

**TECHNOLOGICAL CHANGE MANAGEMENT AT THE BARCLAYS BANK
OF KENYA.**

BY

GEORGE GOBANGA

**A Research Project Submitted to the School of Business in Partial Fulfilment of
the Requirements for the Award of the Degree of Master of Business
Administration, of the University Of Nairobi**

OCTOBER, 2012

DECLARATION

This project is my original work and has not been submitted for a degree course in this or any other university.

Signed..........

Date.....10/11/2012.....

GEORGE GOBANGA

REG NO: D61/76229/2009

This project has been submitted for examination with my approval as university supervisor.

Signed..........

Date.....12/11/2012.....

DR. JAMES GATHUNGU

SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

DEDICATION

To my mother Mrs Esther Musoke whose concern and belief in me has enabled me strive for excellence in everything that I do. To my brothers Geoffrey, Robert and David for their unwavering love and support throughout my MBA course.

To my classmates who always provided valuable advice and cooperation when it really mattered throughout the course.

ACKNOWLEDGEMENT

This paper is complete because of God's goodness and grace. Much appreciation to all the people who have touched my life directly or indirectly during the academic journey.

I would like to extend my gratitude to my supervisor Dr. Gathungu for his support and guidance throughout the period during which I was working on my project.

My sincere gratitude to my mother who since very early emphasized the value of education which became more apparent with passage of time and is now appreciated more than at any other time in history.

I would like to appreciate the management of Barclays bank of Kenya for their cooperation and patience in providing all the information required.

Finally, I heartedly appreciate a hand lent to me by my friend Solomon Wanjohi. I pray that the Almighty God bless the work of your hands. Thank you.

TABLE OF CONTENTS

Declaration	i
Dedication	ii
Acknowledgement	iii
Abstract	vi
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the study.....	1
1.2 Research Problem	5
1.3 Research Objective	7
1.4 Value of the Study	7
CHAPTER TWO: LITERATURE REVIEW	8
2.1 Introduction	8
2.2 Change Management.....	8
2.3 Types of Change	9
2.4 Technological Change.....	11
2.5 Technological Approaches to Change	13
2.6 Characteristics of Technological Change Management.....	14
2.7 Resistance to Change	18
2.8 Summary	18
CHAPTER THREE: RESEARCH METHODOLOGY	20
3.1 Introduction	20
3.2 Research Design	20
3.3 Data collection	20
3.4 Data analysis.....	21
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION	22
4.1 Introduction	22
4.2 Findings.....	22
4.3 Discussion.....	32

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	
.....	36
5.1 Introduction	36
5.2 Summary of Findings	36
5.3 Conclusion	38
5.4 Limitations	39
5.5 Recommendations	40
5.6 Recommendation for further research	42
REFERENCES	43
APPENDICES	i
Appendix I: Introduction Letter	i
Appendix 2: Interview Guide	ii

ABSTRACT

The objective of this study was to investigate the technological change management at the Barclays Bank of Kenya. The dilemma faced by many businesses today is managing change initiatives efficiently and effectively. Arguably, managing changes simultaneously poses great challenges to organisational success in terms of the desired change. Issues in the implementation process include the technological change initiative and the challenges that were faced. Data was collected from 45 respondents who included Managing Director, Heads of Departments and other necessary top level managers in the bank. Qualitative data obtained indicated that while the process and efforts were genuine, they were fraught with various technical and HR problems, and it was found that change efforts lacked integration to business mission, vision and core values. The process improved efficiency and productivity at the bank as well as having positive effects on stakeholders. As part of recommendations, the bank's mission, vision and core values need to be fully aligned with the technology change process.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Organizations throughout the world have more recently been faced with rapid, complex and traumatic technological changes. Metaphorically the process has been described as having to 'change an aircraft in mid flight'. As more and more technological systems are acquired and implemented by organizations, they are having an unsettling and far reaching impact on end users (Markus, 2004). As a consequence, organizational members must now continuously learn and experiment with these emerging technologies. However this is proving more challenging and difficult than initially expected, raising some fundamental questions regarding how to successfully manage this complex change process (Macredie and Sandom, 1999).

Change management is the deliberate and coordinated actions taken to transform an organization to overcome environmental challenges in order achieve its objectives (Johnson and Scholes, 2003). The earliest effort to understand the process of change comes from the work of Lewin (1947). In the course of his research, Lewin (1947) made two observations. First, change initiatives encountered strong resistance, even when there was general agreement on the goals of the initiatives. Second, even initiatives that appeared to overcome resistance and were successfully implemented were often short lived, with the system returning to its previous state in a matter of months (Ancona, Kochan, Scully, Van Maanen and Westney 2005).

The advent of new technology requires both new technological skills and knowledge (Heiss and Jankowsky, 2001). The typical reaction to new technology is fear, anxiety and uncertainty in the form of resistance to the change (Trader-Leigh, 2002).

Resistance to change is accepted as a natural reaction. It is however is cited as one of the major obstacles facing organizations when trying to implement change (Prosci, 2002). Employees fear and resist change for a variety of reasons, fear of redundancy, fear of extra work and others (Trader-Leigh, 2002). It was found that management who rationalize away such concerns generates an instinctual protective reaction (Born, 1995). Change management helps to guard against over simplification of employee concerns. Change management is the process, tools and techniques to effectively manage people and the associated human resource issues that surface when implementing change (Prosci, 2002).

1.1.1 The Concept of Strategic Change

Strategy is a framework through which an organisation can assert its vital continuity whilst managing to adapt to the changing environment to gain competitive advantage. According to Igor Ansoff (1984), Strategic Management is a systematic approach to the major and increasingly important responsibility of general management to position and relate the firm to its environment in a way which will assure its continued success and make it secure from surprises.

Strategic management can depend upon the size of an organization, and the proclivity to change of its business environment. These points are highlighted: A global/transnational organization may employ a more structured strategic management model, due to its size, scope of operations, and need to encompass stakeholder views and requirements; An SME (Small and Medium Enterprise) may employ an entrepreneurial approach. This is due to its comparatively smaller size and scope of operations, as well as possessing fewer resources. An SME's CEO (or

general top management) may simply outline a mission, and pursue all activities under that mission.

Whittington (2001) highlighted four approaches to strategic management, utilising different factors that organisations may face. These are the Classical, Processual, Evolutionary and Systemic approaches. Each paradigm is suited to specific environmental factors, of which global firms have faced over the past 4/5 decades. Mintzberg has stated there are prescriptive (what should be) and descriptive (what is) schools, in the sense that the prescriptive schools are "one size fits all" approaches designed to work as best practice methods, and the descriptive schools merely describe how corporate strategy is devised in given contexts.

In the process of implementing strategic plans, an organization must be wary of forces that may legitimately seek to obstruct such changes. It is important then that effectual change management practices are instituted. These encompass: The appointment of a change agent, as an individual who would champion the changes and seek to reassure and allay any fears arising; Ascertaining the causes of the resistance to organizational change (whether from employees, perceived loss of job security, etc.) and; Via change agency, slowly limiting the negative effects that a change may uncover.

1.1.2 Technological Change

Technology is the method used to transform organizational inputs into outputs. Technology is more than machinery; it is also the knowledge, tools, techniques and actions applied to change raw materials into finished goods and services. The technologies that employees use range from simple to highly complex. Simple technology involves decision-making rules to help employees do routine jobs.

Complex technology requires employees to make numerous decisions, sometimes with limited information to guide them (Slocum, 1996).

Technological change has special characteristics which call for distinctive management techniques, and a combination of organizational and technical skills (Cozijnsen and Vrakking, 1993). Paton and McCalman (2000) identify the following competencies a technology change manager must possess, or must have access to in terms of skills, resources, support and knowledge: Applying communications skills both within and without the managing team; Maintaining motivation and providing leadership to all concerned; Facilitating and orchestrating group and individual activities; Negotiating and influencing skills; Employing planning and control procedures; Managing on all planes, upward, downward and within the peer group; Knowing and influencing the rationale for change.

1.1.3 The Barclays Bank of Kenya

Barclays has operated in Kenya for over 90 years. Financial Strength coupled with extensive local and international resources have positioned Barclays Bank of Kenya as a foremost provider of financial services. Barclays has established an extensive network of 120 outlets with over 230 ATMs spread across the country. The Barclays network is supported by Internet and mobile banking channels plus a Customer Service Centre that operates 24 hours a day, 7 days a week.

Over the past two years, Barclays has undertaken a complete change in its core banking system. This involved changing the entire operating system across its branches in the country. The process involved setting up a complete project team with a change director at the helm of the project. The main aim was to improve on the

efficiency of services provided to the customer and to reduce its operating costs hence setting it apart from there competitors as the bank of choice.

Business organizations, especially the banking industry of the 21st century operates in a complex and competitive environment characterized by these changing conditions and highly unpredictable economic climate. Technology directly affects how managers decide, how they plan and what products and services are offered in the banking industry. It has continued to change the way banks and their corporate relationships are organized worldwide and the variety of innovative devices available to enhance the speed and quality of service delivery.

The banking sector in Kenya has seen the implementation of various new core banking systems with the banks aiming to have a competitive advantage over their competitors. The new systems were more efficient and provided a better platform for the banks to operate. The increased competition compelled Barclays bank to shift their strategy in order to acquire a more superior system to its competitors. With the aim of maintaining its position as the leading bank in Kenya in term of profits, Barclays needed to solidify its status in the market and this could only be done by installing the latest system that would improve the quality of service and the products it offered to its customers.

1.2 Research Problem

Change is inevitable and ubiquitous in a rapidly expanding world. These landscapes of many external forces make it most difficult for organisational survival and prosperity. Indeed, the major dilemma faced by businesses today is managing strategic change initiatives efficiently and effectively. And according to Ulrich

(1997), a primary difference between organisations that succeed and those that fail is the ability to respond to the pace of change. A salient contention is the relative lateness of anticipation and adaptation ability of firms, and their inability to recognise the change in bases of competition that may have changed in their business environment can be a key attribute explaining a loss of competitive performance.

The management of technology change has become a pressing problem for many nations (Basil and Cook, 1974). Komacek, Lawson and Horton (1990), state that banking is based on technology. Technology always results in change and these changes in technology can affect people. Bailey (1993) states that banks are not getting what they expect from technology. However, the problem does not lie with technology, but with the way that technology change is managed.

Many articles and books have been written about how change management can be approached. Nevertheless, the field of technological change is far from mature in understanding the dynamics and effects of time, process, discontinuity, and context (Pettigrew, et al. 2001). Moreover, little is written about implementation process and issues in highly regulated contexts such as the banking context (Baron and Besanko 2001). Technical change in service industries is an underrepresented area, despite its importance in employment and innovation (Nightingale and Poll 2000). In Kenya, majority of studies done are on change management practices in general. For instance; Gekonge (1999) did a survey of the strategic change management practices by Kenyan companies listed by the NSE. Bwibo, (2000) did a survey of strategic change management practices within non- governmental organizations in Kenya while Mbogo (2003) did a study of strategic change management process in hybrid private

public organizations, a case of Kenya Commercial Bank limited, among other studies. However, none of these studies focused specifically on the technological change management process in Kenyan banking industry. What is the situation of the current technological change management at the Barclays Bank of Kenya?

1.3 Research Objective

The objective of this study was to investigate the technological change management at the Barclays Bank of Kenya.

1.4 Value of the Study

This study will contribute to existing theories and models in change management practice including Kotter and Kurt Lewins models (Lewin, 1947). It is important to understand technology change in order to fully appreciate the transformation in the banking industry

For organizations to be successful in a rapidly changing business environment, it is imperative that all managers understand the effects of technology change. Managers should be equipped with the best strategies for managing technological change and should know how to manage the resistance to technology change. In instances where technological change has not been managed effectively in Kenyan organizations, this research may be used to design a training programme to enhance the effectiveness of the management of technology change.

Considering the importance attached to managing technology change in the literature, it is evident that research in this field is vital. This study will contribute to change management by reinforcing existing literature that stress the significant technology factor in change management process in the banking sector.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presented a reviewed of literature on technological change management process at the Barclays Bank of Kenya. The chapter reviewed existing literature on technological approaches to change, characteristics of technological change management, resistance to change and forces for change.

2.2 Change Management

Change management scholars say it entails thoughtful planning and sensitive implementation and above all consultation with, and involvement of the people affected by the changes. Problems arise when change is forced on people change therefore must be realistic achievable and measurable, Chapman (2005-06).

Change management is the process tools and techniques to manage the people side of business change to achieve the required business outcomes also to realize that business change effectively within the social infrastructure of the workplace. Jeff (2007). However according to Nickols (2006) the overall process of change and change management remain pretty much the same. Thus it's this fundamental similarity of the change processes across organizations, industries, structures in different countries, continents i.e. globally that makes change management a task, a process, and an area of professional practice.

Organizational change is a socially constructed reality with negotiated meaning as outcomes of power relationships and struggles for supremacy (Grant, 2005). "Between the lines" a particular strategy is primarily about power and control, dominance and supremacy, whose access to resources will be enlarged or reduced,

who can stay and who has to go. On the one hand, this struggle for supremacy, power and control is about personal interests. For example, senior managers are well aware of the fact that initiating a new strategic change initiative can, irrespective of the factual outcomes for the organization, increase their credibility (Staw and Epstein, 2000) and their market value outside the organization as well as their position and influence inside the organization:

It is for this reason that management must prepare and anticipate the likely reactions of employees and determine how to deal with them. The different perceptions to change come because of the difference in the background of employees and their perception of the change outcome. Change can be studied in terms of its effects at the individual, group, and organization, and society, national or international level, (Mullins, 1999). According to Mullins (1999), we all have our own 'world', our own way of looking at and understanding our environment and the people within it

Change revolves around the process of the subjectization of substance, the appropriation of a universal signifier by a particular content, which takes place through the displacement of some momentary central connotation of a signifier by a formerly peripheral predicate, a subordinated moment of its totality, which installs itself as the new totalizing principle. One of the main differences in these broad competing views is the one which separates the theoreticians from the practitioners. (Butcher and Atkinson, 2001).

2.3 Types of Change

Different kinds of change require different strategies and plans to effectively gain employee engagement and acceptance of change. A critical step in determining which

approach to use in overcoming resistance to implementing organization change is to determine which type of change the organization is experiencing.

The main development in organizations is incremental, with occasional more transformational changes (Johnson and Scholes, 1999). Tidd, Bessant and Pavitt (1997) agree that organizations use minor incremental improvements to radical change which transform the way we think.

2.3.1 Incremental Change

It is beneficial for organizations to change incrementally. In this way it will build on the skills, routines and beliefs of those in the organization, so that change is efficient and likely to win their commitment. The aim is a realignment of strategy rather than a fundamental change of strategic direction; it is also based on the existing paradigm (Johnson and Scholes, 1999). Andrews and Stalick (1994) state that establishing a separate quality or process improvement group will only reinforce the idea that solving problems is someone else's responsibility. Instead, each manager and each unit must be accountable for continuous improvement in these seven areas: communication; quality; error reduction; productivity; customer satisfaction; cost reduction; and worker satisfaction and enjoyment.

Change should be managed as a step-by-step process, using existing firm capabilities as far as possible and not attempting to advance on too many fronts at once. This allows the time and resources needed to build skills, develop markets and absorb change (Cozijnsen and Vrakking, 1993). Risks are reduced by sequential decision making, to postpone major irreversible commitment (if competition allows it) until technical and market uncertainties are resolved. This reflects the connectedness of

much technological advancement, in which changes must rely on parallel advances in outside, complementary technologies (Tidd et al, 1997).

2.3.2 Transformational Change

Transformational change is change which cannot be handled within the existing paradigm and organisational routines: it entails a change in the taken-for-granted assumptions and 'the way of doing things around here'. New relationships and accountabilities are established, and new technologies replace old ones (Johnson and Scholes, 1999). Andrews and Stalick (1994) state that such transformational change may also come about as a result of either reactive or proactive processes. Hammer and Champy (1993) add that when a process is reengineered, jobs evolve from being narrow and task-oriented to being multidimensional.

People who once did as they were instructed now make choices and decisions on their own. Assembly-line work disappears. Functional departments lose their reasons for being. Managers stop acting like supervisors and behave more like coaches. Workers focus more on the customers' needs and less on their bosses'. Attitudes and values change in response to new incentives (Andrews and Stalick, 1994).

2.4 Technological Change

The origins of change are analysed in three primary categories, namely: technological, social behaviour and structural institutional (Basil and Cook, 1974). According to Kofman, Senge, Kanter and Handy (1974), manufacturers are at a stage where mastering change is probably the most important thing that leaders can do to assist organisations. Technology is changing today at a more rapid pace than ever before in human history. It is up to management to manage this change effectively. Slocum

(1996) states that organisations can continue to be successful only if they change and adapt.

Technology change management is not an isolated activity, but a process that touches many of the socio-technical activities at work in an organization (Levine, 2000). This bigger picture of technology change management includes business and work processes and technical systems as well as processes related to group dynamics and collaboration. The connection is clear. When managers ask people to change how they do their work, as is done in improvement of organisations or technology adoption efforts, they are being asked to learn. If managers pay attention to how people learn, they will be capable of more effective change management. Learning and technology change management reinforce one another. If managers are smart about how they manage change, they will help make the workplace a learning organization, and this will pay off in many ways.

The scope and scale of technological change is such as to call for a new paradigm of organization (Bailey, 1993). Unless an organisation includes redundancy or overcapacity in its system it cannot have the flexibility to adapt to the changes in the environment required. In designing adaptive systems there are basically only two choices in the way that an organisation designs redundancy into its system.

The two choices of redundancy of parts, or redundancy of functions are based on two quite different value systems. The first option is for people to have narrowly based, individual tasks like the replaceable parts of a machine. The basic building block is the individual and parts have to be added to the system for purposes of control, and backed up or replaced when they fail. This results in the characteristically

mechanistic, bureaucratic and hierarchical systems of much of industry today. This contrasts with the second option which is based on redundancy of functions, which recognizes the multiple capacities of people and their ability to cope with complex roles. Here, rather than adding additional parts, functions are added to the individual. This develops individual's ability to handle a wide range of roles and their capacity for self control. The building block in this instance is not the individual, but the self-managing group (Bailey, 1993). These alternative values represent a different concept of organization and amount to what the author describes as a new paradigm of organisation.

However, it is recognized that while such new concepts of organisation may well be required, they are far from easy to introduce. The transformation from the old to the new requires nothing less than the working out of a new organisational philosophy (Bailey, 1993).

2.5 Technological Approaches to Change

Successful change can be brought about through modification using certain approaches. Ivancevich, Matteson and Slocum (1996) identify technology as an approach to change. They state that the technological approaches emphasize changes in the flow of work. This could include, for example, new physical plant layouts, changes in office design, and improved work methods and techniques. Many technological changes are related to advances in equipment design and capability. For example, computer-aided-design (CAD) technology has transformed the job (and productivity) of draftspersons; laser-guided production equipment has dramatically increased the accuracy of many manufacturing processes; the desktop computer has altered literally millions of jobs; and, on a growing number of factory floors, robots

are outnumbering people. Organisational researchers are just now beginning to examine some of the longer-term effects of technological change on individuals.

The technology structure consists of the automated communication, networking, and computer systems used to support the process structure. It includes the data, applications, communications, platforms and related technologies. Supported by local and wide area networks, imaging systems and mobile communications networks, one can communicate with just about anyone in any location at any time. Developers using relational database products and advanced development software languages and tools can deliver technology much faster and more cheaply (Andrews and Stalick, 1994). The sensible application of technology depends on the competent integration of technology with work processes.

2.6 Characteristics of Technological Change Management

The special characteristics of technological change a manager must understand are as follows (Cozijnsen and Vrakking, 1993). Uncertainty may be inherent in a new, unknown technology or may only reflect ignorance by an individual firm. According to Levy (1998), uncertainty is associated with a lack of sufficient information. This is the case when the research and development organization lacks adequate information on the successful performance of certain elements that are critical for achieving the competitive edge in a new product.

Typically, this happens when such components are produced by outside vendors. Development of the product may require a new technology, a new material, or a new process (Smith and Eppinger, 1992) Until these pieces are available and reliable, the

project must deal with technological uncertainty. The technological uncertainties in this situation are external and outside the control of the company developing the product. In such cases, the research and development organisation does not have enough information to quantify the uncertainty and to assign it a probable risk level. Uncertainty ranges from complete unpredictability of capabilities, demand, timing and cost for a new technology to more containable variations in technical and market parameters.

The risk associated with the change varies accordingly. For new technology the complexity often makes it impractical to resolve all the uncertainties at once, and calls for an incremental approach (Cozijnsen and Vrakking, 1993). However, Slocum (1996) states that effective planning helps reduce risk and uncertainty or, at least, improves the understanding of the risks and uncertainties associated with decision making. Unfortunately, even the most effective planning cannot eliminate risk and uncertainty. No amount of sophistication is going to dismiss the fact that all our knowledge is about the past and all of our decisions are about the future.

Employee skills must be updated through training so that technological advances are successfully integrated into the organization. As well as technical skills these include marketing and manufacturing skills needed for successful exploitation of the technology; organizational skills in bringing individuals together and in managing the innovation process to initiate, direct, motivate and select change (Carrel, Norbert and Robert, 1995). Complexity means that broad as well as specialized skills may be needed. As "non-codified" knowledge these skills are costly to transfer, are hard to reproduce, and so become specific to the firm, or even the individual. They constitute a set of technical and commercial firm capabilities, often grouped as "complementary

assets (Cozijnsen and Vrakking, 1993). Tidd et al (1997) add that national competencies in research are also an important input into a firm's technological capabilities. For example, in large firms, research and design laboratories actively seek support, knowledge and skills from national basic research activities, especially in universities.

In contrast to firm-specific skills, the idea behind an innovation as 'pure knowledge' may be very difficult to protect from imitators. Hill (1998) states that intellectual property refers to property such as computer software, a screen play, a music score, or the chemical formula for a new drug; that is, the product of intellectual activity. It is possible to establish ownership rights over intellectual property through patents, copyrights, and trademarks. A patent grants the inventor of a new product or process exclusive rights to the manufacture, use, or sale of that invention. Copyrights are the exclusive legal rights of authors, composers, playwrights, artists, and publishers to publish and dispose of their work as they see fit. Trademarks are designs and names, often officially registered, by which merchants or manufacturers designate and differentiate their products.

The philosophy behind intellectual property laws is to reward the originator of a new invention, book, musical record, clothes design, restaurant chain, and the like, for his or her idea and effort. As such, they are a very important stimulus to innovation and creative work. They provide an incentive for people to search for novel ways of doing things and they reward creativity. However, patents and trade secrets are provided limited protection, except in special cases where patents are hard to invent around, such as pharmaceuticals, and some firm-specific process innovations, which may rely

on secrecy (Cozijnsen and Vrakking, 1993). The main defense against imitation is to use lead-time to keep ahead by continuous, incremental innovation.

The time needed to develop technology, or to build up firm capabilities, adds an additional element to all decision making. Andrews and Stalick (1994) state that business reengineering takes time. The initial design work may take only six to eight weeks, but implementing the new design, testing the alternatives, and supporting the change is an iterative process that may take two years, or more. Reinforcing new behaviours and values is an ongoing process. Executives must be able to stick with the programme, even when the pace of progress seems to be two steps forward and one step back. Levy (1998) adds that if a company can recognize trends beforehand and change accordingly, consolidation will be profound.

New technology can change the basic market and operational parameters facing the firm to an extent which makes adopting the technology unavoidable (Cozijnsen and Vrakking, 1993). This is most important in a competitive situation where product innovations open up new markets, or process innovations significantly change quality and cost parameters. Reaction to the technology may then be a matter of survival. Within the firm, technology may impact on working operations in an equally far reaching way.

It is a combination of several factors, rather than any particular one, which will determine the management of technology. For example, certain factors may apply to other kinds of change (investment in new plant, or an innovative advertising campaign), but these may not have the same technical/marketing skills requirements,

unpredictability, or time pressure. The characteristics apply to differing extents in different kinds of technological change (Cozijnsen and Vrakking, 1993).

2.7 Resistance to Change

Resistance to change is by no means a phenomenon specifically reserved to technology (Levy, 1998). Examples of this phenomenon abound in a vast variety of socioeconomic fields. However, in other fields, the pace of change is relatively slow compared to the pace in technology. Technology change management must adjust organizational structures to changing company needs, or even introduce modifications to existing products. Management's behaviour risks freezing innovation and discouraging entrepreneurial initiative.

Organizations, individuals and groups fear change for many reasons: It can result in organization redesign; It creates new technological challenges; It confronts apathy; It permeates throughout the supply chain; It challenges old ideas; It encourages debate Paton and McCalman (2000). All relevant people in the group must share information relating to the need for change, the plans for change, and the consequences of change. A change process ordinarily requires the specific and deliberate opening of communication channels. Blocking these channels usually leads to distrust and hostility. Change processes which provide specific knowledge on the progress to date and specify the criteria against which improvement is to be measured, are more likely to be successful (Huse 1975).

2.8 Summary

There are many aspects involved in technological change management. Technology today changes at a more rapid pace than at any time before and must be managed correctly out of an organizational survival context. Irrespective of the discipline in

which managers manage, there is proof that managers must be able to manage technology change. Technology change management is not an isolated activity but a process that touches many of the socio-technical activity at work in an organization (Levine, 2000). The bigger picture of technology change management includes business, work processes and technical systems as well as processes related to group dynamics and collaboration.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents various stages and phases that were followed in completing the study. It involved a blueprint for the collection, measurement and analysis of data. This section identified the procedures and techniques that were used in the collection, processing and analysis of data. Specifically the following subsections were included; research design, population, data collection and finally data analysis.

3.2 Research Design

A case study design was used as it allowed for an in-depth investigation, and placed more emphasis on a full contextual analysis of fewer events or conditions and their interrelations. The research setting was the Barclays Bank of Kenya's technology change management initiative undertaken in the recent past. The choice of the Barclays Bank of Kenya as the organization of study was made in consideration of the renewed efforts by the banking sector to adopt technology innovations to re-engineer their services.

3.3 Data collection

Data collected was qualitative in nature. An interview guide was used to collect data by interviewing the Managing Director, Heads of Departments and other necessary top level managers in the bank, who total 45. These top level managers were intimately involved in technological change management efforts at the Barclays Bank of Kenya and provided incisive information on the progress of the technological change management.

3.4 Data analysis

The data gathered from the interviews done were analyzed using content analysis. Content analysis is a methodology in the social sciences for studying the content of communication. When using qualitative content analysis, the researcher classified the information into certain categories. These categories were treated similarly to numerical data to provide scientific information. The researcher then drew conclusions about the information in the text using several approaches including identifying themes, topics or issues. The content analysis provided evidence that the technological change management process at BBK had its successes and also highlighted the challenges in the process. This type of analysis does not limit the respondents' answers and therefore the data gathered can shed more light on the technological change management process at the Barclays Bank of Kenya.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presented the results of the study. Analysis was carried out through content analysis. The response rate recorded for the study was 80%.

4.2 Findings

The findings of the study were classified into various sub topics as listed below and a summary of the challenges faced during the process tabulated for ease of reference.

4.2.1 Background Information

From the study, respondents were drawn from all the departments in the bank. The respondents who were interviewed were heads of departments representing the various departments. From the results, 73% of respondents had served in the bank for over 10 years while the rest had been in the bank for less than 10 years. On respondents' level of education, 65% had attained masters level while 35% were bachelor degree holders.

4.2.2 Technological Change Management Involvement

Respondents agreed that it was impossible to involve every employee in each decision along the change process. However, they said the bank made efforts to involve all stakeholders, process owners, and employees who will felt the impact of the changes, as much as possible, in the learning, planning, decisions, and implementation of the change. In addition, each employee was involved in meaningful decisions about their work unit and their work.

From the responses, each respondent was involved in a particular area during the technological change management process. The head of IT department for instance was involved in the overall implementation of the system change, for instance. The heads of departments and managers had the responsibility to facilitate and enable change. Increasingly the managers' roles was to interpret, communicate and enable the employees understand the process. It was also reported that some of the top management were the initiators of this technological change. The management was also involved in managing the relations between the staff involved in the change programme and the consultant (Oracle).

4.2.3 Use of change Agents

The individual or group that undertakes the task of initiating and managing change in an organization is known as change agents. From the results, all respondents said that BBK used Oracle personnel as their change agents. The change was carried out by both Oracle and BBK personnel. BBK staffs were on the ground while Oracle staffs were used as consultants in case any hitches were realised.

Respondents said that external change agents were hired since they were bound by the company's culture, politics, or traditions. Therefore, they were able to bring a different perspective to the situation and challenge the status quo. However, respondents said that these consultants faced challenges since they lacked an understanding of the company's history, operating procedures, and personnel and had to take time to learn. In addition, these external change agents were paired with an internal coordinator from the human resources department where the two then worked together with line management. From the respondents, the change agent's work included helping the organization members learn how to use the new banking system

effectively. The agent provided organization members with a new set of skills to operate the system.

4.2.4 BBK Culture and Technology Change

The study established that BBK had a customer-focused, innovative, honest and technology driven culture. Respondents said that the new technology affected the bank's core work functions, affecting related policies, administrative functions, and inevitably every component of the bank.

The study established that there was some resistance to the technology change. Respondents said that this was partly to management's reluctance to cede power or otherwise involve the collective workforce in planning change. It was said that many managers still lived in the past, believing that workers had no skills or intelligence that would allow them to contribute substantively to improving their organization. Respondents also said that the bank did not have a vision and culture on how to effectively implement change. Although BBK staff were generally responsive, the magnitude of the change involved made them resist the changes. However, this was overcome with training and awareness creation among staff at all levels of operations. Further, the interviews suggested that marginal regard for input had caused the staff to become discouraged and had reduced motivation for process improvements. It also came out that feedback from the management teams during the change process indicated a low level of trust among management, which resulted in a lack of collaboration among the managers.

4.2.5 Management Commitment to Technological Change Process

From the study, senior management commitment and drive for change was essential if momentum was to be maintained for effective implementation. The rest of the

organisation needed to be convinced of the need and the case for change. Only this could happen to good effect if senior management, including the Chairman and Chief Executive, are collectively behind the changes sought. Respondents said it was important for senior management to be seen to be fully supportive by what they do and say - both privately and publicly or else progress could soon stall. They said top-level commitment was vital to engendering commitment from those below them." If employees don't see that the company's leadership is backing a project, they're unlikely to change".

From the responses, sometimes, senior executives were reluctant to back initiatives since they're often bringing about changes that negatively affected employees' jobs and lives. "However, if senior executives do not communicate the need for change, and what it means for employees, they endanger their projects' success".

From majority of respondents, the management was fully supportive to the change process. They said that the management was committed and dedicated in ensuring the change process proceeded as planned.

4.2.6 Non Management Staff Commitment to Technology Change Process

From the responses, majority of respondents said that non management staff initially had doubts about the system change but with continued information flow and trainings, they became very enthusiastic about the change process. From the results, change-related communication positively affected effective commitment to change as timely and honest information helped dispel rumours and presents a clear picture of what the change program entailed. Since affective commitment to change is based on

the recognition of benefits of change, employees who are aware of such benefits were more committed to supporting change in their bank.

Timely communication also helped allay fears and ambiguities related to change and clearly presented the purpose and benefits of change to the employees. The results show that trust in management and the decisions made by them also led to effective reactions to Change. Employees who trust the management will also have faith in the management decisions. Similarly, internal and external employability positively affected effective commitment to change. This indicates that employees who felt confident about their work and experience, felt that their services were important for the organization and consider themselves employable within and outside the organization.

4.2.7 Alignment of BBK's Culture, Mission, Vision and Goals

Barclays Bank of Kenya's vision and goal is to be the most technologically advanced bank that provides unmatched customer care service and products to its customers. Efficiency was also key for the bank and the technology change had been aligned to assist achieve these goals. According to respondents, the change process was planned in such a way that it improved the efficiency in processes to enable the bank to maintain its market leadership.

From the results, senior management was aligned with the organization's stated vision, mission, and goals. In addition, employee alignment with customer/marketplace demands, and operational system and process alignment with the organization's goals was there. In general, according to respondents, stakeholders had not been made clear about their contribution to the desired improvement to increase their commitment. The vision provided the direction showing where the change

programme was heading. The change vision was aligned with the overall organisation's vision and mission, with the desired culture and values of the change reflecting the vision and mission statements.

4.2.8 Acceptability of Change

From the results, majority of respondents agreed that BBK considered the acceptability of the change and possible resistance to the change. To ensure acceptability among various stakeholders and minimize possible resistance, respondents said that the changes were implemented gradually with the initial stage involving sensitization of staff on the necessity or the benefits of the change. In addition, respondents said that there were constant updates on the progress about the change process. The bank also ensured that the change management process got support from top level management including directors and managing directors of the bank.

4.2.9 Re-engineering of BBK Processes through Technology Change Management

On how the technology change had reengineered business processes at the bank, majority of respondents said that turnaround times at the bank had improved, that customers were also able to transact outside the banking hall. In addition, respondents said that the new system had enabled the cashiers at the bank to serve customers faster and better. They also said that bank end processes had improved as turn around times had been drastically reduced.

From the results, workers realized that reengineering usually brought new business opportunity with more hands needed to cope with the challenges. Several banking process that were now in place. All these increased work, so, reengineering required

more workers rather than reducing it. This shows that when management declares that they are going to re-engineer, they are declaring that the relationship between people and their job are going to change, for at least, the transition period. Re-engineering means that jobs will be more flexible, more complex and less predictable rather than that people will lose their jobs.

4.2.10 Effect of technology change on BBK stakeholders

Majority of respondents agreed that the technology changes at BBK had affected the various stakeholders at the institution such as suppliers, contractors and former customers. However, respondents said that the effect was positive and that it had increased efficiency and the ability to transact even from without the banking hall. Further, respondents said that customer service had improved significantly after the implementation of the technology change.

From the results, respondents said that stakeholders were both internal and external. For internal stakeholders, they were affected through process changes – changes in the way work is done or the order of steps in the workflow; Technology changes such as new systems, new software or new systems security procedures; Adjustments to policy or regulations; Changing roles – new roles or new tasks being added to existing roles; Combining jobs or splitting out the work that was once done by one person into several roles and; through shifting reporting lines or communications channels. External stakeholders were affected through suppliers and customers by changes to the inputs or outputs of the internal processes; through changes in timing or order of process steps that involve external partners; through changes to data and integration points with external technical systems and through changes in expectations for service, delivery or quality.

4.2.11 Communication of change

On how change was communicated to stakeholders, respondents said that it was through training and communication to staff was through brochures and bulletins among others. Customers were informed through pamphlets at the branch. Customers were also communicated through the banks staff as they visited the branches to transact. In addition, respondents said that communication was a process, not a product. Newsletters, memos, videos, publications, meetings, team briefings and the intranet may all have an important part to play in your organisation's communication strategy and they should be applied.

The results clearly showed that management felt change was being communicated effectively. Majority agreed that subordinates were included in discussions on changes to existing, and new programs and policies, that they communicated change effectively to subordinates and that they provided adequate feedback to subordinates on newly implemented programs and policies. In addition, the study revealed that communication-downward, horizontal and upward-must be the responsibility of all managers, not just the CEO. Staff needed to be encouraged and supported to accept the responsibility for upward and horizontal communication.

From the study, it was clear that management often communicated only the good news, but it was equally important to communicate the bad which would be in form of service or quality problems, delays, customer complaints, criticism from external sources and so on.

4.2.12 Challenges of Technological Change Management Process

On the challenges encountered by the bank through the technology change management process, respondents said that there were initial staff resistance to change that were often the soft issues such as social, cultural and human issues across different managerial levels and functional boundaries. These significant issues emerged in the implementation stage, in the centralised unit, within branch operations, during the new product launch, across technical training. In addition they said that the system was expensive to run during the test period. Testing of both existing and new services presented great challenges. For example, the stability of the system was erratic. Respondents also said that the implementation time was derailed through continuous system upgrades by the vendor. Respondents said that they experienced higher levels of anxiety because of the unintended inefficiencies that caused further administrative work and more manual 'follow up'. Some commented that it was tiresome to manage the unexpected inefficiency.

Through the journey of designing, developing, and implementing the technology change programme with a wider impact, a new set of challenges loomed even larger. Certainly, technical challenges still existed; but since the new systems affected larger, more heterogeneous groups of people and more organizational areas, the major challenges to this technology success are more behavioural than technical. A summary of challenges mentioned by respondents is given in the table below;

Summary of challenges in change implementation.

Communication	Ineffective outgoing communication
	Ineffective listening
	Failure to effectively prepare the staff for the new system
Culture	Hostile culture within the information systems organization
	Hostile culture toward the information systems area
	No strategies to nurture or grow a new culture
Underestimation of complexity	Missed deadlines and cost overruns
	Lost credibility
Scope creep	Failure to define and maintain original success criteria
	Failure to renegotiate deadlines and resources if criteria do change
Organizational	No clear vision for the change
	Unintended consequences
	Ineffective reporting structure
	Staff turnover
	Staff competency
	Provision of a technical "fix" to a management problem
	Lack of full support of "boss(es)"
	Roles and responsibilities not clearly defined or understood by everyone

	Several people vying to be “in charge”
	Adequate resources not available from the beginning
	Failure to benchmark existing practices
	Inability to measure success
Technology	System too technology oriented
	Poor procurement
	Lure of the leading (bleeding) edge
	Inadequate testing
Training	Inadequate or poor-quality training
	Poor timing of training—too early or too late
Leadership issues	Leader too emotionally committed
	Leader's time over committed
	Too much delegation without control
	Failure to get ownership in the effort
	“Lying” to get initial approval

4.3 Discussion

Organisations today face a major challenge in managing change effectively. The cost of failure is high when organisations fail to change in ways necessary for survival. However, the most serious challenge in change programmes today is how to deal with people's resistance to change. Most advocates of change assume that support will be imminent because the objectives for change are worthwhile, but sometimes this does not happen (Brown & Harvey 2006). Instead, organisations can motivate change by

creating a readiness for change among organisation members that will help them to address resistance to change (Conger, Spreitzer & Lawler 1999). In most cases, the severity and complexity of change compounds the challenges faced by managers, frequently testing the capabilities of the organisational members. Managers may initiate corrective actions that often affect patterns of work or values, and consequently, meet with resistance. Unless members prepare themselves emotionally for change the sheer speed with which change occurs can be overwhelming (Brown & Harvey 2006).

For any given change, people can occupy a wide range of roles that will strongly influence their perceptions of the change and their reactions to it. These are roles such as champion, end user, developer/builder, watchful observer, obstructionist, and such. As on the stage, some people may occasionally play more than one role. In other cases, the roles are unique. Unless we clearly identify both the players and their roles in any change situation, we risk making decisions and taking action based on generalizations that are not true for some of the key players. An overview term often applied to the various roles is stakeholders. The stakeholders have some interest or stake in the quality of both the change and the change implementation process. The role of the stakeholders is subject to change, especially during a change process that extends over some time

Communication breakdown and a lack of coordination in the process of change management in BBK could be identified as some of the main causes of technology change difficulties. Further investigation revealed that the HR department had little involvement in the change management although training was a large part of the change programme. Some middle managers perceived that the HR department was

reluctant to play an active role in the change programme. According to a small number of middle managers the HR department would be indifferent about issues arising from the change programme or would redirect enquiries about the change programme to other parties. The reason for such a limited role of the HR department was not clear. Casson (1997) has asserted that there should be greater emphasis on the role of intermediation in defining the fundamental role of the organisation as the process of intermediation is dependent upon the gathering, management and dissemination of various types of information.

Change efforts have always faced resistance (Pettigrew & Whipp 1991). Resistance to change is a signal that something is not working in the implementation of the change programme. The signals include delays and inefficiencies, failure to produce anticipated results, or even efforts to sabotage the change programme. A large number of project members in BBK tended to refuse work and display grievances in public, which are behaviours displaying and resistance to change. Despite the awareness towards the potential benefits of the change programme, project members and operational staff perceived change efforts to pose threats to routines in work practices and leadership styles. Resistance to change is an ongoing problem. At both the individual and the organizational levels, resistance to change impairs concerted efforts to improve performance. Many corporate change efforts have been initiated at tremendous cost only to be halted by resistance among the organization's employees. Organizations as a whole also manifest behaviour similar to that of individuals when faced with the need to change. The relationship between individual and organizational resistance to change is important. An organization is a complex system of relationships between people, leaders, technologies, and work processes. From this interaction emerges organizational behaviour, culture, and performance

Organisational change may adversely affect people's competencies, worth, and coping abilities. Any proposed change would be more readily accepted if it promises to benefit those who are involved. The key to achieving these positive affects is to communicate realistic, positive expectations about the organisational changes (Szamosi & Duxbury, 2002).

To address the social and psychological needs of employees, BBK needed to communicate the reasons for change. As advocated by change management experts (Lewin 1947, Beckhard & Harris 1977), top management should involve key managerial employees to strive to create a state of dissatisfaction with the status quo. Initial resistance to change is bound to arise, and it is only by making staff realise the necessity of letting go the status quo that change programmes can be truly effective.

There was a lack of structural mechanisms to disseminate or receive feedback at every stage of the change process. Information concerning the change programme should be provided to all organisation members, as the lack of reliable information will lead to rumours and uncertainty (Cummings & Worley 2005, Brown & Harvey 2006). BBK is likely to have benefited by creating a shared vision (driven from the top management) so as to provide a purpose for change and the desired future state to define the core activities in a planned change programme.

Due to the ambiguous nature of the organisational transition change agents play important roles in the change programmes. Changes agents should be people who have the power to mobilise resources to promote change, have the respect of existing leadership and change advocates, and hold the interpersonal and political skills to guide the change process.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to investigate the technological change management at the Barclays Bank of Kenya. The chapter presents the summary of the study, conclusion and recommendations

5.2 Summary of Findings

From the study, each respondent was involved in a particular area during the technological change management process. The heads of departments and managers had the responsibility to facilitate and enable change. Increasingly the managers' roles was to interpret, communicate and enable the employees understand the process. It was also reported that some of the top management were the initiators of this technological change.

From the study, all respondents said that BBK used Oracle personnel as their change agents. The change was carried out by both Oracle and BBK personnel. Although BBK staff were generally responsive, the magnitude of the change involved made them resist the changes. However, this was overcome with training and awareness creation among staff at all levels of operations. Further, the interviews suggested that marginal regard for input had caused the staff to become discouraged and had reduced motivation for process improvements.

From the results, the management was fully supportive to the change process. They said that the management was committed and dedicated in ensuring the change process proceeded as planned. From the responses, majority of respondents said that

non management staff initially had doubts about the system change but with continued information flow and trainings, they became very enthusiastic about the change process

Barclays Bank of Kenya's vision and goal is to be the most technologically advanced bank that provides unmatched customer care service and products to its customers. Efficiency was also key for the bank and the technology change had been aligned to assist achieve these goals. From the results, majority of respondents agreed that BBK considered the acceptability of the change and possible resistance to the change. To ensure acceptability among various stakeholders and minimize possible resistance, respondents said that the changes were implemented gradually with the initial stage involving sensitization of staff on the necessity or the benefits of the change.

On how the technology change had reengineered business processes at the bank, majority of respondents said that turnaround times at the bank had improved, that customers were also able to transact outside the banking hall. In addition, respondents said that the new system had enabled the cashiers at the bank to serve customers faster and better. Majority of respondents agreed that the technology changes at BBK had affected the various stakeholders at the institution such as suppliers, contractors and former customers. However, respondents said that the effect was positive and that it had increased efficiency and the ability to transact even from without the banking hall.

On how change was communicated to stakeholders, respondents said that it was through training and communication to staff was through brochures and bulletins among others. On the challenges encountered by the bank through the technology change management process, respondents said that there were initial staff resistance to

change that were often the soft issues such as social, cultural and human issues across different managerial levels and functional boundaries. These significant issues emerged in the implementation stage, in the centralised unit, within branch operations, during the new product launch, across technical training. In addition they said that the system was expensive to run during the test period. Testing of both existing and new services presented great challenges. For example, the stability of the system was erratic. Respondents also said that the implementation time was derailed through continuous system upgrades by the vendor.

5.3 Conclusion

Organisations today face the dilemma of managing strategic change initiatives efficiently and effectively. Change is unavoidable in a rapidly expanding world that makes it challenging for any organisations not to respond for their survival and prosperity. This study analysed the technological change management process of Barclays Bank of Kenya. Specifically, the study analysed the change strategy and challenges encountered in the technology change management process. Driven by competition brought about by globalisation, information technology and managerial innovation, BBK attempted to fit its operations and systems to a customer focused strategy. The study results revealed that the change management efforts were associated with various technical and HR problems. The findings also revealed that change efforts lacked integration.

As part of conclusion, technological change management process at the Barclays Bank of Kenya was faced by resistance from the bank staff. In addition, the process received the support of top management to ensure its success. However, it was observed that the bank's mission, vision and core values had not been fully aligned to

the technological changes. It was clear from the study that the process improved efficiency and productivity at the bank as well as having positive effects on stakeholders. However, the process was faced with numerous challenges.

Because technology investments are largely made up of things (i.e., hardware and software), it is easy to make the mistake of believing that a technology is implemented once it has been bought and installed. In fact, nothing works without people. These human issues become magnified in the process of redesigning work processes. Many work-process redesign projects focus exclusively on technology and fail to address the human and organizational aspects of work. In these instances, organizations fail to explore nontechnical solutions to improving organization processes, such as training or changes in structures, procedures, and management practices. Most often, technology strategy drives organizational change. While the business strategy may be clear, it is often not reflected in a defined organizational change strategy. Too many technically good applications have failed because of sabotage by users who like the old ways in which things were done. Managing the natural resistance to change and helping convert that resistance into commitment and enthusiasm must be a planned process. New systems should enhance the quality of work life and increase responsibility, empowerment, and motivation.

5.4 Limitations

Rigidity to information disclosure by the respondents posed a great limitation. This challenge was handled through public relation and the use of letters of identification from the university to support the research that was done.

Time was also a limitation since respondents were busy and could not easily spare time for answering questions. They were however convinced to spare time during lunchtime or their tea break and through booking of appointments during their specified time were done at their convenience.

It was difficult to access data because some respondents failed to give adequate information for fear of victimization by management and also some respondents misunderstood the questions. However the researcher assured them that the information was confidential and would be used only for research purposes.

Another limitation of the study is the use of subjective self-reported perceptual measures in assessing the studies. Even though, an attempt was made to identify the best respondents by contacting the key personnel that provide the best information, the accuracy of self perceptions might be strongly influence by the respondent experience in the management of the organizations and frame of reference at the point in time. For instance, perceive biasness may occur if a person with a high reputation strongly believes that their management practices are more advanced compared to other people. In addition to the above limitations, the findings cannot be generalized in a larger context across the cultures of other banks and business environments.

5.5 Recommendations

The following recommendations were suggested;

Leaders need to understand the impact of change on the individual as well as the journey employees go through during times of change. The level of skill displayed by leaders therefore underpins the quality of leadership. The bank's mission, vision and core values need to be fully aligned with the technology change process. There is

need to ensure that all employees understand and internalize the bank's core values, mission and vision.

The HR department may take an active role in involving personnel in the change process, rather than just existing as an instrumentality of management. Human resources personnel could play an active role in linking the desires of management to the interests, skills, and abilities of employees by facilitating the design of these contracts. Each one would be adjusted based on personal needs.

Resistance to change should not be seen as rebellious or truculent. Rather, resistance to change should be seen as a challenge or a force of energy that can be redirected to overcome any risk or negative aspect of the change that is identified by its detractors. Managers should encourage those who have doubts to become active in the process, challenging and refining the problem areas or potential risk. Those who are skeptical may be the best people to identify and correct problems that the change advocates failed to see.

Management must refocus their change efforts onto the process. This process includes the involvement of others, providing feedback, listening, encouraging employees, and encouraging employee ownership of the process. To improve the acceptance of change on the individual level, the process needs to be broken down and reconstructed. If an individual fails to understand the change or see the vision for the future, reconstructing the change process will allow the individual to see the big picture and the individual components in that process. He will be more able to see his role in the grand design.

5.6 Recommendation for further research

The study focused on the financial services industry. Further studies could be conducted in other industries in order to create comparisons.

The field study only focused on the employee aspect of change management as the focus was on leading employees through change and uncertainty. Further studies that would incorporate other dimensions in the organisation such as the customers may reveal additional sets of challenges.

REFERENCES

- Andrews, P.C. and Stalick, S.K. (1994). *Business Reengineering* (1st ed.). Tokyo: Prentice Hall of Japan.
- Bailey, J. (1993). *Managing people and Technological Change* (1st ed.). London: Pitman Publishing.
- Basil, C.B. and Cook, C.W. (1974). *The Management of Change* (1st ed.). Maidenhead: McGraw-Hill Book Company.
- Born, G (1995), *Business Process Re- engineering – A Short Guide, Electronic Aids for Increased Profits*, IEE Seminar on 29 Jun 1995 pp.7/1-7/5
- Bwibo, S (2000), A survey of strategic change management practices within non-governmental organizations in Kenya, Unpublished MBA Project, University of Nairobi.
- Carrel, M.R., Norbert, F. and Robert, D.H. (1995). *Human Resources Management* (5th ed.) New York: Prentice – Hall.
- Cozijnsen, A., and Vrakking, W. (1993). *Handbook of innovation Management* (1st ed.). Oxford: Basil Blackwell Ltd.
- Gekonge, F (1999), A survey of the strategic change management practices by Kenyan companies listed by the NSE, Unpublished MBA Project, University of Nairobi.
- Hammer, H. and Champy, J.T. (1993). *Organisational Change* (3rd ed.). New York: McGraw-Hill.

Heiss, M and Jankowsky, M. (2001), The Technology Tree Concept – An evolutionary approach to technology management in a rapidly changing market, *IEMC 2001 Proceedings from Change Management and the New Industrial Revolution*, 2001, 7-9 Oct. 2001 pp:37 – 43

Hill, C.W.L. (1998). *International Business* (2 nd ed). New York: McGraw-Hill.

Huse, F.F. (1975). *Organisational Development and Change* (1 st ed). St Paul: West.

Ivancevich, J.M. and Matteson, M.J. (1996). *Organisational Behaviour and Management* (4th ed.). Boston: Irwin.

Johnson, G. and Scholes, K. (1999). *Exploring Corporate Strategies* (5th ed.). London: Prentice Hall Europe.

Komacek, S.A. Lawson, A.E. and Hortan, A.L. (1990). *Manufacturing technology* (1st ed.). Canada: Delmar Publishers Inc.

Levine, L. Winter. (2000). Integrating knowledge and Processes in a learning Organisation: *Information Systems Management*, Vol. 18, no. 1, 13 – 21.

Levy, N.S. (1998). *Managing High Technology and Innovation* (1st ed.). New Jersey: Prentice Hall.

Lewin, K. (1947). Frontiers in group dynamics: I. Concept, method and reality in social sciences; social equilibria and social change. *Human Relations*, 1, 5-41.

Macredie and Sandom (1999). IT-enabled change: evaluating an improvisational perspective. *European journal of information systems*, 8, 247-259.

- Markus, L. (2004). Techno change management: Using IT to drive organizational change. *Journal of Information Technology*, 19 (1), 4-20.
- Mbogo, M. (2003), A Study of Strategic Change Management Process in Hybrid Private-Public Organizations: The case of Kenya Commercial Bank Limited, *Unpublished MBA Project*, University of Nairobi.
- O'Brien, J.A. (1996). *Management Information systems* (3rd ed.). Chicago: Irwin.
- Paton, R.A. and MaCalman, J. (2000). *Change Management* (2nd ed.). California: Sage.
- Prosci (2002), 2002 *Best Practices in Business Process Reengineering Report*, available at <http://www.prosci.com/bprbestpractices.htm>, last accessed 10/04/04
- Slocum, H. (1996). *Management* (7th ed.). Ohio: South-Western College Publishing
- Smith, H.J. and Eppinger, D. (1992). *Beyond Change* (1st ed.) London: Blackwell Publishers Inc.
- Tidd, J., Bessant, J., and Pavitt, K. (1997). *Managing Innovation* (2nd ed.). New York: John Wiley & Sons.
- Tosi, H.I., Rizzo, J.R. and Carroll, S.J. (1990). *Managing Organizational Behaviour* (2nd ed.) San Francisco: Harper & Row Publishers.
- Trader-Leigh, K. E (2003). Case Study: Identifying resistance in managing change *Journal of Organizational Change Management*; Volume 15 No. 2; 2002.

APPENDICES

Appendix I: Introduction Letter

Dear Respondent,

MBA RESEARCH PROJECT

I am a postgraduate student at the School of Business, and University of Nairobi. I am conducting a study on technological change management at the Barclays Bank of Kenya.

To undertake this research, please note that you have been selected to form part of the study. This letter is therefore to request your assistance in filling the attached questionnaire. The information you give will be treated with strict confidence, and is needed purely for academic purposes.

A copy of the final report can be availed to you on request. Your assistance and co-operation will be highly appreciated.

Yours faithfully,

Student

Supervisor

Appendix 2: Interview Guide

Part 1: General Information

Job Title	
Department	
Length of service in years?	
Current education level	

Part 2: Technological Change Management

1. How were you involved in the technology change management process in this bank?

.....
.....
.....

2. Did BBK use change agents (people who are responsible for change) in carrying out it's Technological change management process? (Yes/ No). If Yes, How were the changes carried out ? If No, how was the process implemented?

.....
.....
.....

3. How would you describe the relationship between BBK culture and technology change

.....
.....
.....

4. How would you describe the commitment of the management to technology change process at BBK

.....
.....
.....

5. How would you describe the commitment of non management staff to technology change process at BBK

.....
.....
.....

6. Describe the alignment of the technological changes to the bank's culture, situations, visions and goals?

.....
.....
.....

7. Did BBK consider the acceptability of the change and possible resistance to the change?..... If Yes, what did BBK do to ensure acceptability among the various stakeholders and minimize possible resistance?

.....
.....
.....

8. How has the BBK technology change management re-engineered business processes at the bank.

.....
.....
.....

9. Did the changes at BBK affect the various stakeholders such as suppliers, contractors, former customers? (Yes/No)

.....

If Yes, were they affected Negatively or Positively? Explain.

.....
.....

10. How was the change communicated to the stakeholders?

.....
.....

11. What challenges have the technology change management process in the bank encountered?

.....
.....

.....
.....

THANK YOU FOR YOUR TIME AND COOPERATION