

# **UNIVERSITY OF NAIROBI**

## **A SURVEY OF ALIGNMENT OF BUSINESS STRATEGY AND INFORMATION SYSTEMS STRATEGY IN BANKS IN KENYA**

**BY**

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**DECLARATION**

This study project is my original work and has not been presented for a degree or any other academic award in any university.

**Signed:** ..... **Dated:** .....

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**D61/P/7138/2005**

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

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## **DEDICATION**

This study is dedicated to my mother Mrs. Mary Lagat, my friend Dr. Mercy Siyoi, my family and friends for their love, guidance and support. God bless you all.

## **ACKNOWLEDGEMENT**

I wish to record my sincere gratitude of appreciation to my family for the moral support they have given me throughout the duration of the study. I am grateful to my supervisor Kate Litondo who devoted much of her time to supervise the writing of this project. Through her expert guidance, encouragement and constructive criticism, I was able to complete this study.

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## **ABBREVIATIONS**

CBK - Central Bank of Kenya

ICT – Information Communication Technology

IS – Information Systems

IT - Information Technology

MIS-Management Information System

SAM – Strategic Alignment Model

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## **ABSTRACT**

Interest in Information system strategy and business strategy has largely received very little attention and yet many interesting developments are taking place in Kenya. The study first sought to establish the activities commercial banks use to align business strategies and IS strategies, secondly determine the extent of the alignment of business strategy and IS strategy in Kenya banks and thirdly establish the challenges that banks in Kenya face in aligning business and IS Strategy.

The study focused on the banking sector as at the 30<sup>th</sup> June 2009 and comprised a population of 44 commercial banks. The respondents targeted were business executives, IT executives and strategic planners from all these banks. Structured questionnaires with appropriate questions were delivered physically to the banks. The methodology used to analyze data was by descriptive statistics - by rating the importance of the variables studied using the means and standard deviations. Completed questionnaire's was edited after receipt from the respondents during the analysis stage to ensure completeness and consistency. Data was then summarized in tables according to the main section of the questionnaire

The study found out that the major challenges faced by banks due to alignment of business and IS strategy are Lack of clear understanding of business needs, Lack of consensus between business and IS decision makers, Lack of active involvement of Managers during strategy formulation and Lack of focus on organization long term goals. The study also developed ten key process of aligning business and IS strategies this includes; Develop IS strategy and business strategy, Identify Business strategy that links to IS strategy and vice versa, Establish common architecture to alignment, Matching Business need to IS, Develop an Enterprise IS-Business Model, Develop a implementation plan, Communication Strategies to all and enhance organizational culture to support Alignment.

As a result of the research findings it was recommended that firms need to understand the process of alignment, tackle the challenges and implement strategy to enhance competitive advantage.

## CHAPTER 1: INTRODUCTION

### 1.1 Background

Businesses today have to deal with dynamic and uncertain environments, they must be strategically aware and understand how changes in competitive environment are unfolding (Broadbent and Well, 1993). Increased competition and globalization have increased the strategic importance of aligning business strategy and IS strategy. Business and IS strategy alignment remains elusive because in many organization there is a missing link between IT investment and business performance (Sircar and BorBordoloi , 2000). However, the ability of organization to integrate business information and processes has led to improvement in efficiency and customer service. Therefore, for competitive advantage organizations have to align business and IS strategy to survive and compete effectively. Keen (1991) noted that IT has become an important aspect of everyday business, it is potentially a key element in competitive positioning. Just as business, IS continues to play a critical role in the creation of competitive advantages for businesses. This is especially true for financial institutions. Financial institutions are critically dependent on IS activities for daily operations and are therefore highly dependent on information technology as their core technology. This dependence is even greater for major banks operating in Kenya where their survival and success lies in understanding and meeting the needs, desires and expectation of their customers better than their competitors .

Banking industry plays a predominant role in the economic development of Kenya. The Banking industry in Kenya is governed by; the Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK). The industry was liberalized in 1995 and exchange controls lifted. According to statistics from the Central Bank of Kenya (CBK Annual Report, 2009), financial institutions is made up of 48 Companies, comprising 44 commercial banks, 2 mortgage finance companies and one non-bank financial institution. Thirty-five of the banks, most of which are small to medium sized, are locally-owned. The industry is dominated by a few

large banks most of which are foreign-owned, though some are partially locally-owned. Alignment of business and information strategies is a significant focus for organizational effort.

Strategy is the determination of the basic long term goals and objectives of an enterprise and the adoption of the courses of action and the allocation of resources necessary for carrying out this goals (Chandler, 1962). A strategy enables an organization find direction and determine their market scope in order to achieve sustainable competitive advantage. A strategy might be formulated for broad, long-term, corporate goals and objectives, for more specific business unit goals and objectives, or for a functional unit, even one as small as a cost center. Companies derive their strategies by using analytical tools, indexes and plans. Strategies exist in several levels in an organization and varies with respect to organization size, market share, age. This level includes corporate strategy, business strategy, operational strategy and IS Strategy. Organization formulate and implement Business and IS Strategy to gain competitive advantage over their competitors.

A business strategy is an analytical management tool used for planning a future business path (Glaser, 2005). It addresses the internal and external business environment, the approach to competition, vision and allocation of company resources and which calls on strong commitment in its formulation and execution (Henderson, 1989). Business strategy is an essential part of any effective business plan. Business Strategy plays a critical role in an organization since it creates an enabling environment for businesses to actively look for opportunities to exploit, adapt and seek to improve business by building awareness and understanding of current strategies and successes. A business strategy is important because it allows resources to be targeted and also because it allows the shareholders, customers, banks and employees to see that the business is taking account of their interests. Business strategy enables business leader to find areas to work with their customer and create a value chain to offer an integrated solutions.

A business strategy provides an agreed set of objectives for the business (Porter, 1985). To formulate a business strategy, a Strengths, Weaknesses, Opportunities, and Threats (SWOT)

analysis may be carried out to identify internal and external factors that have an impact on the business. Threats might include competitors who can come up with better products or over-reliance on a particular supplier. A business strategy might, for example, include plans for new products and new markets; it might involve selling of the business or buying other businesses. Business strategy is critical to organization survival, business strategy is enable and support by information system strategy (Henderson, 1989).

IS strategy is a strategic business tool used to structure a future path and it addresses the use and management of IT resources, business IT relationships both internal and external and the flow and storage of information throughout the organization (Henderson and Vankatraman, 1993). IS strategy enables organization attain a competitive advantage over its competitors. The IS strategy is concerned with the planning, introduction and use of IT resources for the benefit of the whole organization (Broadbant and Well, 1993). Success in IS strategy is achieved through creating and adding value to the customer. However, inadequate business strategy which changes at a much slower pace is reducing the benefits of value chain creation and hence eroding the use of information system to its fullest. Effective IS planning helps organization set priorities and decide how best to coordinate activities to achieve its goals. Organization identifies goals, resources and dependencies and aligns this to its overall organization vision, hence creating a synergy.

IS synergy is an environment where corporate members tend to disseminate and share information willingly and collaborate with each other across subunit boundaries, forming a harmonious organizational climate to generate synergy through the power of unity (Li, 2006). IS strategy should enable and support information synergy. Therefore the more the coordination between Business and IS units the higher the synergy which interns promotes the integration of Business and IS strategies. IS impacts organizations by increasing the ability for organization to respond to changes and take advantage of new opportunities. Organizations that have been able to successfully integrate technology and business strategy have created significant business returns (Reich and Benbasat, 1996). IS has become an important enabler of business strategies in such areas of mass customization, competitive differentiation, quality improvements, and process automation and improvement (Bruce,

1998). Company officers that have aligned IS with business strategies argue that the integration was crucial to the firm's survival and its success (Earl and Feeny, 1994).

Alignment of business and information strategies refers to the extent at which business strategies are enabled, supported, and stimulated by information strategies (King, 1978). Alignment in this extent is viewed as a driver to achieving an historical, integrated and systematic competitive advantage. Achieving alignment between business and IS in a dynamic environment is difficult (Broadbent and Well, 1993). As organizations continue to operate in an uncertain economy, industry and competition which continues to evolve, alignment between business and IS strategy is becoming a focus. There exist separation between business function and IT functions in an organization, IT is viewed as a cost center that provides support to business function.

The "intention of developing an IS strategy is to ensure that there is a strong and clear relationship between IT investment decisions and organizational overall strategies, goal and objective" (Glaser, 2005). While IS strategy is concerned with the planning, introduction and use of IT resources for the benefit of the whole organization (Broadbent and Well, 1993), alignment of business and IS strategies involves the process that enables and shapes IT applications, infrastructure and organization to achieve cohesive and concurrent IS and business units at the strategic level (Reich and Benbasat, 1996). Organizations strive to achieve alignment of IS and Business strategies in order to derive a robust and adaptable technology throughout the organization that supports organization strategy. Alignment of business and IS strategy is achieved through understanding of the business process and transforming this into IT resource, hence leading to successful business focused outcome.

Linking of IS and Business strategies is core to any organization survival and competitiveness (Reich and Benbasat, 1996). Therefore organizations have to find the best way to align this through a process driven mechanism. The process of aligning Business and IS strategy is not only limited to the immediate strategic focus, but is also governed by the overall direction of business environment (Li et al, 2007). The process of alignment becomes an immediate goal to achieving globalization and ultimate competitiveness. The process of aligning Business and IS strategies is the method and procedure of actions done

within an organization to achieve IS/Business synergy(Andrews,1980). Orna (1999) noted that organizations have adopted different techniques of achieving alignment, the different activities involved in alignment results in a unique Business/IS model. The success of alignment between business and IS strategy is dependent of some factors that promote this alignment. Gartlan (2007) identified ten factors that promote alignment between IS and Business strategy. The ten factors are as follows: Firm wide active involvement, long term focus, Meeting of the minds, clarity and consistency organization strategic plan, management skill, alignment facilitating processes, organizational, organizational culture, communication and IT as an organizational tool.

## **1.2 Challenges of Aligning Business and IS strategy**

Aligning IS with Business strategy is critical to firm's success and yet remains an ongoing challenge. Technology especially in Banking industry in Kenya continue to play an important role in competitiveness and globalization. Banks have developed a concept of branchless as the country is no longer viewed as regions, branches or units. The challenge is now how they can align around a common goal and identify the drivers and end product of alignment. Gartlan (2007) noted that the impact of communication is imperative to achieving alignment. Managers lack then understanding of the business needs and in some situations they are not involved the strategic formulation process.

## **1.3 Statement of Problem**

The ability of organizations to survive and compete effectively will depend upon how well they enhance their competitive advantage. This means that IS and Business strategies must align and unify with the customers' expectations. The ability to collect, process, analyze and efficiently disseminate meaningful information will enable organizations to become more competitive. According to Coleman (2007) highly successful organizations of the next century will be ones that uncover the hidden powers that technology brings to business processes and operations.

Aligning IS and Business strategies is core to any organization survival and competitiveness where different organizations use different processes to achieve this alignment. This is

widely observed in the Banking industry where strategic choices are made in selection of core banking applications, business intelligence systems and risk management systems.

Various authors have identified activities that organizations can use to align business strategy and information system strategy. Orna (1999) identified four key activities: Understanding the organization, identify what alignment should achieve, match what it is doing with what it should be, produce information policies and develop appropriate IS- Business strategies. . Teo et al (1997) on the other had highlighted six activities; identify business strategy objectives and IS strategy objectives, establish and evaluate the baseline architecture, develop the conceptual enterprise model, develop the target architecture, develop migration strategy and implementation plans.

One of the biggest challenges for IT in today's rapidly changing business environment is in accurately aligning IT projects with well-understood business objectives. In many cases, the IT projects themselves are ill-conceived and /or the business objectives are poorly understood. In fact, it is not at all uncommon for an organization to launch an IT project simply to deploy a new technology because a competitor, or a recognized market leader, has done the same. This might result in deploying a popular technology with little or no concrete business value for the deploying company. The lack of alignment between investments in IS and business strategies is a major reason for the failure of companies to realize fully the benefits of large scale IT systems (Reich and Benbasat, 1996).

According to Kenya Banking Survey (2008) over the last five years a number of banks have invested in robust information technology (IT) core banking system and infrastructure. The system has enabled the banks to develop specific products, tailor-made for various market segments. Although this is happening in the industry no studies have been carried out to ascertain the extent of aligning business and IS strategy. Also the process of alignment and the challenges Banks face while trying to aligning these strategies have not been carried out.

This research is set to address this knowledge gap by determining the extent of the alignment of business strategy and IS Strategy, establishing the activities commercial banks use to align these strategies and finally establish the challenges they face in the process. Therefore, the need to adequately align business and IS strategy, the need to adopt appropriate process and the need to counter challenges of alignment raise the following question. To what extent have banks in Kenya aligned Business strategies with IS strategies? What process of aligning business strategies and IS Strategies used by banks in Kenya? What are the challenges banks in Kenya face in aligning business strategies and IS strategies?

#### **1.4 Research objectives**

**1.4.1** The objective of the study was to:

- a) Establish the activities commercial banks use to align business strategies and IS strategies.
- b) Determine the extent of the alignment of business strategy and IS strategy in Kenya banks.
- c) Establish the challenges that banks in Kenya face in aligning business and IS Strategy.

#### **1.5 Importance of the study**

On completion of this study, it is expected that the study might provide a wakeup call and a basis for planning integration tactics for organizational teams at all levels. The study will also provide important practical implications for senior managers and others responsible for the development, implementation, or execution of strategies in organizations. The study will benefit banks in Kenya to develop strategies that achieve and sustain Business/IS competitive advantage. The study will also be of interest to government agencies and policy makers in the development of policy frameworks that will provide basis for equitable distribution of resources. The study will interest academicians in enriching them with knowledge and new area of research.

## CHAPTER 2: LITERATURE REVIEW

### 2.0 Introduction

Alignment between business and IS strategy is still one of the most important challenges for organization today. Business and IS strategy alignment remains elusive because in many organization there is a missing link between IT investment and business performance (Sircar and BorBordoloi , 2000). Although IS and Business strategies are often treated separately, alignment that is IT-driven may not realize this goal, whereas alignment that is business focused may not create IT payoffs that technology alone cannot create. Without an effective alignment between business and IT, tremendous IT investments would not create sustainable competitive advantage or improve business performance. Failure to properly manage the organizational, social, and technical factors that affect the alignment process between business and IS will create a disconnection between IS and business performance. The extent of alignment is complicated and ambiguous (Saberwal and Chan, 2001). Thus, it is difficult to trace how IT-driven business is directly or indirectly linked to an organization's performance.

### 2.1 Business strategy and IS strategy

Information System IS over the years continue to add value to organization as an element of competitive strategy, Rockart (1979) acted as a precursor in the domain of the strategic alignment between business strategy and IS strategy, he stressed the importance that organization derives from linkage of IT application to business strategy to its critical success factors. The link between IS and Business strategy can be viewed from different point. McLean & Soden (1977) suggested that Business and IS strategies should be independent, in his argument IS and Business strategy requires appropriate choice to position firm with respect to a dynamic and uncertain business environment. Therefore at any point in time the challenge of managing IS function must parallel that of strategic management of the organization for effective management of complex set of alignment. Henderson and Venkatraman (1993) on the other hand argued that organization find it difficult to realize the value from IT investments because of lack of alignment between business and IS strategy. Hence, Alignment achieved must be a process in motion to be successful. Porter (1985)

highlighted the contribution of IT in enhancing the competitive position of the organization. Das, Zahra and Warketin (1991) identified four dimensions related to the strategic deployment of information technology: competencies, role of IT, design and the development of IS, and infrastructures, all set to support business strategy and lead to business performance.

In developing IS and Business strategy alignment model, (Henderson and Venkatraman, 1993) explained the links between business strategy and IS strategy, which they defined in terms of three components: technology scope, systemic competencies, and IT governance. They further argued that IS and business integration must ensure both functional and strategic alignment across the internal and external business and Information system domains.

Finkelstein (1989) adopted Information engineering (IE) approach to alignment of Business and IS strategy. The IE is to align hardware and software resource to the corporate plan. Finkelstein suggested the use of a life cycle model for analyzing the products and services with regards to the environmental factors such as the market and competitors. Dickson and Wetherve (1985) described a unique alignment technique, in this technique any alignment is formed by a formal attempt to match the investment in IS with an identifiable business need, to create certainty that spending derives gains. Henderson and Venkatraman (1993) in their assessment they attempted a different approach to Business – IS strategy technique. In their technique business-IS alignment impact to organization, and this can be ranked depending on the planned approach. The process of ranking requires a process of agreeing on what to regard and treat as the most important issues. Therefore the use of Critical Success factor (CSF) analysis was proposed by Henderson and Venkatraman. Therefore alignment techniques works by identifying business goals and plans, and deduce IS requirements via a formal method for translating them.

Vitale, Ives and Beath (1986) identified two fundamental ways to look at the relationship between business strategy and IS strategy: the dependent approach and the impact approach.

The dependent approach means that IS strategy supports business strategy in the same way as any other organization functional strategy, be it marketing, finance or production. The impact approach is considered as more powerful in the sense that the IT function could give the lead to the organization's mission and goals, and therefore being determinant of the business strategy. As explained by Brown and Sambamurthy (1999), IT enables business strategies and allows the firm to adopt a stronger competitive posture.

Galliers (1991) speculated that much of continual senior management disinterest in the process of IS strategy planning results from the refusal of many organizations to concentrate upon the core line of business related strategies. The technology issues addressed by IS strategy and infrastructure issues addressed by Business strategy are secondary to organization strategy (Sullivan, 1985). Teo and King (1996) confirmed the existence of four types of integration between business planning and IS planning (administrative, sequential, reciprocal, and full integration); their proposition that greater fit supports a firm's business strategies more effectively was confirmed by the significant positive relationship of planning integration with IS contributions to organization performance.

The fit between IT structure and organizational structure has long been considered to play a role in explaining firm performance. In a decentralized organization, information technology is thought to enable decentralization of control and delegation of decision authority by facilitating the dissemination and sharing of information throughout the firm (Tavakolian, 1989).

## **2.2 Activities of Aligning Business and IS Strategy**

Li et al (2006) attempted to develop Business-IS alignment planning activities. The elements of the activities includes; phases, stages and modules of elementary activities. He further literate that the linkage of IS and Business strategies only consisted of adopting elements of the corporate strategy. The technique aimed at categorizing the target organization into IS maturity stage, aid the analysis of strategic impact of IT and suggested how strategic advantage may be sought. He identified four activities namely Input, process, output and

Outcome. This method has some advantage in that it give the ability to managers to control and review the various deliverable during the whole life-cycle of Business-IS alignment process.

Andrews (1980) identified seven steps to align business and IS strategies, this consisted of defining mission and objectives of the organization, assessing the environment for threats and opportunities, assess internal strengths and weakness, consider alternative strategies through competitive analysis, choose appropriate strategies, implement strategy through complementary structure systems and operational processes, set up control system to ensure success, feedback to planning. He also argued that IS Business strategy alignment should be based in a derivation of needs from the organization strategy.

Orna (1999) described five main activities to align business and IS strategies, this activities are; understanding the organization, identify what alignment should achieve, match the it is doing with what it should be, produce information policies and develop appropriate IS-Business strategies. She emphasized that in order for the alignment to be achieved the organization policies should be robust so that they can deal with changing need of the business. Teo et al (1997) supported that IS-Business alignment can be developed to support organization model framework. In the model he identified five key phases to align IS to Business strategies. This includes; identify business strategy objectives and IS strategy objectives, establish and evaluate the baseline architecture, develop the conceptual enterprise model, develop the target architecture, develop migration strategy and implementation plans.

### **2.3 Models of Business and IS Strategy**

Tapia et al. (2007) developed a model called Value-Added business-IT alignment Maturity Model VITAL MM. He argued that organization have different level of maturity in its alignment between business and Information Technology, he further literate that maturity of each participating organization is influenced by the maturity of business-IT alignment of entire cross-organizational collaboration. Cross-Organization collaboration consist of complex system where decisions does not originate from one point but from different firms

and different individuals or groups. The end product of business-IT alignment is a robust coordination of three relationships; process architecture, IS architecture and partnering structure. Organization can vary these relationships to achieve desired competitive advantage.

Parker et al. (1989) and Henderson and Venkatraman (1993) presented a simple strategic alignment model, in his model the link between Business and Information system strategy is based on Business – IT Processes. This shows clearly the links between IS and Business strategies and the processes connected with them. On the other hand, several research studies have defined the link between IS practices and improved organizational decision-making (Rockart and Bullen 1986).

Henderson and Venkatraman (1993) developed strategic alignment model (SAM), in the model they discussed the linkages of the four domains of Business Strategy; IS Strategy, Organizational Infrastructures and Processes, and IT Infrastructure and Processes. Business make decision and this decision is dependent on the business scope, they include dimensions for IT scope, systemic competencies and IT governance. Organizational infrastructure and processes is concerned with the administrative infrastructure, business processes (including workflow), and organizational skills. The adaptive strategy model characterizes the co-alignment of the IS strategy with its environment. The environment from the perspective of IS consist of the internal environment of the organization and the external environment. This stresses the co-alignment of business strategy and IS strategy as well. An IS strategy based on this model may be planned, but need not always be planned.

Porter (1985) identified the competitive advantage strategy model. In his model an organization position within an industry determines whether an organization profitability is above or below the industry average. He identified two types of competitive advantage a firm can possess: low cost or differential competitive advantage, organization average performance is dependent on three factors: Cost Leadership, differentiation and focus strategies.

## 2.4 Factors that promote alignment between IS and Business strategy

Gartlan (2007) identified ten factors that promote alignment between IS and Business strategy. The ten factors are as follows: (a) *Firm wide active involvement*- this is the involvement of the entire organization in the formulation of IS / Business strategy; (b) *long term focus*- strategy developers should put in mind long term organization vision while formulating strategic plan; (c) *Meeting of the minds*- managers should agree during IS/Business strategy formulation especially on contentious issues; (d) *clarity and consistency organization strategic plan*- must be easily understood by everyone within an organization; (e) *management skill and capability*- managers must have necessary skills in developing IS/Business strategy; (f) *alignment facilitating processes*- organization process must be aligned towards achieving strategic objectives; (i) *organizational structure*- should be design in such a manner that various organization strategies are met; (j) *organizational culture*- must be created to encourage involvement in strategic planning and implementation; (k) *communication*- communication within the organization must be efficient, productive and fast when it comes to achieving IS/Business strategy success and finally (l) *IT as an organizational tool* must be utilized appropriately.

*Firm-wide active involvement*: - The success of strategic planning does not rest on the plan alone(Henderson and Venkatraman 1993). Managerial insight and organizational structures and processes are other key areas that often affect strategy implementation.

*Long term focus*: - The process of formulating the Business and IS strategy should also includes the identification of future opportunities to be exploited as well as threats that must be avoided, the evaluation of the organization's strengths and weaknesses, and the creation of a control system to ensure that the organization remains on course to achieve intended objectives(Broadbent and Weill, 1993)

*Meeting of minds*: - Consensus creates a cooperative dynamic rather than a competitive one. Everyone works together to make it the best possible decision for the group(Broadbent and Weill, 1993).

*Clarity and consistency:* - A clear mission and vision of organization will drive senior managers in establishing a purpose driven strategy formulation which is all inclusive (Chan et al, 1997). To effectively respond to these any challenges, managers need an effective strategic planning process one that would provide a clear and credible direction, support consistent decision making at all levels of the business, and align to strategic planning at the corporate level

*Management skill and capability:* - The need for IT managers to understand business needs is particularly important (Kaplan and Norton, 1996). Effective management impacts directly on business performance. Changes in technology and organizational changes create a need for managers to continually develop and enhance their competences and their personal attributes as part of an on- going development process (Rockart, Earl and Ross,1996).

*Alignment facilitation process:* - Strategically-oriented decision-making processes that are maintained and managed by key stakeholders are important for successful alignment (Broadbent and Weill, 1993).

*Organizational structure:* - Having such mechanisms in place not only ensures that IS and business strategy will be formulated but also holds individuals accountable when alignment is not achieved and business goals remain unfulfilled (Broadbent and Weill, 1993)..

*Organizational culture:* - A supportive organizational culture is required to establish a strong working relationship between the business and IT functions and achieve successful alignment (Kantrow 1980).

*Communication:* - Communication facilitates understanding and promotes mutually beneficial thinking about strategy (Rockart, Earl and Ross, 1996 ;Pollalis 2003). When communication is rewarded and recognized it became an organizational norm (Kaplan and Norton 1996).

*IT as an organizational tool:* - IT needs to be perceived by organizations as a resource or business asset (Willcocks and Plant, 2001). This perception needs to be deeply instilled

within organizations to ensure that new IT opportunities that emerge are recognized and can impact business strategy formulation (Henderson and Venkatraman, 1993).

## **2.5 Importance of aligning business and IS strategy**

Henderson and Venkatraman (1993) emphasized that while organization strive to align Business and IS strategy, both the internal and external alignment as well as function integration must be accounted. Internal alignment involves departments, divisions, sections and groups while external alignment includes customers, business partners. Luftman (2004) noted that neither IT nor the business can provider business value alone and their strategies they need to be aligned. He identified reasons why it is critical to align business and IS strategy: Organizations are information based, value of knowledge is higher in the market today, IT is enabler for continuous innovation and finally IT contributes to reduction of costs.

According to Rockart (1979), companies that align business and IS strategies are in a better position to execute, implement and adopt to changes in business environment. Das, Zahra and Warketin (1991) identified ten reasons for alignment; Profitability, reduction in cost, reduces social problems, provide solution to social issues, provide competitive edge, good public relations, facilitates venture into new line of business, boost customer loyalty and it's the right thing to do.

## **2.6 Challenges of Aligning Business and IS Strategy**

Despite the importance of aligning IS with business strategy, many organization struggle to understand their business needs . Shied (2009) commented on an article that “The smart grid won’t ever happen unless IT and Business unit work together to achieve common goal and fully understand each other’s needs and limitations”. To achieve this alignment, organization must integrate their management teams closely it build trust over time (Kramer,2005).

Aligning IS with Business strategy is critical to firm’s success and yet it remains an ongoing challenge. Technology should have the same end goal as other disciplines in the business in

order for it to work towards the overall success of the organization, the challenge is how each unit can align around a common goal and identify the drivers and the end product to alignment.

Andrew (1980) noted that aligning IS with Business takes time and it cannot be done overnight. Organization tend to change policies and procedures too quickly without following due process, in other cases organization set too high for users to achieve. Organization tend to ignore cultural issues that impacts the ability to achieve alignment, this is so since most organization view IT as a cost center instead of an investment center. Gartlan (2007) while identify factors that promotes alignment noted that the impact of communication is imperative in achieving this goals. He further noted that communication facilitates understanding and promotes mutually beneficial thinking about strategy. IT department needs to listen to feedback raised from business department and business units need to set priorities and drive the process. Both business and IS units needs to set their expectation realistic.

Business and IS strategy alignment remains elusive because in many organization there is a missing link between IT investment and business performance (Sircar and BorBordoloi , 2000). Although IS and Business strategies are often treated separately, alignment that is IT-driven may not realize this goal, whereas alignment that is business focused may not create IT payoffs that technology alone cannot create. Without an effective alignment between business and IT, tremendous IT investments would not create sustainable competitive advantage or improve business performance.

## CHAPTER 3: RESEARCH METHODOLOGY

### 3.0 Research Design

This is was a census survey aimed at surveying the extent of alignment of business and IS strategies in Bank in Kenya and establish the activities commercial banks use to align business strategies and IS strategies. The study also established the challenges that banks in Kenya face in aligning business and IS Strategy.

### 3.1 The population of study

The population of study consisted of Commercial Banks in Kenya, which are 44 according to statistics by CBK on their official website for the financial year ended 30<sup>th</sup> June 2009. The respondents targeted were business executives, IT executives and strategic planners from all these banks. This group of executives are important to the study as they will provide needed perceptions regarding organizational performance and participate in Organizational strategic formulation. A census of the banks is necessitated as the population of the banks is not considered large.

### 3.2 Data collection method

Questionnaires was used to collect the primary data. The questionnaires was self-administered, this was to provide more privacy to the respondent since the data collected might be sensitive to some banks, some banks consider strategic issues as confidential. In order to check the applicability of the questionnaire in context, it was pre-tested on a number of respondents in a selected bank. A revised survey questionnaire was then dispatched to the targets 44 commercial banks using “drop and pick later” method.

### 3.3 Questionnaire design

The questionnaire designed consists of four sections. Section A consists of open-ended questions and gathers the general information about individual respondent and organization background information and nature of the strategy-formation processes. Section B consisted

of factors that promotes alignment, Section C determined the process used by individual banks to align business with IS strategy and finally section D examined challenges faced during alignment process. The questionnaire was administered by 'drop and pick' method.

### **3.4 Data analysis**

Completed questionnaires was edited after receipt from the respondents during the analysis stage to ensure completeness and consistency. Data was then summarized in tables according to the main section of the questionnaire: Section A which includes Individual information and organization Background Information was used to get the background information about each respondent and organization . General information about the organizations and their broad perceptions of alignment between business and IS strategy was key feature to this section. The response was analyzed by Statistical Package for the Social Sciences (SPSS) and the responses in was shown as a percentage of each factor and a descriptive analysis was followed to interpret the results.

Section B consisted of factors that promote alignment, this section was used to identify the extent of alignment and provide a more focused perceptions of alignment between business and IS strategy. The data was analyzed using SPSS and cross tabulations was used to examine the interaction of importance of each factor. Section C and D identified various activities and process that different organization employee to achieve alignment between business and IS strategy. The respondents where ask to identify which activities they performed to achieve alignment between business and IS strategy a yes and no type of response was expected. Cumulative tables was used to sum together similar responses on section C and D.

## CHAPTER 4: DATA ANALYSIS AND INTERPRETATIONS

### 4.0 Introduction

This chapter covers data analysis and findings of the research. The first section gather's the general information about individual respondent and organization background information and nature of the strategy-formation processes. The second section highlights the factor that promote alignment between business and IS strategy, the third section highlights the process used by individual banks to align business with IS strategy and finally the fourth section examined challenges faced during alignment process. Questionnaires was administered banks using "drop and pick later" method. A total of 44 responses was received yielding an overall response rate of 33% from the overall response. This implies that of the total response only a third returned.

### 4.1 General Information

This section entailed gathering general information about the individual and the organization and to understand the nature of the strategic formulation process. Summary Characteristics of the sample are shown in Table 1.

**Table 1 Summary of Information**

#### INDIVIDUAL INFORMATION

##### *Gender*

Male	32	73%
Female	12	27%

It was noted that of the 44 respondents 73% where male while 27% female

##### *Highest completed education level*

High School	0	0%
Bachelors	2	5%
Graduate	42	95%

Majority of the respondents where graduates 95%, it was noted that the list education level was Bachelor's degree. This indicated that the respondents had sufficient education

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background to understand the research.

*College major*

Computer	13	30%
Business	30	68%
Other	1	2%

It was also noted that majority of the respondents were business majors 68% and 30% computer majors. Only 2% had other form of college majors.

*Years worked at your current job*

1-2	3	7%
3-5	16	36%
6-10	7	16%
More than 10	18	41%

36% of the respondent indicated have worked in the current job for 3 to 5 years

*Years worked for your current employer*

1-2	1	2%
3-5	18	41%
6-10	7	16%
Above 10	18	41%

It was noted that 41% are with the current employer for 3 to 5 years and above 10 years.

This distribution shows that most employees have worked at the current job with the current employer for the same years.

*Age*

20-30	4	9%
32-40	12	27%
41-50	9	20%
51-60	14	32%
Above 60	5	11%

Majority of the respondents are 51-60 years old 32%. Managers between 30 and 50 years contributed to an average of 25%. It was also observed that 9% are young between 20-30 years old

**ORGANIZATION BACKGROUND INFORMATION**

*Business strategy*

Yes	44	100%
No	0	0%

Dont Know	0	0%
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All respondents agreed that they have a business strategy in their organization

*IS strategy*

Yes	44	100%
No	0	0%
Don't Know	0	0%

All respondents agreed that they have a IS strategy in their organization

*Company's turnover of last year (2008)*

0-1B	18	41%
1.1-2B	9	20%
2.1-3B	8	18%
3.1B-4B	6	14%
Above 4B	3	7%

Majority of the organization have a turnover of less than 1 billion and 21% have turnover of over 3 billion shillings

*Number of employee*

1-500	1	2%
501-1000	15	34%
10001-1500	14	32%
1501-2000	11	25%
Above 2000	3	7%

A significant majority of organization 32% have number of employees range from 1000 to 2000. However 25% have employees range between 1501 and 2000

*Ownership structure of organization*

Locally	30	68%
Internationally	3	7%
Both	3	7%
Blank	8	18%

In terms of ownership more 68% of the banks surveyed are locally owned with approximately 7% being foreign owned or both local and foreign ownership.

**NATURE OF THE STRATEGY-FORMATION PROCESSES**

*Important is IT to organization's operations*

Not Important at all	0	0%
Not Important	0	0%
Neutral	0	0%
Important	2	5%

Very Important	42	95%
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95% of the respondents agreed that aligning of IT and business strategy is very important

*Organisation's total capital expenditure spent on IT per annum*

0-10%	14	32 %
11-20%	1	2%
21-30%	26	59%
31-40%	3	7%
41-50%	0	0%
Over 50%	0	0%

59% of the respondent indicated that there organization spends 21-30% if of the total budget on IT per year, 14 % spend less than 10%

*Extent of involvement in business strategy formation in organisation*

Very Uninvolved	0	0%
Uninvolved	0	0%
Neutral	0	0%
Involved	14	32%
Very Involved	30	68%

68% of the respondents are very involved if business strategy formulation in their respective organization while 32 % are involved to some extent.

*Extent of involvement in information systems strategy formation*

Very Uninvolved	0	0%
Uninvolved	0	0%
Neutral	10	23%
Involved	11	25%
Very Involved	23	52%

52% of the respondents are very involved if information strategy formulations in their respective organization while 23 % are neutral to some extent.

*Importants of achieve alignment between business and information systems strategy*

Not Important at all	0	0%
Not Important	6	14%
Neutral	9	20%
Important	12	27%
Very Important	17	39%

39% of the respondents find it very important to achieve the alignments between business and information system strategies, while 27% assign some importance. It was also

observed that 20% where neutral.

*Length of time firm-wide strategy plan in place*

0-1	0	0%
2-3	0	0%
4-5	44	100%
5-6	0	0%
Above 6	0	0%

All respondents agreed that there firm-wide strategy plan is in place between 4-5 years

*Company's strategy planning time frame*

Short Term	0	0%
Mediam Term	0	0%
Long Term	44	100%

All the respondents have a long term strategy plan in place

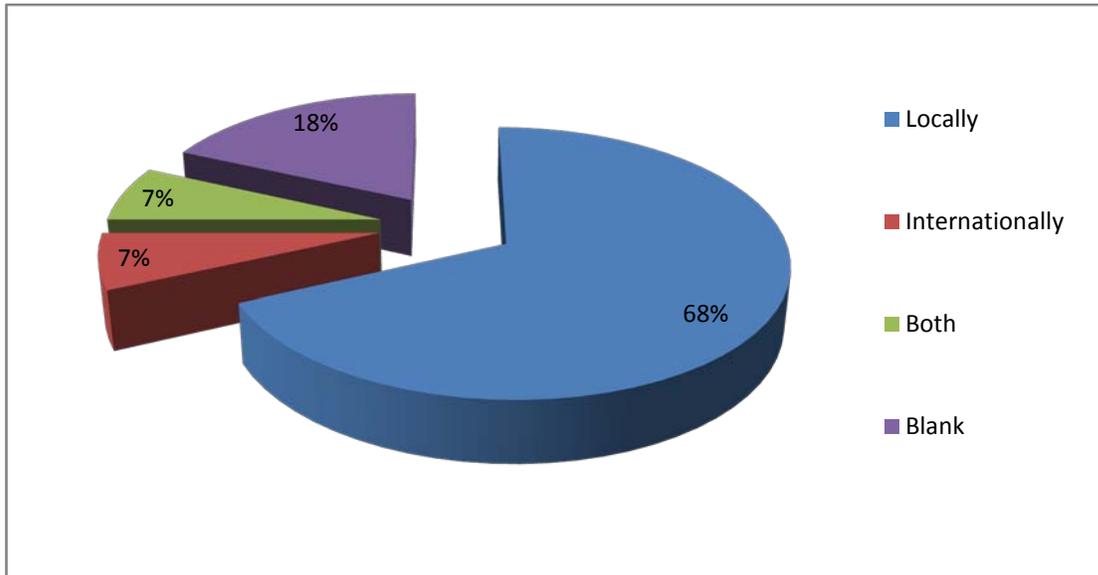
*Extent of firm-wide strategy iteration with business units*

Limited	8	18%
Developing	22	50%
Extensive	14	32%

50% of the respondents have developing firm-wide strategy iterations with business unit, while 32% have an extensive iteration.

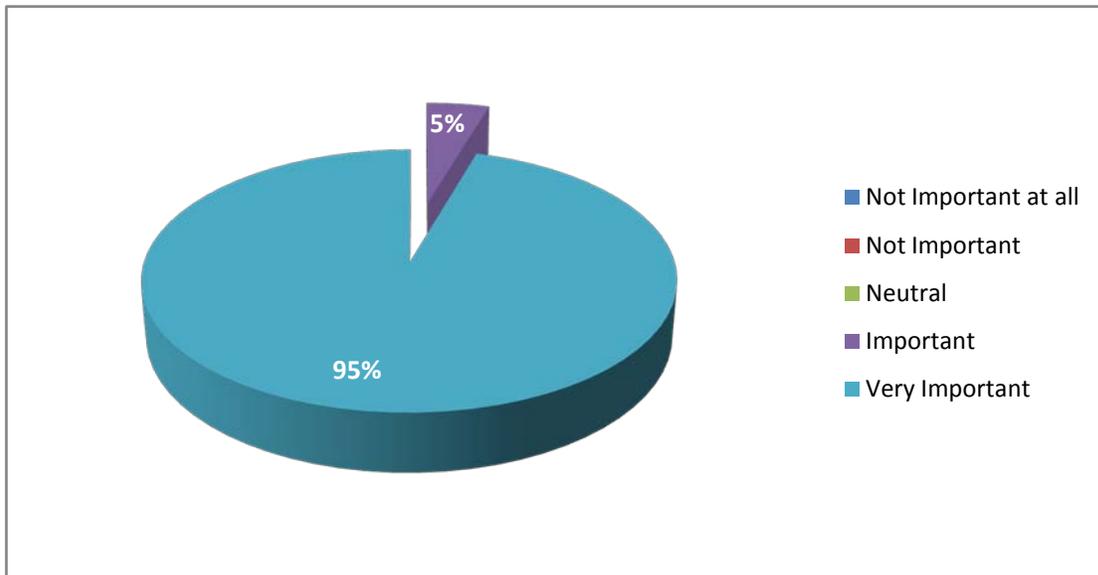
In summary, tt was noted that of the 44 respondents 73% where male while 27% female, majority of the respondents where graduates and business majors of 68%. 36% of the respondent indicated have worked in the current job for 3 to 5 years, it was noted that 41% are with the current employer for 3 to 5 years and above 10 years. All respondents agreed that they have a business and IS strategy in their organization. Majority of the organization have a turnover of less than 1 billion and the number of employees range from 1000 to 2000. Intermis of ownership more 68% of the banks surveyed are locally owned with approximately 7% being foreign owned or both local and foreign ownership. This is shown in chart 4.1

**Chart 1 Profile of Bank ownership**



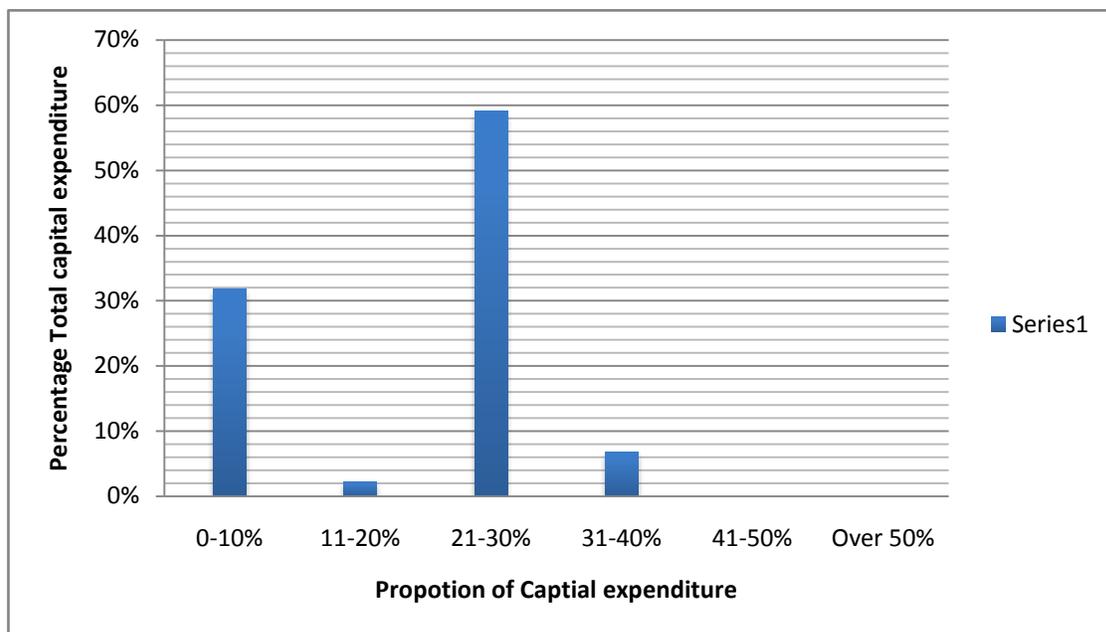
Most respondents 95% agreed that IT is important to organization's operation as shown in Chart 4.2. 5% of the respondent agreed that IT is important.

**Chart 2 Importance of IT**



Of the banks surveyed, over half (59%) spending 21%-30% of their capital expenditure in IT while (32%) spending 0-10% of equivalent proportion as shown in chart 4.3. The study also showed that 68% of locally owned companies spend up to 0%-10% of capital on IT annually in comparison with 7% of foreign owned banks that spend up to 20%-31% of capital on IT. This indicates that locally owned banks are likely to achieve alignment less than foreign banks. Further banks with turnover of Kshs. 3.1 billion to 4 Billion spend up to 20%-30% of capital on IT, while banks with turnover of Kshs 0 to 1 billion spend up to 0%-10% of capital on IT.

**Chart 3 Percentage of your organisation’s total capital expenditure is spent on IT per annum**

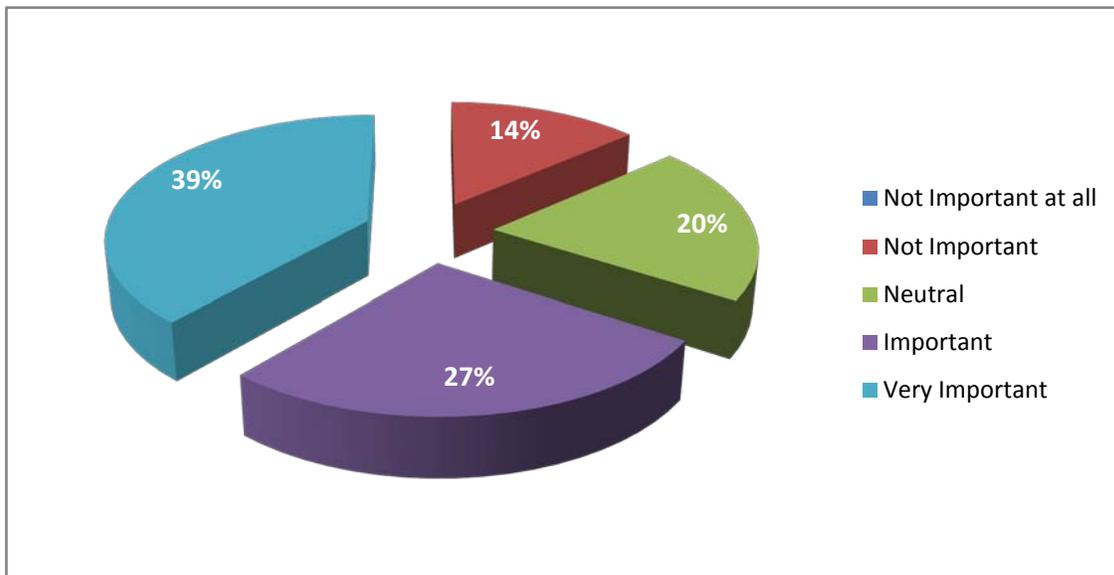


The research also revealed that 68% of the respondents are very involved in business strategy formulation against 32% of whom were just involved. It was also noted that 23% of the respondent where neutral in their involvement of IS strategy formulation. 52% of the respondents where very involved in IS strategy formulation. Some interesting observations

was noted, of Locally owned banks 90% responded that they were neutral in their involvement in IS strategy formulation process and 78% were very involved in business strategy formulation. This trend can lead to conclusion that locally owned banks focus more in business strategy formulation by great involvement of manager in its formulation, and less focused in IS strategy. Of the respondents who were computer graduates 56% responded that they were very involved in IS strategy formulation while 13% of the same respondent were very involved in business strategy formulation. The same trend is observed in business graduates, with 82% very involved in business strategy formulation and 22% being involved in IS strategy formulation.

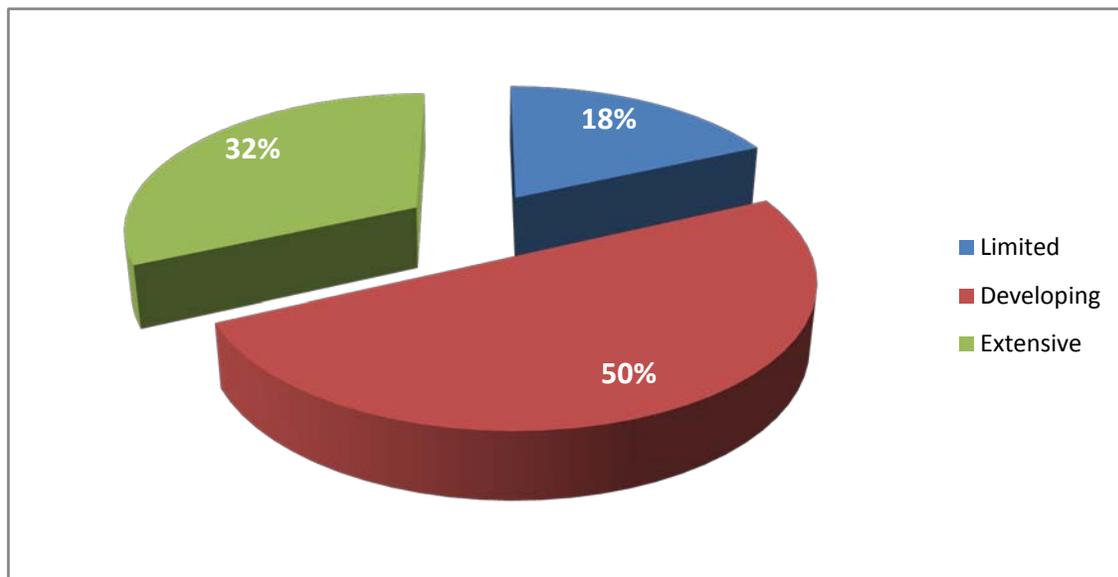
Chart 4.4 shows that 39% of the respondents find it very important to align business and IS strategy, while 14% felt alignment is not important. This is significant since of 43% of the respondents who felt they were not involved in IS strategy formulation 100% responded that alignment was not important to the bank. 94% of computer graduates found it very important to achieve alignment while 63% of business graduate found it just important to align business and IS strategies.

**Chart 4 Importance of Aligning Business and IS strategies**



100% of the banks that responded have a 4-5 firm-wide strategy plan in place and there strategic planning time frame is long term. Chart 4.5 shows that majority (50%) of the banks are in there developing stage with regards to firm-wide iteration. 51% Computer graduates responded that the firm is in limited stage, while 95% of business graduates responded that the firm is in developing stage.

**Chart 5 Firm-wide strategy iteration**



#### 4.2 Factors that promotes alignment

**Table 2 Factors that promote alignment between business and IS strategy**

Factors that promotes alignment	Mean	Standard deviation	Minimum	Maximum
Active involvement of Business Manager during strategic formulation	3.50	0.525	0.068	1.273
Active involvement of IT Manager during strategic formulation	3.30	0.674	0.000	1.705
Consensus between business and IT decision makers	3.27	0.695	0.000	1.705
Business strategy focus on organization long	3.55	0.930	0.023	2.273

term goals				
IS strategy focus on organization long term goals	3.80	0.754	0.000	1.727
Clarity with business goals	3.77	0.697	0.000	1.727
Consistent with business goals	3.77	0.697	0.000	1.727
Management skill of business decision makers	3.48	0.478	0.000	1.136
Management skill of IT decision makers	3.66	0.789	0.000	1.727
Management capability of business decision makers	3.66	0.810	0.000	2.091
Management capability of IT decision makers	3.82	0.733	0.000	1.636
Strategic oriented decision making process	3.45	0.683	0.000	1.591
Organization structure that provides mechanisms for accountability and ownership	3.11	0.617	0.000	1.545
Supportive organizational culture	3.05	0.465	0.182	1.273
Communication between business and IT decision maker	3.59	0.647	0.045	1.591
IT as a business asset	3.55	0.685	0.000	1.636

From the research findings factor that promotes alignment between business and IS strategy that was highly ranked of mean score 3.82 and a standard deviation of 0.733 was “Management capability of IT decision makers”. Most banks felt that management capability of there IT decision makers will play a critical role in the achievement of this alignment. The high the capability the high the degree of alignment. These supports the result that most IT managers felt they are not involved in business and IS strategy formulation. The second highly rated factor that promotes alignment is “IS strategy focus on organization long term goal” with a mean score of 3.80 and a standard deviation of 0.754. From the analysis Long term focus of IS strategy towards organization goal is key to alignment. Of the banks surveyed over 73% of the responded agreed that IS plays a critical role in achieving alignment between business and IS strategy.

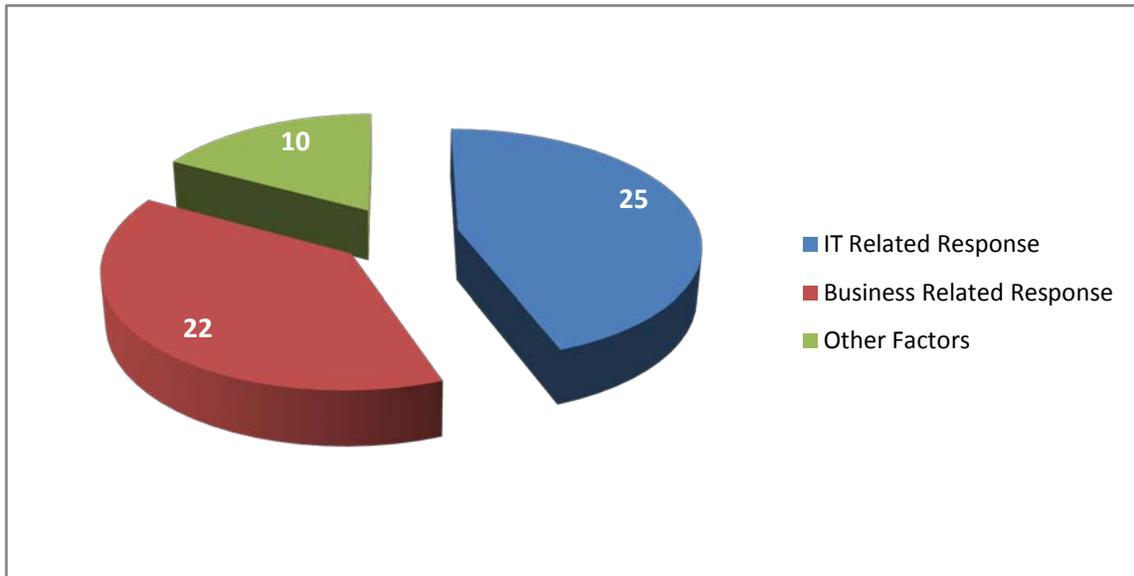
Another important factor “Clarity with business goals” and “Consistent with business goals” were rated third with mean score of 3.77 and standard deviation of 0.697. Majority of the respondents felt that clarity and consistency in business goals play critical role in achieving alignment, banks have to have a clear and consistent goals that is well understood and

communicated effectively. “Management Skill of IT decision Makers” was rated fourth with a mean score of 3.66 and a standard deviation of 0.789. Further analysis reveals that IT managers and their skill in strategic development plays a critical role in alignment.

With a mean of 3.05 and standard deviation of 0.182 “Supportive organization culture” was rated least important factor that promotes alignment between business and IS strategy. Most organization have organization culture already entrenched with its structure and there for the managers felt it did not play a bigger role in alignment since culture can be cultivated, created or removed at any point of its growth. The other least factor is “Organization structure that provides mechanisms for accountability and ownership” with a mean score of 3.11 and a standard deviation of 0.617 and “Consensus between business and IT decision makers” with a mean score of 3.27 and standard deviation of 0.65.

Chart 4.6 shows summary of responded grouped into IT related factor, business related factor and other factors. From analysis 25% of the response was IT related factors, 22% business related factors and 10% other factors. From this summary IT plays a critical role in alignment this includes factors like Active involvement of IT Manager during strategic formulation, Consensus between business and IT decision makers, IS strategy focus on organization long term goals and Management capability of IT decision makers. For alignment to be achieved IT managers need to be strategically informed, trained and participate. Business related factors also contribute a lot to the alignment with 22% of the response rating it as important. Finally other factors such as Strategic oriented decision making process and Supportive organizational culture returned 10% response as important factor.

**Chart 6 Summary of Factors**



*i. Active involvement of Business Manager during strategic formulation*

38% of computer graduates responded that there is little extent of active involvement of business manager in achieving alignment of business and IS strategy with a mean of 2.46 and a standard deviation of 0.150 and 31% there was not extent in involvement. While 50% of the business graduate responded that by actively involving business manager facilitates alignment and a mere 3% felt otherwise. 53% of locally owned banks responded that Active involvement facilitates alignment to great extent while 79% of response from foreign owned banks responded that it facilitates alignment to very great extent.

*ii. Active involvement of IT Manager during strategic formulation*

50% of business graduates responded that there is little extent in involvement of IT managers in achieving business and IS alignment with a mean of .019 and standard deviation of 0.447. While 54% of computer graduates responded that there is no extent in their involvement to achieve alignment. It was however noted that 27% of business graduates felt that there is active involvement of IT managers during

strategic formulation to a greater extent. Banks that are locally owned responded that involvement of IT manager in strategy formulation facilitates alignment to little extent (42%) while 92% of foreign owned bank responded that involvement of IT managers facilitates alignment to very great extent. This is in contrast with the locally owned banks.

*iii. Consensus between business and IT decision makers*

Some interesting patterns was noted here business and computer graduates responded 50% that there is some consensus between business and IT decision makers in trying to achieve alignment. However 31% of business graduates responded that there is a greater extent while 14% of computer graduates responded otherwise. 60% of locally owned bank responded to some extent that consensus facilitates alignment while 72% of foreign owned bank response to great extent it facilitates alignment.

*iv. Business strategy focus on organization long term goals*

43% of computer graduate responded that business strategy focus on organization long term goal is of great extent to achieve alignment, the same was noted with business graduates with 61% of the responded indicating it has being of great extent. 88% of foreign owned company felt that business focus to long term goal facilitates alignment to a very great extent while 12 % of locally owned banks felt the same.

*v. IS strategy focus on organization long term goals*

70% of computer graduate agreed that there is greatest need for IS strategy focus to organization long term goal while 65% of the responded who where business graduates agree that there was some extent to achieve alignment. In overall both the business and computer graduates agreed that IS strategy focus on long term goals is critical to achieving alignment of business and IS strategy. Both locally and foreign owned banks seems to agree that IS strategy focus in organization long term goal facilitates alignment with 48% and 54% response respectively.

vi. *Clarity with business goals*

Of the respondents who were computer graduates 61% agreed that there has to be greater extent of clarity with business goals for organization to achieve alignment, while the business graduates 41% agreed at the very greatest extent. An equal proportion of business and computer graduate (12%) felt that very little of the factor contributes to alignment. 41% of locally owned banks felt that to some extent clarity with business goal facilitates alignment while 52% of foreign owned banks felt to great extent.

vii. *Consistent with business goals*

54% of computer graduates felt that “Consistent with business goals” facilitates alignment to greater extent while 70% of business graduate responded that it is of very great extent. 80% of foreign owned banks consistent business goal facilitates alignment to great extent while 34% of locally owned banks felt otherwise.

viii. *Management skill of business decision makers*

71% of response from computer graduates concluded that “Management skill of business decision makers” facilitates alignment to some extent with majority of business graduate responding that it is of very greatest extent. 66% of foreign own banks felt that management skill of business decision makers facilitates alignment of very great extent while 68% of locally owned banks responded that to some great extent.

ix. *Management skill of IT decision makers*

100% of IT graduates responded that “Management skill of IT decision makers” is very great extent to achieve alignment between business and IS strategy. Management of skill plays a predominant role in creating as well as sustain alignment. 60% of business graduates responded that this factor is of great extent to achieving alignment. Most respondents seems to agree that this factor plays an important role to achieving alignment. 86% of foreign owned banks responded that

“Management skill of IT decision makers” facilitates alignment to very great extent while 47% of locally owned banks felt the same.

x. *Management capability of business decision makers*

33% of business graduates responded to “Management capability of business decision makers” little extent facilitate alignment of business and IS strategy. 19% of computer graduates felt that this factor facilitate to a great extent alignment of business and IS strategies. This is complemented by management skill of business decision makers whose responded predict there capability. While 77% of locally owned bank responded to some extent and 49% of foreign owned banks felt the same.

xi. *Management capability of IT decision makers*

82% of business graduates felt that “Management capability of IT decision makers” facilitates alignment to a very great extent. 94% of the computer graduates also agreed that IT decision makers facilitates alignment to a very great extent. 81% of locally owned banks responded that “Management capability of IT decision makers” facilitates alignment to some extent while 10% of the foreign owned banks felt the same. Overall “Management capability of IT decision makers” was rated among the 5 top factors that facilitates alignment.

xii. *Strategic oriented decision making process*

54% of business graduates responded that “Strategic oriented decision making process” facilitates alignment to little extent while 22% of computer graduates responded same. An equal proportion of the responded agreed that this factor facilitates alignment to great extent at 18% each. 93% of locally owned banks responded to little extent while 88% of foreign owned banks felt it facilitates alignment to great extent.

xiii. *Organization structure that provides mechanisms for accountability and ownership*

From the research equal response was received of 30% that “Organization structure that provides mechanisms for accountability and ownership” facilitates alignment to little extent. 76% of foreign owned banks responded that banks organization structures facilitates alignment to great extent while 45% of locally owned banks responded to no extent.

*xiv. Supportive organizational culture*

Of the respondents where were business graduates 23% of the response where “Supportive organizational culture” is achieved to no extent while 47% of the respondents of computer graduate responded to great extent that the factor contributes to alignment. 84% of foreign owned banks responded that supportive culture facilitates alignment to great extent while 54% of locally owned bank responded to no extent. However it was observed the response was distributed across the likert scale, in overall this factor was rated among the lowest facilitator of alignment in banks with a mean of 3.05

*xv. Communication between business and IT decision maker*

62% of computer graduates agree that “Communication between business and IT decision maker” facilitates alignment to very great extent while 45% of business graduates felt that it facilitated alignment to great extent. 59% of foreign owned banks and 19% of locally owned banks responded communication as great extent Communication in organization is a plays a pivotal role in streamlining business operation by allowing seamless flow of information, IT on the other hand create a channel that enables and support this factor. Therefore it does not come as a surprise that in overall this factor is rated among top five factors that promotes alignment.

*xvi. IT as a business asset*

From the findings “IT as a business asset” provided a balance view both from business graduated perspective and computer graduate perspective. It was noted that 42% of computer graduate and 44% of business graduated responded that this factor

facilitates alignment to a great extent while 18% and 21% of computer and business graduates respectively responded to a very great extent. 44% of locally owned and 71% of foreign owned banks responded that IT as a business asset facilitate to alignment great extent.

### 4.3 Process of alignment between business and IS strategy

The study also sought to determine the process that banks use to achieve alignment between business and IS strategy in banks in Kenya. Respondents were therefore ask to choose which of the activities were performed in the process of aligning business and IS strategy, respondent were expect to check either “yes” or “no”. Mean and stand deviation of each activity was the calculated and the results cross tabulated for the purpose of interpretation. A higher shows high importance, low standard deviation represent high importance and vice versa. The response are summaries bellow in chart 4.7.

**Chart 7 Summary of process of alignment**

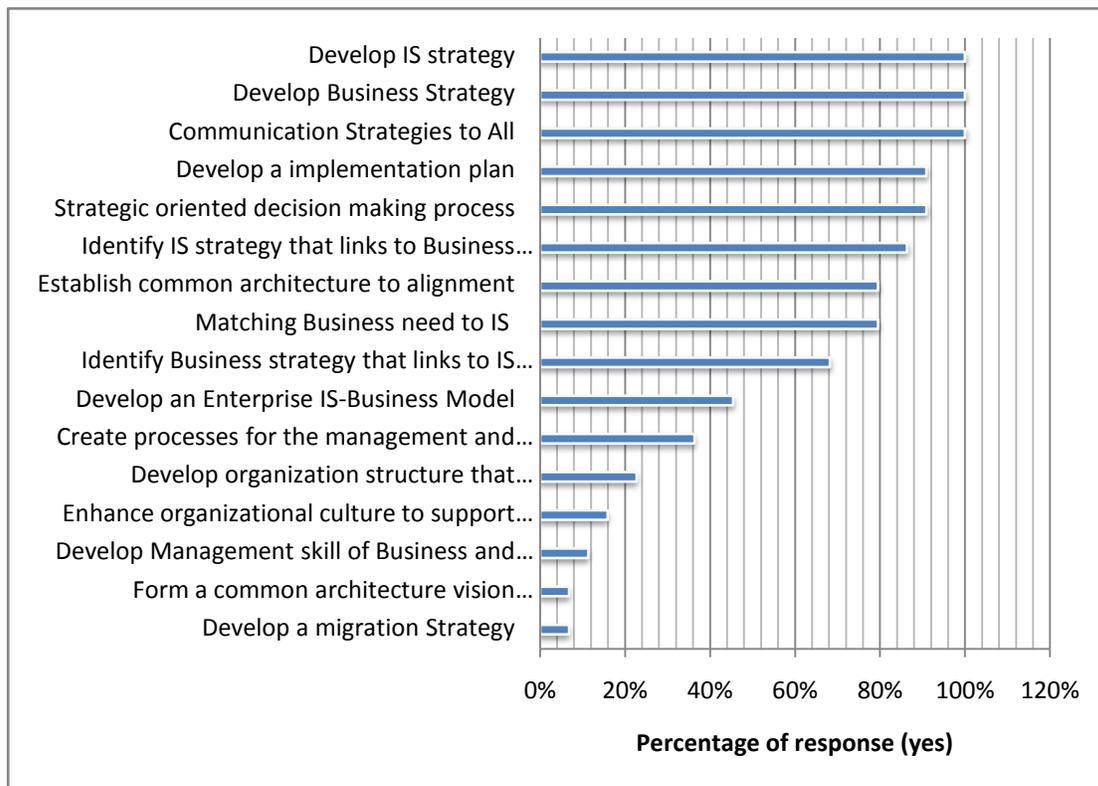
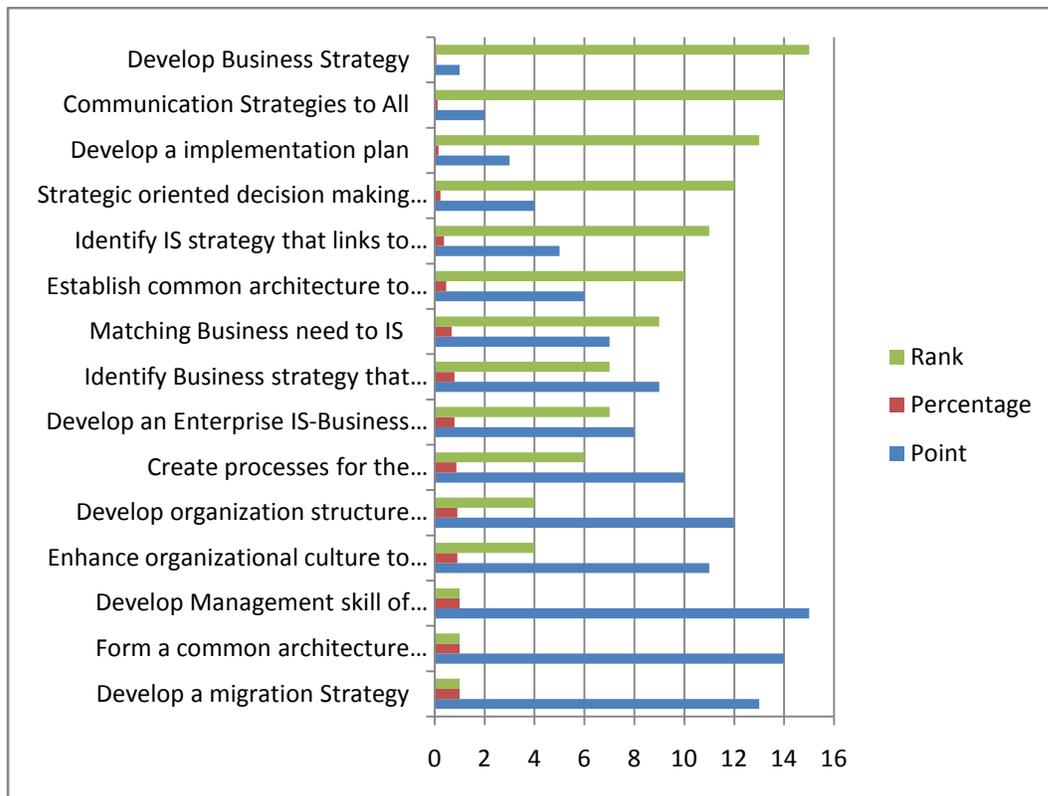


Chart 4.7 shows the ranking and percentage of the responses and the most ranked activities are develop IS strategy, develop business strategy, communication strategies to all with a response rate of 100%, followed by develop a implementation plan and strategic oriented decision making process with 91% and ranked fourth. Chart 4.8 shows further analysis of rank, percentage and points of each activity. In the middle at around point 8 where the activities seem to intersect with the points and percentage is activity “Establish common architecture to alignment, Matching Business need to IS ,Identify Business strategy that links to IS strategy, Develop an Enterprise IS-Business Model, Create processes for the management and governance of IT in relation to business strategy, Develop organization structure that provides mechanisms for IS Business alignment”. This activities creates value and alignment strategy since they are well rated and ranked by all responded.

**Chart 8 Summary of Ranking of process of alignment**



From the responses it is clear that all the activity are important since none of them was totally rejected. But this activity vary from bank to bank but cross analysis reveals the following ten process that will facilitate alignment of business and IS strategy,

#### 4.4 Ten activities of alignment between business and IS strategy

**Table 3 Ten activities of alignment between business and IS strategy**

Ranking of the responses from the highest to the lowest the following table shows the activities that organization employ to achieve business and IS strategy alignment. Table 3 is a summary of the findings.

Develop IS strategy
Develop Business Strategy
Identify Business strategy that links to IS strategy
Identify IS strategy that links to Business strategy
Establish common architecture to alignment
Matching Business need to IS
Develop an Enterprise IS-Business Model
Develop a implementation plan
Communication Strategies to All
Enhance organizational culture to support Alignment



#### 4.5 Challenges of alignment Business and IS strategy

The study further sought to determine challenges that banks face while trying to align business and IS strategy. Respondents were therefore asked to rank the factors on likert scale how strongly they agree or disagree with a list of factors. Mean and standard deviation for each factor was then calculated and the results cross tabulated for the purpose of

interpretation. A high mean shows strong agreement of the factor, a low standard deviation represents agreement of the factor and vice versa. Those recorded appear in table 4 below

**Table 4 Challenges of aligning business and IS strategy**

<b>Factor</b>	<b>Mean</b>	<b>Standard Deviation</b>
Lack of clear understanding of business needs	3.52	0.764
Lack of consensus between business and IS decision makers	3.48	0.674
Lack of active involvement of Managers during strategy formulation	3.32	0.802
Lack of focus on organization long term goals	3.84	0.962
Lack of supportive organization culture	3.61	0.817
Lack of Communication between business and IS decision makers	3.05	0.684
Lack of clear decision structure	3.43	0.601
Lack of participation of IS team as integral part of line business management team	3.00	0.547
Lack of supporting organization structure	3.02	0.559
Lack of strategy	1.14	0.414

From the research “Lack of focus on organization long term goals” was the factor that posed the biggest challenge to achieving alignment in banks in Kenya with a mean score of 3.84 and standard deviation of 0.962. Managers of bank in Kenya have done a considerable effort to focus firm-wide strategic focus to only five years, but in reality organization live and need to survive current and future completions. The survey results showed that “Lack of supportive organization culture” with a mean score of 3.61 and a standard deviation of 0.817 was second factor that poses biggest challenge. Organization culture must focus to embrace technology and look at IT as an enabler and integral part of the long-term success of the organization. The third factor was “Lack of clear understanding of business needs” with a mean score of 3.52 and standard deviation of 0.764, manager lack of understanding of business need and frequent changes in business environment, this needs include globalization and competitive advantage to survive and compete effectively.

## CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.0 Introduction

This chapter contains a summary of the research, conclusion drawn and recommendation.

### 5.1 Summary and conclusion

The first objective sought in this research is to establish the activities commercial banks use to align business strategies and IS strategies. The study revealed the following main activities to align business and IS strategies, this process are; Develop IS strategy, develop Business Strategy, identify Business strategy that links to IS strategy, identify IS strategy that links to Business strategy, establish common architecture to alignment, matching Business need to IS, develop an Enterprise IS-Business Model, develop a implementation plan, communication Strategies to All and enhance organizational culture to support Alignment. This factor can further be grouped into five main factors as suggested by (Orna et al, 1999); understanding the organization, identify what alignment should achieve, match the it is doing with what it should be, produce information policies and develop appropriate IS- Business strategies.

The second objective sought is to determine the extent of the alignment of business strategy and IS strategy in Kenya banks. The factors that were highly ranked are “Management capability of IT decision makers” and “IS strategy focus on organization long term goals”. The study indicated that all the majority of the banks are in the “developing” stage of aligning business and IS strategies, but higher alignment was observed from foreign owned banks compared to locally owned banks. This is attributed to the fact that parent company of majority of the foreign banks have had a lot of experience in IS and business alignment over a long period of time and they have operated and the nature of competition in the international market.

The study also revealed that computer graduate managers place considerable importance to alignment compared to their business graduate counterparts. It is recommended that great

sensitization of business graduates on important of IS/business alignment should be carried out. “Management capability of IT decision makers” and “IS strategy focus on organization long term goals” was highly rated as key factor to achieve alignment. It is therefore important that IT managers have the necessary skill to spear head alignment within the organization. Other factors that promote alignment that were highly rated are “Clarity and Consistent with business goals” and “Management skill of IT decision makers”.

The third objective sought to establish the challenges that banks in Kenya face in aligning business and IS Strategy. The factors that were analyzed are broadly of internal nature. Internal challenges are the one that stem from within the banking industry and carry a profound effect on the long run robustness of the banking industry. The factors that were considered important and posed a greater challenge in achieving alignment in banks in Kenya are “Lack of clear understanding of business needs”. Banks lack efficiency and effectiveness to acquire, manage and grow customers as a business need. Another challenge was “Lack of consensus between business and IS decision makers” in most organization IS and Business are often treated separately with IT considered as Cost Center. To achieve effective alignment consensus between the units is critical.

In conclusion aligning IS with Business strategy is critical to firm’s success and yet it remains an ongoing challenge. Business and IS strategy alignment remains elusive because in many organization there is a missing link between IT investment and business performance. The study has identified activities that commercial banks can use to align business strategies and IS strategies. The study has also identified the challenges that banks in Kenya face in aligning business and IS Strategy and what banks can do to mitigate this challenge to achieve competitiveness and globalization.

## **5.2 Limitations of the study**

The study was fraught with several drawbacks especially in collecting the data. One was the fact that most respondents were reluctant to fill the questionnaire. This was overcome by clearly explaining the core objectives of the study and promising to avail a copy of the results after the study. The other limitation was unwillingness of the firms to give comprehensive information about the challenges they are facing while trying to achieve alignment.

## **5.3 Recommendations for Further Research**

The research reported here was based in the banking industry, which may limit the generalizability of the findings to other industry settings. The same study can be done in other industries. A research could be done on the effects of alignment of organization strategy with IS strategy. Another area for research would be to investigate whether there is a relative importance to strategies due to alignment in an industry over a period of time.

## **5.4 Implications for Policy and Practice.**

From the findings of the study, understanding the process and challenges of aligning business and IS strategies provides a framework for anticipating and influencing competition over time. Information systems continues to play a critical role in the creation of competitive advantages for businesses. Globalization of business operations is a major force which is responsible for increasing strategic importance of Information System; globalization has melted borders and provided an opportunity for free trade. Therefore banks are under extreme pressure to change their value chain and restructure customer relationship to achieve competitive advantage. Investment in advanced technologies can contribute significantly to optimizing the return on a bank's innovation investment. It is expected to reduce costs, facilitate customized products and generation of new income streams.

Alignment of business and IS strategies can be positive sum when each competitor leverage information technology in order to transform themselves into globalized and virtualized

organizations, continuously adapting and changing in a process of strategic alignment. An effective alignment between business and IS, tremendous IT investments will create sustainable competitive advantage and improve business performance.

## Reference

- Andrews, K. R. (1980), *The Concept of Corporate Strategy*. Homewood, IL: Dow Jones-Irwin.
- Bank List (2009) [www.centralbank.go.ke](http://www.centralbank.go.ke) [2009, August 3<sup>rd</sup>]
- Broadbent, M. and P. Weill (1993), “Improving Business and Information Strategy Alignment: Learning from the Banking Industry”, *IBM Systems Journal*, Vol. 32 (1), pp. 162-179.
- Brown, C.V., and Sambamurthy, V. (1999), *Re-Positioning the IT Organization to Facilitate business Transformations*, United Kingdom; Pinnaflex Press, pp. 1-7.
- Bruce, Karin (1998), “Can you align IT with business strategy?” *Strategy and Leadership*, Vol. 26(5), pp. 16.
- Central Bank of Kenya (2008) **Banking Survey 2008**. CBK.
- Chandler, Alfred Jr. (1962). *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*. MIT.
- Coleman. G Kevin, (2007), “Reengineering MIS Aligning Information Technology”, *Ideal Group Inc*, New York pp. 4-9
- Das, S.R. Zahra, S.A. and Warketin, M.E. (1991), “Integrating the Content and Concept of Strategic Planning with Competitive Strategy”, *Decision Sciences*, No. 22 pp. 953-984.
- Dickson, G.W and Wetherbe, J.C (1985) *The Management of Information System*, McGraw-Hill. pp 52
- Earl, M.J. and D.F. Feeny, “Is your CIO adding value?” *Sloan Management Review*, Vol. 35(3), 1994, pp. 11-20.
- Galliers, R.D (1991). *Strategic Information Systems Planning; Myths, Reality and Guidelines for success implementation*, *European Journal of Information System*, Vol 1 No 1 pp. 55-64

- Glaser, John P. (2005). "Information Technology Strategy: Three Misconceptions". *MIS Quarterly*, 17, 1-2.
- Gartlan J (2007), The Alignment of Business and Information Technology Strategy in Australia, *Australian Journal of Information Systems*. June 2007 Vol 14 (2)
- Henderson, J., Venkatraman, N. (1989), "Strategic Alignment: A Framework for Strategic Information Technology Management", *Center for Information Systems Research, Working Paper No. 190*, Massachusetts Institute of Technology, Cambridge.
- Henderson, J., Venkatraman, N. (1993), "Strategic Alignment: Leveraging information technology for transforming organizations", *IBM Systems Journal*, Vol. 32 (1), 4-16.
- Finkelstein, C. (1989) *An introduction to Information Engineering*, Addison-Wesley.
- Keen, P.G.W. (1991) "Shaping the future- Business design through information technology", *Harvard Business School Press*, Boston, MA
- King, W.R. (1978), "Strategic planning for management information systems", *MIS Quarterly*, Vol.2 No 1, pp 27-37.
- Kramer L., "CIO Challenge- IT/Business Alignment" *MIS Quarterly*, Vol 11 (2), pp 1-20
- Li, E.Y., Chen, J.S., & Huang, Y.H. (2006). A framework for investigating the impact of IT capability and organizational capability on firm performance in the late industrializing context. *International Journal of Technology Management*, 36 (1,2,3), 209-229.
- McLean, E R & Soden. J V (1977). *Strategic Planning for MIS*, New York: Wiley.
- Orna E. (1999) "Practical Information Policies" *Prentice-Hall* pp. 99
- Parker, M. M., Trainor, H. E., Benson, R. J. (1989): *Information Strategy and Economics*. London: Prentice Hall.

- Porter, M.E., Millar, V.E. (1985), "How Information Gives You Competitive Advantage", *Harvard Business Review*, July-August 1985, Vol.63 (4), pp.149-161.
- Reich, B. Horner and I. Benbasat (1996), "Measuring the Linkage between Business and Information Technology Objectives", *MIS Quarterly*, Vol. 20 (1), pp. 55-81.
- Rockart, J.F. (1979). "Chief Executives Define Their Own Data Needs", *Harvard Business Review*, (March-April) pp.81-92.
- Rockart, J., Bullen, C. (1986): *The Rise of Managerial Computing*, Homewood, Ill.: Dow Jones-Irwin
- Saberwal, R., Chan, Y. (2001), "Alignment between business and IS strategies", *Information Systems Research*, Vol. 12 No.1, pp. 11-3.
- Shields M., (2009) "A rich seam of discontent", *TeamQuest Vol 1(1)* pp. 7-9
- Sircar, S., Turnbow, J. L., and Bordoloi, B. "A Framework for Assessing the Relationship between Information Technology Investments and Firm Performance," *Journal of Management Information Systems* (16:4), 2000. pp.69-97
- Sullivan, C (1985) Business Planning in the information Age, *Sloan Management Review*, Winter pp. 3
- Tapia S. R (2007) "Developing a Maturity Model for IT Alignment in Cross-Organizational environment". *Technical Report*, Enshede, Netherlands.
- Tavakolian H. (1989) "Linking the Information Technology Structure with Organizational Competitive Strategy: A Survey ", *MIS Quarterly*, (September) pp. 309-15.
- Teo, T.S.H. and King, W.R. (1996). "Assessing the Impact of Integrating Business Planning and IS Planning. Information and Management", *Information Systems Research*, Vol.30 (6) pp.309-321.
- Vitale, M.R., Ives, B. and Beath, C.M. (1986) "Linking Information Technology and Corporate Strategy: An Organizational View", *Proceedings of the*

*Seventh International Conference on Information Systems*, San Diego, December 15-17, pp. 265-276.

## APPENDICES

### i. Introduction Letter

**Raphael Limo**

School of Business

University of Nairobi

P. O. Box 30197

Nairobi.

Dear Respondent,

**RE: COLLECTION OF SURVEY DATA**

I am a postgraduate student of the University of Nairobi, School of Business. In order to fulfill the degree requirement, I am undertaking a project a survey of alignment of business strategy and information systems strategy in the bank, as part of the academic requirements towards completion of the course.

You have been selected to form part of this study. This is to kindly request you to assist me collect the data by filling out the accompanying questionnaire, which I will collect from you personally.

The information that you are going to provide will be used exclusively for academic purposes and will be treated with strict confidence. At no time will your name appear in my report. A copy of the final paper will be availed to you upon request.

Your co-operation will be highly appreciated.

Thank you in advance.

Yours faithfully,

**RAPHAEL LIMO**

MBA Student

School of Business

University of Nairobi

**KATE LITONDO**

Lecturer / Supervisor

School of Business

University of Nairobi

ii. Questionnaire



# UNIVERSITY OF NAIROBI

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A SURVEY OF ALIGNMENT OF BUSINESS STRATEGY AND  
INFORMATION SYSTEMS STRATEGY IN BANKS IN KENYA

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QUESTIONNAIRE

## SECTION A

### INDIVIDUAL INFORMATION

1. Your Name *(Optional)*

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2. Your Title *(Optional)*

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3. Bank *(Optional)*

---

4. Email *(Optional)*

---

5. Phone *(Optional)*

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6. You are?

Male                       Female

7. What is your highest completed education level?

High School       Bachelor's       Graduate degree  
Degree

8. Your college major was (if applicable):

Computer       Business       Other (Specify)

9. Years worked at your current job \_\_\_\_\_ years

10. Years worked for your current employer: \_\_\_\_\_ years

11. What is your age? \_\_\_\_\_ years

**ORGANIZATION BACKGROUND INFORMATION**

1. Does your company have a business strategy?

Yes                       No                       Do not Know

2. Does your company have a IS strategy?

Yes                       No                       Do not Know

3. Please state your company's turnover of last year (2008) Total \_\_\_\_\_

4. Please state the number of employee\_\_\_\_\_

5. Please specify ownership structure of your organization \_\_\_\_\_

**NATURE OF THE STRATEGY-FORMATION PROCESSES**

1. How important is IT to your organization's operations?

Not Important at all     Not Important     Neutral     Important     Very Important

2. What percentage of your organisation's total capital expenditure is spent on IT per annum?

0-10%            11-20%            21-30%            31-40%            41-50%            Over 50%

3. To what extent are you involved in business strategy formation within your organisation?

Very uninvolved     Uninvolved     Neutral     Involved     Very involved

4. To what extent are you involved in information systems strategy formation within your organisation?

Very uninvolved     Uninvolved     Neutral     Involved     Very involved

5. How important do you think it is to achieve alignment between business and information systems strategy within your organisation?

Not important     Not important     Neutral     Important     Very

at all

Important

6. What is the length of time firm-wide strategy plan in place?  Years
7. What is your company strategy planning time frame?  
 Short term       Medium term       Long term
8. What is Extent of firm-wide strategy iteration with business units?  
 Limited       Developing       Extensive

**SECTION B**

To what extent are the following achieved in the alignment between business / IS strategy within your organisation? (Circle a number from 1 to 5 indicating the importance of the item with “1” – No extent to “5” Very Great extent)

	No extent	Little extent	some extent	Great extent	Very Great extent
	1	2	3	4	5
Active involvement of Business Manager during strategic formulation					
Active involvement of IT Manager during strategic formulation					
Consensus between business and IT decision makers					
Business strategy focus on organization long term goals					
IS strategy focus on organization long term goals					
Clarity with business goals					
Consistent with business goals					
Management skill of business decision makers					
Management skill of IT decision makers					
Management capability of business decision makers					
Management capability of IT decision makers					

Strategic oriented decision making process					
Organization structure that provides mechanisms for accountability and ownership					
Supportive organizational culture					
Communication between business and IT decision maker					
IT as a business asset					

### SECTION C

#### PROCESS OF ALIGNMENT BETWEEN BUSINESS AND IS STRATEGY

1. Which of the following activities are performed in the process of aligning business / IS strategy within your organisation? (tick appropriate option  $\surd$ )

	Yes	No
Understand Organization goals and objective	( )	( )
Develop Business Strategy	( )	( )
Develop IS strategy	( )	( )
Identify Business strategy that links to IS strategy	( )	( )
Identify IS strategy that links to Business strategy	( )	( )
Matching Business need to IS	( )	( )
Establish common architecture to alignment	( )	( )
Develop an Enterprise IS-Business Model	( )	( )

- Develop Management skill of Business and IT decision makers ( ) ( )
- Strategic oriented decision making process ( ) ( )
- Develop organization structure that provides mechanisms for IS Business alignment ( ) ( )
- Enhance organizational culture to support Alignment ( ) ( )
- Communication Strategies to All ( ) ( )
- Develop a migration Strategy ( ) ( )
- Develop a implementation plan ( ) ( )
- Create processes for the management and governance of IT in relation to business strategy ( ) ( )
- Form a common architecture vision between lines of business and IT ( ) ( )
- Others, specify \_\_\_\_\_

**SECTION D**

**CHALLENGES OF ALIGNMENT BUSINESS AND IS STRATEGY**

1. How strongly do you agree or disagree with the following challenges you face during the process of aligning business / IS strategy within your organisation? *(Circle a number from 1 to 5 indicating the importance of the item with “1” – Strongly Disagree to “5” Strongly agree)*

**In my organization there is :**

	Strongly Disagree	Disagree	Undecided	Agree	Strongly agree
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Lack of clear understanding of business needs					
Lack of consensus between business and IS decision makers					
Lack of active involvement of Managers during strategy formulation					
Lack of focus on organization long term goals					
Lack of supportive organization culture					
Lack of Communication between business and IS decision makers					
Lack of clear decision structure					
Lack of participation of IS team as integral part of line business management team					
Lack of supporting organization structure					
Lack of strategy					
Others, specify _____					

### iii. List of Commercial Banks in Kenya

African Banking Corporation Ltd	Giro Commercial Bank Ltd
Bank of Africa K�nyia	Guardian Bank Limited
Bank of Baroda (Kenya) Ltd	Habib Bank AG Zurich
Bank of India	Habib Bank Ltd
Barclays Bank of Kenya Ltd	Imperial Bank Limited
CFC Bank Ltd	Investments and Mortgages Bank Ltd
Chase Bank (Kenya) Ltd	Kenya Commercial Bank Ltd
Citibank NA	K-REP Bank Ltd
City Finance Bank Ltd	Middle East Bank Kenya Ltd
Commercial Bank of Africa Ltd	National Bank of Kenya Ltd
Consolidated Bank of Kenya Ltd	NIC Bank
Credit Bank Ltd	Oriental Commercial Bank
Development Bank of Kenya Limited	Paramount Universal Bank Ltd
Diamond Trust Bank Kenya Ltd	Prime Bank Ltd
Dubai Bank Kenya Limited	PTA Bank
East African Building Society Bank	Southern Credit Banking Corp Ltd
Equatorial Commercial Bank Ltd	Stanbic Bank Kenya Ltd
Equity Bank Limited	Standard Chartered Bank Kenya Ltd

Family Bank Ltd

The Co-operative Bank of Kenya Ltd

Fidelity Commercial Bank Ltd

Trans-National Bank Ltd

Fina Bank Limited

Victoria Commercial Bank Ltd