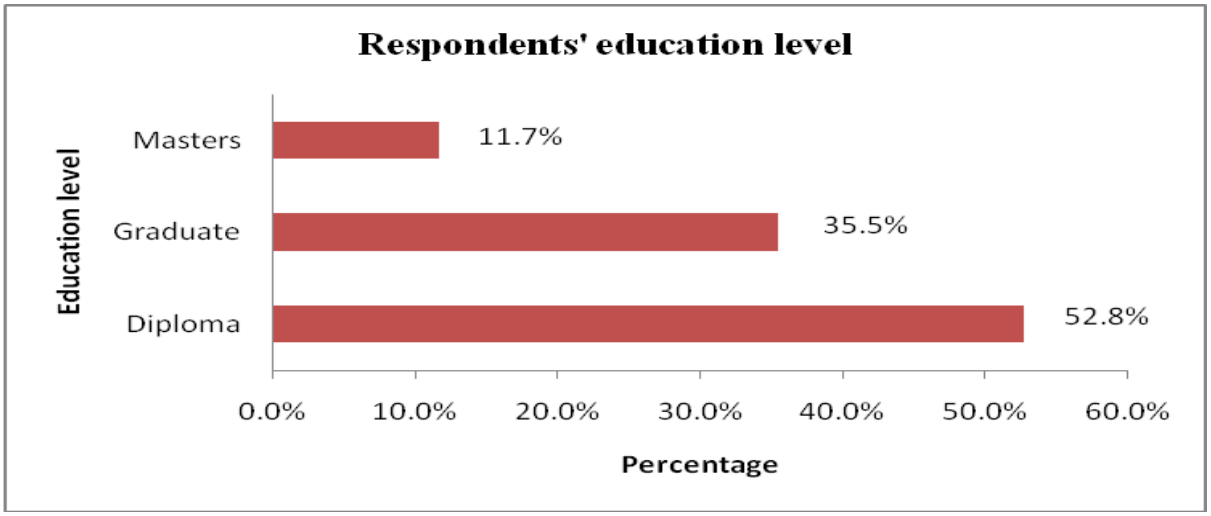

Figure 4.3 Education level of the respondents

According to Figure 4.3 above, majority (52.8%) of the respondents were Diploma holders, 35.5% were Graduates while 11.7% were Masters holders. This inferred that majority of the respondents had a sound academic background and as such had a good understanding of the effect of business process improvement mechanisms on revenue collection in Nairobi County Government.

4.2.4 Years Worked in the Institution

The study sought to establish the number of years that the respondents had worked in the Nairobi County Government. The findings are as illustrated in Figure 4.4.

Figure 4.4 Respondents' distribution based on the number of years worked in the institution

Figure 4.4 above indicates that 47.2% of the respondents had worked in the Nairobi County Government for 1-5 years, 32.7% had worked for 6-10 years, 13.1% had worked for over 10 years while 7% of the respondents had worked in the institution for less than 1 year. This implied that majority of the respondents had worked in the Nairobi County Government for long enough to be able to provide crucial information relating to the effect of business process improvement mechanisms on revenue collection in Nairobi County Government.

4.3 Change Management and Revenue Collection

The first objective of the study sought to examine the effect of change management on revenue collection in Nairobi County Government. The study evaluated the respondents' level of agreement with various statements on change management as a BPI mechanism

using a scale of 1-5 where 5-strongly agree, 4-agree, 3-neutral, 2-disagree and 1-strongly disagree. The findings are as illustrated in Table 4.5.

Table 4.5 Respondents' level of agreement with statements on change management

Statements	Mean	Std. Dev
Change management policy, procedures, and standards are integrated with and communicated to business management functions	4.000	0.7443
Roles and responsibilities affecting change management are clearly defined and designated to qualified personnel	4.098	0.8306
Key Performance Indicators (KPIs) are captured periodically about the entire change management process	4.271	0.5744
The change management process follows a logical order and is controlled to ensure the logical evolution of the work environment	3.897	0.8979
Change management process is well communicated among the employees in the organization	4.084	0.8405
The adopted change management practices have helped the county government enhance its revenue collection	4.262	0.7099

The study findings shown on Table 4.5 above indicate that the management staff of Nairobi County Government agreed that Key Performance Indicators were captured periodically about the entire change management process (mean = 4.271); the adopted change management practices had helped the county government enhance its revenue collection (mean = 4.262); roles and responsibilities affecting change management were clearly defined and designated to qualified personnel (mean = 4.098); change management process was well communicated among the employees in the organization (mean = 4.084); change management policy, procedures, and standards were integrated with and communicated to business management functions (mean = 4.000) and that the change management process followed a logical order and was controlled to ensure the logical evolution of the work

environment (mean = 3.897). This implied that change management as a BPI mechanism played a significant role in enhancing revenue collection in the Nairobi County Government.

4.4 Automation and Revenue Collection

The second objective of the study sought to determine the effect of automation on revenue collection in Nairobi County Government. The study evaluated the respondents' level of agreement with various statements on automation as a BPI mechanism using a scale of 1-5 where 5-strongly agree, 4-agree, 3-neutral, 2-disagree and 1-strongly disagree. The findings are as illustrated in Table 4.6.

Table 4.6 Respondents' level of agreement with statements on automation

Statements	Mean	Std. Dev
The BPI techniques have enabled the county government of Nairobi to computerize its revenue collection systems	4.308	0.5959
The county government is leveraging on technology based applications to increase revenue collection	4.117	0.7189
The county staff are being equipped on new technological knowledge and skills	3.958	0.7075
There has been staff resistance towards adoption of automated platforms for revenue collection for fear of job cuts	4.234	0.7762
The county lacks adequate capacity to support automated applications introduced in the course of BPI	2.210	0.9630
The technological innovations have enhanced employee productivity and service quality	4.164	0.7669

The study findings shown on Table 4.6 above indicate that the management staff of Nairobi County Government did agree that the BPI techniques had enabled the county government of Nairobi to computerize its revenue collection systems (mean = 4.308); there had been staff resistance towards adoption of automated platforms for revenue collection for fear of job cuts

(mean = 4.234); the technological innovations had enhanced employee productivity and service quality (mean = 4.164); the county government was leveraging on technology based applications to increase revenue collection (mean = 4.117) and that the county staff were being equipped on new technological knowledge and skills (mean = 3.958). However, the management staff of Nairobi County Government disagreed with the notion that the county lacked adequate capacity to support automated applications introduced in the course of BPI (mean = 2.210). This implied that automation as a BPI mechanism was integral in the Nairobi County Government's efforts to improve its revenue collection performance.

4.5 Performance Management and Revenue Collection

The third objective of the study sought to establish the effect of performance management on revenue collection in Nairobi County Government. The study evaluated the respondents' level of agreement with various statements on performance management as a BPI mechanism using a scale of 1-5 where 5-strongly agree, 4-agree, 3-neutral, 2-disagree and 1-strongly disagree. The findings are as depicted in Table 4.7.

Table 4.7 Respondents' level of agreement with statements on performance management

Statements	Mean	Std. Dev
The organization operates a formal performance management system	4.112	0.7670
Performance planning is undertaken in the organization	3.822	0.8756
The performance management system helps to identify areas of improvement in the employees work	4.033	0.8634
There is a formal system for evaluation of performance management practices of the organization	3.902	0.7780

The performance management system has yielded measurable benefits to the institution such as improved morale, productivity, quality, work methods & operational performance	4.290	0.7188
Coaching, training and development are part of the existing performance management system	4.051	0.7885

According to the study findings in Table 4.7 above, the management staff of Nairobi County Government concurred that the performance management system had yielded measurable benefits to the institution such as improved morale, productivity, quality, work methods & operational performance (mean = 4.290); the organization operated a formal performance management system (mean = 4.112); coaching, training and development were part of the existing performance management system (mean = 4.051); the performance management system helped to identify areas of improvement in the employees work (mean = 4.033); there was a formal system for evaluation of performance management practices of the organization (mean = 3.902) and that performance planning was undertaken in the organization (mean = 3.822). This clearly showed that performance management as a BPI mechanism was critical in the efforts by the Nairobi County Government to improve its revenue collection performance.

4.6 Outsourcing and Revenue Collection

The last objective of the study sought to establish the effect of outsourcing on revenue collection in Nairobi County Government. The study evaluated the respondents' level of agreement with various statements on outsourcing as a BPI mechanism using a scale of 1-5 where 5-strongly agree, 4-agree, 3-neutral, 2-disagree and 1-strongly disagree. The findings are as shown in Table 4.8.

Table 4.8 Respondents' level of agreement with statements on outsourcing

Statements	Mean	Std. Dev
Functions outsourcing has enabled the county staff to focus on their core competencies	4.098	0.7780
Functions outsourcing has freed time and resources which are directed to other important areas	4.210	0.7491
Functions outsourcing has ensured reduced expenditure for the county government	4.276	0.6002
Functions outsourcing has improved service delivery in the county	4.065	0.7156
Functions outsourcing has improved the county's revenue collection process	3.865	0.9372
Functions outsourcing has lifted the burden of training and supervision from the county government	4.145	0.7947

From Table 4.8 above, the study results revealed that the management staff of Nairobi County Government were in agreement that functions outsourcing had ensured reduced expenditure for the county government (mean = 4.276); functions outsourcing had freed time and resources which were directed to other important areas (mean = 4.210); functions outsourcing had lifted the burden of training and supervision from the county government (mean = 4.145); functions outsourcing had enabled the county staff to focus on their core competencies (mean = 4.098); functions outsourcing had improved service delivery in the county (mean = 4.065) and that functions outsourcing had improved the county's revenue collection process (mean = 3.865). This implied that outsourcing as a BPI initiative played a crucial role in helping the Nairobi County Government to enhance its revenue collection.

4.7 Inferential Statistics

4.4.1 Correlation Analysis

The study performed the Pearson correlation analysis to assess the relationship between the study variables. The results are as illustrated in Table 4.9.

Table 4.9 Correlation Matrix

		Revenue collection	Change management	Automation	Performance management	Outsourcing
Revenue collection	(r)	1				
	Sig. (2-tailed)					
Change management	(r)	.641*	1			
	Sig. (2-tailed)	.000				
Automation	(r)	.714*	.016	1		
	Sig. (2-tailed)	.000	.114			
Performance management	(r)	.672*	.042	.017	1	
	Sig. (2-tailed)	.000	.156	.212		
Outsourcing	(r)	.618*	.108	.095	.074	1
	Sig. (2-tailed)	.000	.372	.139	.176	

*Correlation is significant at the 0.05 level (2-tailed)

Results of the Pearson correlation as shown on Table 4.9 above indicate that there is a significant positive correlation between change management and revenue collection (r=0.641, p value <0.05); a significant positive correlation between automation and revenue collection (r=0.714, p value <0.05); a significant positive correlation between performance management and revenue collection (r=0.672, p value <0.05) and a significant positive correlation between

outsourcing and revenue collection (r=0.618, p value <0.05). In general, the findings indicate that there exists a positive correlation between change management, automation, performance management and outsourcing as BPI mechanisms and revenue collection by the Nairobi County Government.

4.4.2 Tests of the Model and Data

The study performed various diagnostic tests. These tests were critical in ensuring that the study data met the specific assumptions underlying regression analysis. The results of the tests are as described below:

4.4.2.1 Tests of Normality

As part of exploratory data analysis, tests for normality of distribution of the response variables were conducted. The normality of the data was tested using the Shapiro – Wilk test. The significance level for this study was p = 5%. For $p \geq 0.05$ normality was assumed while for $p < 0.05$ deviation from normality was assumed. The normality tests results were as shown in Table 4.10.

Table 4.10 Tests of Normality

Variables	Shapiro-Wilk		
	Statistic	df	Sig.
Change management [X_1]	.521	213	.483
Automation [X_2]	.428	213	.377
Performance management [X_3]	.605	213	.575
Outsourcing [X_3]	.723	213	.681
Revenue collection [Y]	.574	213	.524

Table 4.10 above indicates that the significance values for the Shapiro-Wilk tests were 0.483 for change management, 0.377 for automation, 0.575 for performance management, 0.681 for outsourcing and 0.524 for revenue collection. This implies that since the p-value of Shapiro-Wilk tests was greater than the chosen alpha level of 0.05 then we accept the hypothesis that the data came from a normally distributed population. The results of the tests are therefore of a normally distributed population.

4.4.2.2 Homoscedasticity Tests

Heteroscedasticity is a situation where the variability of a variable is unequal across the range of values of a second variable that predicts it (Vinod, 2008). In this study Heteroscedasticity was tested using the Breuch-pagan / cook-weisberg test. For the Breusch-Pagan / Cook-Weisberg test, the null hypothesis is that the error variances are all equal while the alternative hypothesis is that the error variances are a multiplicative function of one or more variables. Homoscedasticity is evident when the value of "Prob > Chi-squared" is greater than 0.05 (Bera & Jarque, 2012). The results for the Heteroscedasticity tests were as shown in Table 4.11.

HO	Constant variance
Study variables	Change management, automation, performance management and outsourcing

Table 4.11 Test for Heteroscedasticity

HO	Variables	Chi^2	Prob. > Chi^2
Constant Variance	X_1 X_2 X_3 X_4	56.02	.323

Table 4.11 shows that the constant variance (Chi^2 = 56.02) is insignificant (P = 0.323). Thus the study failed to reject the null hypothesis and conclude that the error variance is equal thus heteroscedasticity is not a problem in the study data. Hence, the study accepted the null hypothesis that there is no difference in residual variance of independent to dependent variables tested.

4.4.2.3 Multicollinearity Tests

Multicollinearity is a test that evaluates whether the independent variables are highly correlated. The primary concern is that as the degree of multicollinearity increases, the regression model estimates of the coefficients become unstable and the standard errors for the coefficients can get wildly inflated. Multicollinearity in the study was tested using Variance Inflation Factor (VIF) and Tolerance. For the purpose of this study, a VIF for all the independent and dependent variables less than 3 (VIF < 3) indicated no multicollinearity while a VIF of ≥ 3 indicated multicollinearity. Further, Tolerance Statistics values below 0.1 indicated a multicollinearity problem (Maddala & Lahiri, 1992). The multicollinearity tests results are as shown in Tables 4.12.

Table 4.12 Multicollinearity Tests Results

Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
Multicollinearity between change management and automation, performance management and outsourcing			
1	Automation	.940	1.064
	Performance management	.891	1.123
	Outsourcing	.867	1.153
Multicollinearity between automation and change management, performance management and outsourcing			
1	Change management	.777	1.287
	Performance management	.788	1.269
	Outsourcing	.751	1.331
Multicollinearity between performance management and change management, automation and outsourcing			
1	Change management	.882	1.134
	Automation	.944	1.059
	Outsourcing	.803	1.245
Multicollinearity between outsourcing and change management, automation and performance management			
1	Change management	.829	1.206
	Automation	.842	1.187
	Performance management	.946	1.057

From the results of the multicollinearity tests shown in Tables 4.12 to 4.15 above, there was no multicollinearity among the independent variables since their VIF values were all less than 3.

4.4.4 Regression Analysis

A regression analysis was performed in order to analyze the relationship between the study variables. This was done by regressing the independent variables (change management, automation, performance management and outsourcing) against the dependent variable (revenue collection). The results are as summarized below;

Table 4.13 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.890[a]	0.792	0.737	.561

Predictors: (Constant), change management, automation, performance management and outsourcing

According to Table 4.13 above, R square is the coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variables. Based on Table 4.13 above, the value of R square was 0.792 which means that 79.2% variation in Nairobi County Government's revenue collection was due to variations in change management, automation, performance management and outsourcing. Hence, 20.8% of variation in Nairobi County Government's revenue collection was explained by other factors not in the model or not focused on in the current study.

Table 4.14 ANOVA (Analysis of Variance)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.05	4	18.5125	63.312	.0000[a]
	Residual	61.11	209	0.2924		
	Total	135.16	213			

a. Predictors: (Constant), change management, automation, performance management and outsourcing

b. Dependent Variable: Revenue collection

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and form a basis for tests of significance. The "F" column provides a statistic for testing the hypothesis that all $\beta \neq$ 0 against the null hypothesis that β = 0 (Weisberg, 2005). From the findings the significance value is .0000 which is less that 0.05 thus the model is statistically significant in predicting how change management, automation, performance management and outsourcing affect revenue collection in the Nairobi County Government. The F critical at 5% level of significance was 6.26. Since F calculated (value = 63.312) is greater than the F critical (6.26), this showed that the overall model was significant.

Table 4.15 Regression analysis results

	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	7.012	.641		10.939	.0000
Change management [X_1]	0.729	.311	.514	2.344	.0259
Automation [X_2]	0.806	.301	.626	2.678	.0119
Performance management [X_3]	0.762	.303	.572	2.515	.0175
Outsourcing [X_4]	0.661	.295	.428	2.241	.0326

Based on the regression results shown on Table 4.15 above, the regression model becomes;

$$Y = 7.012 + 0.729 X_1 + 0.806 X_2 + 0.762 X_3 + 0.661 X_4$$

From the regression equation above, taking all factors (change management, automation, performance management and outsourcing) constant at zero, revenue collection would be 7.012. The results further indicate that a unit increase in change management would lead to a 0.729 increase in revenue collection; a unit increase in automation would lead to a 0.806 increase in revenue collection; a unit increase in performance management would lead to a 0.762 increase in revenue collection while a unit increase in outsourcing would lead to a 0.661 increase in revenue collection. At 5% significance level [or 95% level of confidence], change management had a 0.0259 level of significance; automation had a 0.0119 level of significance; performance management had a 0.0175 level of significance while outsourcing had a 0.0326 level of significance. All the variables were significant ($p<0.05$) with the most significant factor being automation followed by performance management, change management and outsourcing, respectively.

Table 4.16 Hypotheses Tests Results Summary

Hypotheses	Sig.	Beta	Remark
H_{01}. Change management has no significant effect on revenue collection in Nairobi County Government	.0259	.05	Reject null hypothesis
H_{02}. Automation has no significant effect on revenue collection in Nairobi County Government	.0119	.05	Reject null hypothesis
H_{03}. Performance management has no significant effect on revenue collection in Nairobi County Government	.0175	.05	Reject null hypothesis

H_{04}. Outsourcing has no significant effect on revenue collection in Nairobi County Government	.0326	.05	Reject null hypothesis

Given, that all the p values of the 4 independent variables were < 0.05, the study rejected the four null hypotheses and accepted the alternate hypotheses that change management, automation, performance management and outsourcing had a significant effect on revenue collection in Nairobi County Government.

CHAPTER FIVE: SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings, conclusions and recommendations of the study based on the study objectives. The chapter also highlights suggested areas for further research. The study sought to establish the effect of business process improvement mechanisms on revenue collection in Nairobi County Government.

5.2 Summary

This section provides a summary of the key findings of the study and a discussion of the findings based on the study objectives.

5.2.1 Change Management and Revenue Collection

The study findings showed that the management staff of Nairobi County Government did agree that Key Performance Indicators were captured periodically about the entire change management process; the adopted change management practices had helped the county government enhance its revenue collection; roles and responsibilities affecting change management were clearly defined and designated to qualified personnel; change management process was well communicated among the employees in the organization; change management policy, procedures, and standards were integrated with and communicated to business management functions and that the change management process followed a logical order and was controlled to ensure the logical evolution of the work environment. This implied that change management as a BPI mechanism played a significant role in enhancing revenue collection in the Nairobi County Government. This agreed with Adeniji *et al*. (2013) who argued that to manage organizational change effectively, effective planning and

communication, human resources strategy, creating distinctive capabilities, staff motivation and participation are necessary. On their part, Ndahiro *et al*. (2015) found that open communication, effective information flows, teamwork, shared vision and responsibility and sound leadership were the key success factors behind the implementation of change management initiatives at the Rwandan Revenue Authority.

5.2.2 Automation and Revenue Collection

The study findings showed that the management staff of Nairobi County Government did agree that the BPI techniques had enabled the county government of Nairobi to computerize its revenue collection systems; there had been staff resistance towards adoption of automated platforms for revenue collection for fear of job cuts; the technological innovations had enhanced employee productivity and service quality; the county government was leveraging on technology based applications to increase revenue collection and that the county staff were being equipped on new technological knowledge and skills. This implied that automation as a BPI mechanism was integral in Nairobi County Government's efforts to improve its revenue collection performance.

The findings concurred with Mburugu (2016) who found that ICT adoption was a key determinant that influenced revenue collection performance at Kenya Revenue Authority. In addition, allocation of more human and financial resources to strengthen the organization's ICT based revenue collection system as well as continued public awareness on the functioning of the Simba System were identified as key to enhancing the institution's capacity in its revenue collection mandate. The findings also agreed with Smith *et al*. (2010) who in an investigation of the effect of automating the public sector on the performance of the public entities observed that there seemed to be a general consensus that application of automated revenue collection systems positively related with the levels of revenue collected

by such entities. Similarly, Olushola (2011) observed that the level of effectiveness of revenue collection in Nigeria increased as a result of use of ICT in company income tax collection.

5.2.3 Performance Management and Revenue Collection

The study findings showed that the management staff of Nairobi County Government agreed that the performance management system had yielded measurable benefits to the institution such as improved morale, productivity, quality, work methods & operational performance; the organization operated a formal performance management system; coaching, training and development were part of the existing performance management system; the performance management system helped to identify areas of improvement in the employees work; there was a formal system for evaluation of performance management practices of the organization and that performance planning was undertaken in the organization. This clearly showed that performance management as a BPI mechanism was critical in the efforts by the Nairobi County Government to improve its revenue collection performance. The findings agreed with Abiola and Asiweh (2012) who argued that through performance management, the revenue collection agencies are able to get feedback on the performance of existing revenue collection systems which may in turn inform the systems' improvement efforts. The findings also concurred with Njau (2010) who pointed that performance management initiatives should be aimed at enhancing staff's competency while identifying possible areas of continued improvement.

5.2.4 Outsourcing and Revenue Collection

The study findings showed that the management staff of Nairobi County Government agreed that functions outsourcing had ensured reduced expenditure for the county government;

functions outsourcing had freed time and resources which were directed to other important areas; functions outsourcing had lifted the burden of training and supervision from the county government; functions outsourcing had enabled the county staff to focus on their core competencies; functions outsourcing had improved service delivery in the county and that functions outsourcing had improved the county's revenue collection process. This implied that outsourcing as a BPI initiative played a crucial role in helping the Nairobi County Government to enhance its revenue collection.

The findings agreed with Agbedzani (2011) who pointed that organizations are motivated to outsource services by factors such as cost saving, focus on organization's core business, improvement of technology and service quality, access to knowledge and technology that the organization does not have among others. Similarly, Bers (2012) identified cost savings, increased efficiency, focus on core areas, access to skilled resources and decreasing the lead time in service/product delivery as the key benefits attributable to outsourcing among firms in Copenhagen, Denmark. However, the findings were in contrast with those of Bettis (2012) who argued that outsourcing disadvantages the firm in that it leads to loss of in-house expertise, that is, the ability of the organization to provide services in the future is diminished as in-house expertise is lost.

Further, the regression analysis 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. This agreed with Brown and Osborne (2012) who observed that integration of BPI methodologies in revenue collection has a positive impact on the cost of tax administration, effectiveness of revenue collection, duration of revenue collection and revenue collection compliance rates. Similar sentiments

were shared by Van Der Aalst (2013) who argued that use of the BPI techniques in revenue collection help the governments in being able to modernize their revenue collection systems, audit their revenue collection systems, curb tax evasion, increase agility in revenue collection, broaden the revenue base and increase efficiency and effectiveness in revenue collection which would in turn occasion higher revenue collections.

5.3 Conclusions

The study concluded that change management as a BPI mechanism played a significant role in enhancing revenue collection in the Nairobi County Government. The study also concluded that there existed a significant positive relationship between change management and revenue collection in Nairobi County Government.

The study concluded that automation as a BPI mechanism was integral in Nairobi County Government's efforts to improve its revenue collection performance especially in light of the resulting increased efficiency and effectiveness in revenue collection. In addition, the study also concluded that there existed a significant positive relationship between automation and revenue collection in Nairobi County Government.

The study also concluded that performance management as a BPI mechanism was critical in the efforts by the Nairobi County Government to improve its revenue collection performance especially in light of its effects on staff productivity and aiding in identification of areas that need improvement. Further, the study concluded that there existed a significant positive relationship between performance management and revenue collection in Nairobi County Government.

The study also concluded that outsourcing as a BPI initiative played a significant role in enhancing revenue collection in Nairobi County Government especially in light of cost

savings, increased efficiency, ability to focus on core areas, access to needed resources and improved service quality attributable to outsourcing decisions. The study also concluded that there existed a significant positive relationship between outsourcing and revenue collection in Nairobi County Government.

5.4 Recommendations

Given that change management positively relates to revenue collection in the Nairobi County Government, the study recommends that to make the change management process successful, the Nairobi County Government should ensure proper planning and communication of the change process as well as ensure adequate participation of all the stakeholders.

Given that automation positively relates to revenue collection in the Nairobi County Government the study recommends that the Nairobi County Government should continually finance the automation of its various functions and services especially in areas where the existing manual operations are inefficient and wasteful.

Given that performance management positively relates to revenue collection in the Nairobi County Government, the study recommends that the Nairobi County Government should embrace and promote the use of performance contracting measures among its staff in order to enhance employee productivity while also being able to identify possible areas of improvement in the employees' work.

Given that outsourcing positively relates to revenue collection in the Nairobi County Government, the study recommends that the Nairobi County Government should map out all its functions and roles and perform an internal capability assessment with a view of identifying functions and roles that are better performed internally and those which are better performed when outsourced.

5.5 Suggested Areas for Further Research

Since this study explored the effect of business process improvement mechanisms on revenue collection in Nairobi County Government, the study recommends that similar studies should be done in other county governments in the country for comparison purposes and to allow for generalization of findings on the effect of business process improvement mechanisms on revenue collection in the devolved units in Kenya.

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APPENDICES

Appendix I: Letter of Introduction

My name is Tom Kibet, a student at KCA University, pursuing a Masters of Business Administration degree. I am carrying out a research study on: **effect of business process improvement mechanisms on revenue collection in Nairobi County Government, Kenya**.

I'm requesting for your participation in this study by giving your views and opinions about the research subject through answering the questionnaires. The information provided will be treated confidentially and will be used for the purpose of the study only.

Thanks in advance.

Yours faithfully,

Tom Kibet

Appendix II: Questionnaire

Section A: Demographic information

1. Gender Male [ ] Female [ ]

2. What is your age?

Less than 30 years [ ] 30-39 years [ ]

40-49 years [ ] 50 years and above [ ]

3. What is your highest level of education?

Diploma [ ] Graduate [ ] Masters [ ] PhD [ ]

4. For how long have you worked with the county government of Nairobi and its predecessor the Nairobi city council?

Less than 1 year [ ] 1-5 years [ ]

6-10 years [ ] Over 10 years [ ]

Section B: Change Management

5. Kindly rate your opinion regarding the following statements on change management as a BPI practice. Use a scale of 1-5 where 1= strongly disagree, 2-disagree, 3-neutral, 4-agree and 5= strongly agree.

Statements	**1**	**2**	**3**	**4**	**5**
Change management policy, procedures, and standards are integrated with and communicated to business management functions.					

Roles and responsibilities affecting change management are clearly defined and designated to qualified personnel.					
Key Performance Indicators (KPIs) are captured periodically about the entire change management process.					
The change management process follows a logical order and is controlled to ensure the logical evolution of the work environment.					
Change management process is well communicated among the employees in the organization.					
The adopted change management practices have helped the county government enhance its revenue collection					

Section C: Automation

6. Kindly rate your opinion regarding the following statements on automation as a BPI practice. Use a scale of 1-5 where 1= strongly disagree, 2-disagree, 3-neutral, 4-agree and 5= strongly agree.

Statements	**1**	**2**	**3**	**4**	**5**
The BPI techniques have enabled the county government of Nairobi to computerize its revenue collection systems					
The county government is leveraging on technology based applications to increase revenue collection					
The county staff are being equipped on new technological knowledge and skills					
There has been staff resistance towards adoption of automated platforms for revenue collection for fear of job cuts					
The county lacks adequate capacity to support automated applications introduced in the course of BPI					
The technological innovations have enhanced employee productivity and service quality					

Section D: Performance Management

7. Kindly rate your opinion regarding the following statements on performance management as a BPI practice. Use a scale of 1-5 where 1= strongly disagree, 2-disagree, 3-neutral, 4-agree and 5= strongly agree.

Statements	1	2	3	4	5
The organization operates a formal performance management system.					
Performance planning is undertaken in the organization					
The performance management system helps to identify areas of improvement in the employees work.					
There is a formal system for evaluation of performance management practices of the organization.					
The performance management system has yielded measurable benefits to the company such as improved morale, productivity, quality, work methods & operational performance					
Coaching, training and development are part of the existing performance management system					

Section E: Outsourcing

8. Kindly rate your opinion regarding the following statements on functions outsourcing as a BPI practice. Use a scale of 1-5 where 1= strongly disagree, 2-disagree, 3-neutral, 4-agree and 5= strongly agree.

Statements	1	2	3	4	5
Functions outsourcing has enabled the county staff to focus on their core competencies					
Functions outsourcing has freed time and resources which are directed to other important areas					
Functions outsourcing has ensured reduced expenditure for the county					

government					
Functions outsourcing has improved service delivery in the county					
Functions outsourcing has improved the county's revenue collection process					
Functions outsourcing has lifted the burden of training and supervision from the county government					

Section F: Revenue Collection

			2014	2015	2016
S/N	**Sub variable**	**Measure**			
	Revenue collection	Amounts collected			

Thank you for your time.