

**IT-BUSINESS STRATEGY ALIGNMENT PRACTICES IN KENYAN  
PARASTATALS**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE OF  
MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF  
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## Declaration

This Research project is my original work and has not been presented for a Degree in any other university.

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The Research Project has been submitted for examination with my approval as a University Supervisor.

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Special and profound gratitude and appreciation to my family and friends for believing in my capabilities. They have shown their dedication to my cause in many great ways through their unconditional love, encouragement, understanding and support.

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## **Dedication**

Special dedication to God the almighty for giving me this victory, my mother Margaret Wanjiru Onyimbo and my entire family for their overwhelming support and appreciation.

## **Abstract**

This study had three objectives. First was to determine the practices parastatals use to align IS and Business strategies. Second it also sort to identify the extent of IS-Business strategy alignment in parastatals in Kenya. Thirdly it looked at challenges of IS-Business strategy alignment. The need for the study arose because there are benefits that parastatals could reap from IT-Business alignment but no conclusive research has been done to address the subject.

In undertaking the study, Kenyan parastatals with offices in Nairobi were targeted. Primary data was collected using questionnaires from 52 senior managers of Kenyan parastatals. The data analysis was done by means, standard deviations and factor analysis and the findings were presented using tables, frequencies and narratives. The questionnaires were administered electronically.

From the data analysis, it was established that the majority of the respondents were male. It was also established majority of respondents were business oriented as opposed to IT orientation by 73.1% and 26.9% respectively. Majority have worked for less than 5 years in the parastatals. There was evidence that most of the parastatals do not have IT strategies but they consider it to be significant in the organizations policy making. The respondents also felt not involved to a great extend in the formulation of business strategies. Presence of a supportive organizational culture, the use of an IT project steering committee and IT strategy consistence with business goals were the major practices identified in the study. Matching business need to IT, Develop a mitigation strategy, Create processes for governance of IT in relation to business strategy were pointed out as major activities in IT-Business strategy alignment. Non supportive organization structure, lack of IT strategy in place and lack of Business strategy in place were the main challenges identified from the study

Through the study findings, the factors affecting IT-Business strategy alignment process have been established. The role of parastatals in the process needs to be reviewed. Four types of alignment within organizations have been identified. These types of alignment are very well defined and hence suitable for use by any organization which is interested in aligning its business with IS strategy. Activities undertaken are meant to ensure that IS strategy is supposed to support as well as it is supported by the organizational goals, it's evident that there is need to look into the IT-business strategy alignment process and resolve the factors affecting it.

Effective implementation process is a function of many facets as evidenced by the study. This is strengthened by the responses in the research. The government parastatals as the case study have to have the best systems to ensure that there is implementation of IT-Business strategies integration. Every industry player with a responsibility on the implementation of IT-business strategies in the parastatals must practice high ethical standards to ensure compliance and prudent utilization of resources that make integration a success and ensure participation of IT team as integral part of line business management team.

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## Abbreviations and Acronyms

CEO	Chief Executive Officer
CIO	Chief Information Officer
ERS	Economic Recovery Strategy
ICT	Information and Communication Technology
IS	Information Systems
ISO	International Organization for Standardization
IT	Information Technology
IS	Information Systems
SAM	Strategic Alignment Model
RRI	Rapid Results Initiative
MDG	Millennium development Goals

# CHAPTER ONE: INTRODUCTION

## 1.1 Background

Increased competition and globalization has raised the need for aligning business strategy with Information System (IS) strategy. Aligning business strategy and IS strategy ensures correspondence between the business objectives and the Information Technology (IT) requirements of an organization. Firms need to align their Information System (IS) strategies with the other strategies of the business so as to realize full potential of the organization (Luftman, 2004). IT-Business alignment is a dynamic state in which a business organization is able to use information technology (IT) effectively to achieve business objectives (Bird, 2011).

Strategy alignment is defined as the extent to which the IT strategy supports, and is supported by, the business strategy (Tallon and Kraemer, 2003). Organizations have to ensure that their IT-Business strategy is optimally aligned. Henderson and Venkatraman, (1989) have identified four types of IT-Business strategy alignments within organizations. These types of alignment are very well defined and hence suitable to be applied by any organization which is interested in aligning its business with IT strategy.

These four aspects of alignment are strategic integration, operational integration, business fit and IT fit. Strategic integration is the alignment between business and IT strategies, operational integration is the alignment between business infrastructure and IT infrastructure, business fit is the alignment between business strategy and business infrastructure while IT fit is the alignment between IT strategy and IT infrastructure. Different researchers have focused on parts of the Henderson and Venkatraman (1993) model. For instance, Chan and Reich (2007) focused on the link between business strategies and IT strategy, while Raymond et al (1995) focused on the link between organizational structure and IT structure.

### 1.1.1 Practices of IT-Business Strategy Alignment

IT-Business alignment activities include the activities that business entities design and implement to achieve competitiveness in the market. They can be derived from the four

phases of IT-Business alignment (Nugent, 2004). These activities are planning, modelling, managing and measuring. Planning is translating business objectives into measurable IS services. Activities done here are closing the gap between what business managers need and expect and what IS delivers. Modelling is designing infrastructure to optimize business value. It identifies resources needed to deliver IS services at committed service levels. Modelling phase involves mapping IT assets, processes, and resources back to IT services, then prioritizing and planning resources that support those business critical services. Managing phase involves driving results through consolidated service support. The managing phase enables the IT staff to deliver promised levels of service. Measuring is verifying commitments and improves operations. It improves cross-organization visibility into operations and service level commitments (Nugent, 2004).

On the other hand, Cochrane (1999) puts alignment of business and IT activities into four basic steps. These are 1) completing a business and IT strategy with representation from key areas of the company, 2) planning the actions required to implement the strategy 3) identifying key performance indicators and relationships between the outcomes and behaviours, and 4) establishing a measurement program that continually measures the behaviour indicators and outcomes so that cause and effect relationships will be recognized and proactive management can occur.

Activities undertaken are meant to ensure that IT strategy is supposed to support as well as it is supported by the organizational goals (Tallon and Kraemer, 1998). Without an effective alignment between business and IT, tremendous IT investments would not create sustainable competitive advantage or improve business performance (Tallon and Kraemer, 1998). There is a general laxity in the extent of alignment of IT-Business strategy although the extent of alignment is context dependent across various economic sectors.

Achieving alignment between business and IT strategies is an elusive task for organizations in various sectors. In many organizations there is a missing link between IT investment and business performance. Although IT and business strategies are often



treated separately, alignment that is IT driven may not realize this goal, whereas alignment that is solely business focused may not create IT payoffs that technology alone cannot create (Tallon and Kraemer, 1998).

Another challenge is lack of consensus and clarity whereby different groups pursue different agendas. People are a major part of strategy alignment in an organization so if not involved then there is a barrier in strategy alignment. There is also resource barrier in which strategy is not linked to resource allocation (Cochrane, 1999). Most organizations have separate process for budgeting and strategic planning. This also goes hand in hand with management barrier where there is lack of feedback on how the strategy is being implemented and whether it is working is a challenge. The management needs to fully support the process for success (Tallon and Kraemer, 1998). Most management systems today provide feedback only about short-term, operational performance, tracking by financial measures.

Business and IS need to go hand in hand in order to achieve alignment at its best. Where senior executives do not support IS, then IS does not demonstrate leadership. If this becomes the case, strategy alignment fails as this is a major barrier that blocks strategy alignment (Cochrane, 1999). When IS management lacks leadership it means there are not well prioritized IT efforts. IT has to have leadership in management in order to align well with the business strategy of an organization hence strategy alignment.

### **1.1.2 Parastatals in Kenya**

Parastatals in Kenya are government-owned corporations, state-owned companies, state-owned entities, state enterprises, publicly-owned corporations, or government business enterprises. They are legal entities created by a government to undertake commercial activities on behalf of an owner government. They are different from other business entities due to ownership and management structure.

Parastatals are already embracing ICT in their day to day activities in form of E-Government. This is because E-Government is a fundamental element in the modernization of Government. E-Government provides a common framework and

direction across the public sector and enhances collaboration within and among public sector organizations and institutions, between Government and the business community, and between Government and the citizens that it serves in the implementation of Government Policies. It also identifies ways of developing the skills needed by public servants to realize the new opportunities offered by ICT advancement such as the Internet just like the private organizations which have taken full advantage of this together with other ICT technologies.

We also have the Rapid Results Initiative (RRI) an approach widely claimed to deliver and currently promoted by the World Bank in Kenya (Marwa, 2011). It is a robust tool for transforming the public service from process orientation to results based management culture. It establishes public service values and providing a mechanism that supports the achievement of Economic Recovery Strategy (ERS), the attainment of Millennium Development Goals (MDGs) and the Vision 2030 - Kenya's flagship strategy for public service renewal. In praise of these approaches (Brown et al., 2005) contends that capacity to fulfil its responsibility and responsiveness to citizens' needs and rights are key to RRIs in the public sector.

In Kenya, we have parastatals which are already in line with ICT development. For example in its 2004/09 Strategic Plan, Kenya Industrial Research and Development Institute has envisaged to moving to an E-based environment in the next five years. Through this strategy which involves IS Business strategy alignment to be realized, all information systems will be organized such that users get information about what they want and when they need it. This in effect will move the Institute to an organization where required administrative steps become paperless and non-duplicative. Other parastatals are moving towards this change too.

## **1.2 Statement of the problem**

Organizations invest in IT with a view to realizing its benefits. Those benefits may not be fully realized if IT-Business strategies are not aligned (Reich and Benbasat, 1996).

Cochrane (1999) puts alignment of business and IT activities into four basic steps while there are four phases of IT-Business alignment (Nugent, 2004) which are planning, modelling, managing and measuring. These activities however may vary from firm to firm depending on how well structured their IT is (Cochrane, 1999). Some organizations outsource IT functions only for the inevitable services hence may not have to go through all the phases and activities in the alignment process as compared to those organizations which embed IT in their business functions.

While some organizations align in their business and IT strategies fully, others do it partially. This has been confirmed in a study on business IT strategy alignment done in Australia in various organizations (Jovita and Graeme, 2007). This research concluded that business IT process alignment is very important in those organizations that  
\* embedded IT in their strategy.

Lack of alignment between investments in IT and business strategy is a major reason for the failure of companies to realize fully the benefits of large scale systems (Reich and Benbasat, 1996). The biggest challenge however is well aligning IT objectives with those of business objectives. This is made worse if specific activities that help in alignment are not well outlined. Many organizations do not align IT-Business strategies due to challenges that vary from firm to firm (Jovita and Graeme, 2007).

Parastatals have substantially invested in IT systems and infrastructure. This is since the launch of E-Government and vision 2030 which strongly advises government institutions to make use of IT to save on costs and improve on the various services that they provide. In addition they have strategies in place and therefore need to have them aligned. There is evidence that this is happening in this industry although no studies are available to ascertain the extent of aligning business and IT strategy. The process of alignment and challenges parastatals face while trying to align these strategies has not been carried out.

This research will address this knowledge gap by determining the extent of alignment of business strategy and IT strategy, establishing the activities parastatals use to align these

strategies and establish the challenges they face. There is therefore need to answer the questions: What practices of aligning business strategies and IT strategies are used by parastatals in Kenya? To what extent have parastatals in Kenya aligned business and IT strategies? What challenges are faced during the alignment process?

### **1.3 Research objectives**

The objectives of this study were to:

1. Determine the practices parastatals use to align IS and Business strategies
2. Determine the extent of IS-Business strategy alignment in parastatals in Kenya
3. Establish challenges of IS-Business strategy alignment

### **1.4 Value of study**

This study is important to the academics, government and the business fraternity especially as Kenya implements vision 2030. Business processes will become fully integrated with IT infrastructure. IT-Business strategy alignment is a key component of successful firms.

It's important to determine the practices parastatals use to align IS and Business strategies investigate the extent of IS-Business strategy alignment in parastatals in Kenya and finally establish the challenges of IT-Business strategy alignment. This study may also be used to improve the role of government in IT security provision for the general business community and especially for online businesses in Kenya especially in respect of IT-Business strategy. For a number of years in Kenya, there have been very few studies on the real benefits that businesses can enjoy through IT-Business strategy alignment.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

Aligning IS strategy with business strategy is vitally important to both executives and researchers. CEOs are taking a more active interest in IT and CIOs are increasingly being called upon to help formulate not only IS strategy, but organizational strategy as well. Indeed strategic alignment has remained among the top concerns of executives and managers for over two decades (Brancheau et al. 1996, Chan and Reich 2007, Dickson et al. 1984, Luftman et al., 2005).

IS strategy defines and prioritizes the investments required to achieve the 'ideal' application portfolio, the nature of the benefits expected and the changes required to deliver those benefits, within the constraints of resources and systems interdependencies (Ward and Peppard, 2002 ).

The IS strategy is concerned mainly with aligning IS development with business needs and with trying to gain a strategic advantage through the proper using of IS in the firm (Earl, 1989). It is a planning process for the development of systems towards some future vision of the role of information systems in the organization. IS strategy defines the organization's demand for IS - the requirements or demand for information and systems to support the overall business strategy. It brings together the business aims of the organization, a clear understanding of the information needed to support those aims, and the implementation of computer systems to provide that information. IS strategy is firmly grounded in the business, taking into consideration both the competitive impact and alignment requirements of IS.

With the rapid pace of progress and new advanced technologies in IS and IT, the application of IS is at a new era, opening up new opportunities by using the technology strategically for the benefit of organizations and business (Galliers, 2003). The strategic use of IS became a fundamental issue for every business and can change the basic nature of industries. The effective and efficient utilization of IS requires the alignment of the IS strategies with business strategies, business plan and its subsequent implementations to

improve the overall competitiveness and productivity of the enterprise by improving the core business processes and exploiting the opportunities provided by IS to redesign the business processes (Luftman, 2000).

## **2.2 Strategic alignment**

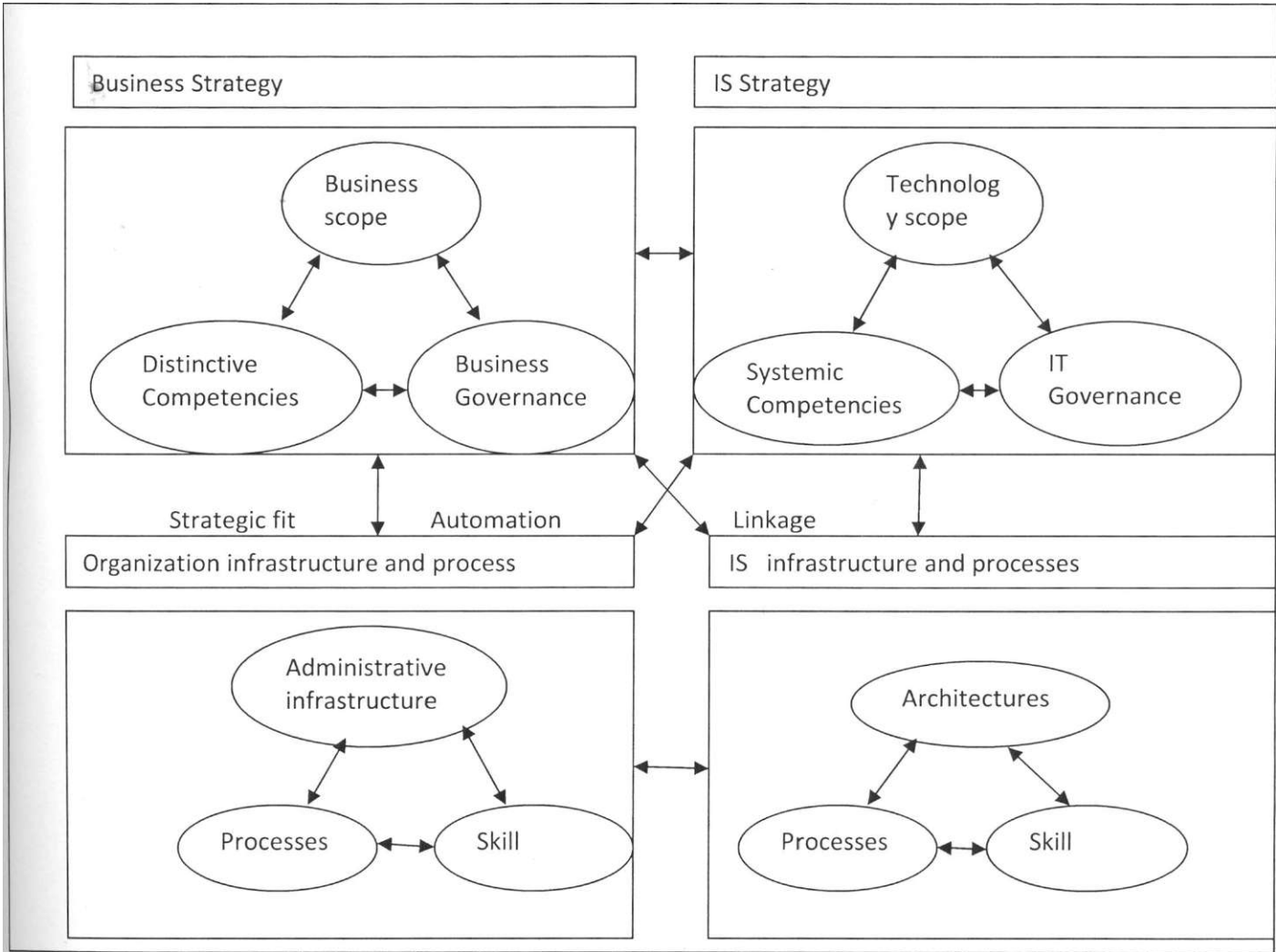
Although the concept of strategic alignment has been developed more than a decade ago and has been in use for many years, it is still valuable to corporate executives looking to achieve alignment of their business and technology strategies (Coleman and Papp 2006; Ward and Peppard, 2002). The concept of strategic alignment is crucial to achieve sustainable competitive advantages for many business or industrial organizations. The strategic and successful use of IT is reflected on the concept of strategic alignment.

As the concept of strategic alignment has been developed for more than a decade, there are a number of definitions to this concept presented by different scholars and authors in literature. According to Henderson and Venkatraman, the strategic alignment refers to "Strategic Fit" and "Functional Integration" among business strategy, IT strategy, business infrastructure, and IT infrastructure" (Henderson and Venkatraman, 1993). Based on Henderson and Venkatraman's view, strategic alignment is a continuous process, ideally executed by a management team working together and recognizing where the organization is strong and weak (and why), developing action plans that leverage areas of strength, and building and managing the four domains and the interrelationship between them. The strategic alignment refers to the extent to which a firm's operational decisions within the firm are consistent with the strategy, and the firm must successfully implement its strategy to achieve its fundamental goals (Henderson and Venkatraman 1991 and 1993; Luftman et al., 1993).

A number of business-IT or business-IS strategic alignment models have emerged in the literature. Henderson and Venkatraman's SAM model is adapted in this study based on the developed work of Henderson and Venkatraman (1991, 1993). The SAM model represents the dynamic alignment between the business strategic context and the IT strategic context. It is based on the building blocks of strategic integration and functional integration.

The strategic alignment model is defined in terms of four fundamental domains of strategic choices that consist of: business strategy, information technology strategy, organizational infrastructure and processes, and information technology infrastructure and processes. Each domain has its own underlying dimensions that consist of three components as presented in Figure 1 (Henderson and Venkatraman 1991 and 1993). The components of the strategic alignment model are twelve components that further define business-IT strategic alignment (Luftman et al. 1993; Luftman 2000). These components are as follows:

**Figure 2.1: Strategic alignment model (Henderson and Venkatraman 1993)**



Source: Henderson and Venkatraman 1993

Business strategy has scope, distinctive competencies, and business governance. Business scope includes the markets, products, services, groups of customers/ clients, and locations where an enterprise competes as well as the competitors and potential competitors that affect the business environment article (Luftman, 2000). Distinctive competencies have the critical success factors and core competencies that provide a firm with a potential competitive edge. This includes brand (type of product made by a particular firm), research, manufacturing and product development, cost and pricing structure, and sales and distribution channels article (Luftman, 2000). Business governance involves how companies set the relationship between management, stockholders or shareholders, and the board of directors. Also included are how the company is affected by government regulations, and how the firm manages its relationships and alliances with strategic partners.

Organizational Infrastructure and Processes is divided into administrative structure, processes and skills. Administrative structure is way the firm organizes its businesses. Processes involve how the firm's business activities operate or flow. Major issues include value added activities and process improvement. Skills on the other hand are human resource considerations such as how to hire/fire, motivate, train/educate, and culture.

IT strategy is categorized into technology scope, systemic competencies and IT governance. Technology scope is about all important information applications and technologies used while systemic competencies are those capabilities (e.g. access to information that is important to the creation/achievement of a company's strategies) that distinguish the IT services. IT governance describes how the authority for resources, risk, conflict resolution, and responsibility for IT is shared among business partners, IT management, and service providers. Project selection and prioritization issues are included here.

IS infrastructure and processes has architecture, processes and skills. Architecture involves the technology priorities, policies and choices that allow applications, software, network, and hardware and data management to be integrated into a cohesive platform.



Processes are those practices and activities carried out to develop and maintain applications. Skills cover human-resource considerations such as how to hire/fire, motivate, train or educate and culture. The strategic alignment model can be used to assess the range of strategic choices facing managers and explores how they interrelate (Ward and Peppard, 2002). The power of this model was presented in terms of two fundamental characteristics of strategic management: strategic fit (the interrelationships between external and internal components) and functional integration (integration between business and functional domains) (Henderson and Venkatraman, 1991 and 1993).

### **2.3 IT-Business Strategy Alignment Processes**

IT-Business strategy alignment process has been defined by Luftman and Brier (1999). It includes setting of goals and establishing a team. It also involves ensuring that there is an executive business sponsor and champion for the assessment. Next, it is engaged in assigning a team of both business and IT leaders. Obtaining appropriate representatives from the major business functional organizations is critical to the success of the assessment. The purpose of the team is to evaluate the maturity of the business-IT alignment. Once the maturity is understood, the team is expected to define opportunities for enhancing the harmonious relationship of business and IT.

The process also involves understanding the business-IT linkage. A trained facilitator can be valuable in guiding the important discussions. Next, analyze and prioritize gaps. Recognize that the different opinions raised by the participants are indicative of the alignment opportunities that exist. Understand the activities necessary to improve the business-IT linkage. The gap between where the organization is today and where the team believes it needs to be are the gaps that need to be prioritized.

Specify the actions (project management). Naturally; knowing where the organization is with regards to alignment maturity will drive what specific actions are appropriate to enhance IT-business alignment. Assign specific remedial tasks with clearly defined deliverables, ownership, timeframes, resources, risks, and measurements to each of the prioritized gaps.

Choose and evaluate success criteria. This step necessitates revisiting the goals and regularly discussing the measurement criteria identified to evaluate the implementation of the project plans. The review of the measurements should serve as a learning vehicle to understand how and why the objectives are or are not being met.

Sustain alignment. Some problems just won't go away. Obtaining IT-business alignment is a difficult task. This last step in the process is often the most difficult. To sustain the benefit from IT, an "alignment behavior" must be developed and cultivated. By adopting these behaviors, companies can increase their potential for a more mature alignment assessment and improve their ability to gain business value from investments in IT. Hence, the continued focus on understanding the alignment maturity for an organization and taking the necessary action to improve the IT-business harmony is a major concern (Luftman and Brier, 1999).

#### **2.4 Challenges of strategy alignment**

Alignment of IT or IS strategy with business strategy has been ranked as one of the most important issues faced by business and IT executives. Alignment has been defined as the extent to which the IT mission, objectives and plans support and are supported by their business counterparts (Reich & Benbasat, 2000). Further, IT-business alignment concerns the degree of correspondence of an organization's IT strategy and IT infrastructure with the organization's strategic business objectives and infrastructure. Since the late 1980s, alignment has been an important concern to the business community as it not only helps firms realize the potential benefits from investments in IT (Tallon et al., 2000), but also enhances business performance through aligning the organizational and technological infrastructures (Croteau et al., 2001). The following factors challenge IS Business alignment:

Lack of consensus and clarity whereby different groups pursue different agendas. In strategy alignment various groups are involved and if they do not have the same agenda then they provide a barrier to it. This goes hand in hand with people barrier in which strategy is not linked to departmental, team or individual goal. People are a major part of

strategy alignment in an organization so if not involved then there is a barrier in strategy alignment.

There is the resource barrier in which strategy is not linked to resource allocation. Most of time, energy, and money are not allocated to those things that are critical to the organization (Tallon et al., 2000) Most organizations have separate process for budgeting and strategic planning.

In management barrier there is lack of feedback on how the strategy is being implemented and whether it is working. Most management systems today provide feedback only about short-term, operational performance, tracking by financial measures (Croteau et al., 2001). Organizations have no way of getting feedback on their strategy. And without feedback they have no way to test and learn about their strategy.

IT may fail to achieve strategic goals and this is a barrier to strategy alignment. IT strategy is supposed to support as well as it is supported by the organizational goals (Tallon and Kraemer, 1998). IT may also fail to understand business. This means there is no stable business-IT partnership which is a critical factor in strategy alignment. Business and IT need to go hand in hand in order to achieve alignment at its best.

Where senior executives do not support IT, then IT does not demonstrate leadership. If this becomes the case, strategy alignment fails as this is a major barrier that blocks strategy alignment. When IT management lacks leadership it means there are not well prioritized IT efforts. IT has to have leadership in management in order to align well with the business strategy of an organization (Tallon et al., 2000).

## **2.5 Chapter Summary**

In conclusion, we find that business and IT strategy alignment remain elusive because in many organizations there is a missing link between IT investment and business performance. Although IT 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. While there are activities to be used while doing alignment, not all organizations use them. This brings into focus that some organizations align partially and also questions the extent of business-IT alignment in organizations. Also there are challenges which make some organizations not well align their business and IT strategies.

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## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Research Design**

The research design that was used is descriptive survey. Survey designs enable researchers to obtain data from members of a population or sample to determine the current status of the population with respect to one or more variables (Frankel and Wallen, 1983). This entails studying a small sample of the population and then generalizing to the larger population.

### **3.2 Population and Sample design**

The population of the study adopted purposive sampling of all parastatals in Kenya. A sample size of 52 was selected by choosing parastatals that have their headquarters in Nairobi. This was to necessitate faster data collection and analysis.

### **3.3 Data Collection**

Questionnaire was used to collect the data. The respondents targeted were IT and Business managers from the selected organizations as they are expected to have experience and knowledge required for this research.

Questionnaires were administered using the "drop and pick later" method. The questionnaire is divided into four sections. Section A covered demographic data. Section B concerned activities that are used in IT-business strategy alignment. Sections C covered the extent of alignment of business strategy and IT strategy and Section D concerned the challenges the organizations face in IT-business strategy alignment.

### **3.4 Data Analysis**

Data collected in questionnaire was cleaned, edited, coded then analyzed according to the sections of the questionnaire using SPSS and responses shown as a percentage of each factor subjected to various analyses. Section A of the questionnaire included individual and organizational background information and this was used to get background information about individuals and the organization. This was analyzed using descriptive analysis.

Data relating to Section B was used to determine the extent of IT-Business alignment. Factor analysis was used to analyze the data. Factor analysis is a statistical method used to describe variability among observed variables in terms of a potentially lower number of unobserved variables called factors.

Data relating to Sections C was analyzed using descriptive analysis to identify various activities and processes that organization employee's use in its IT-Business strategy alignment. Data relating to Section D concerned challenges of IT-Business strategy alignment and was analyzed using factor analysis.

## CHAPTER FOUR: ANALYSIS AND PRESENTATION OF DATA

### 4.1 Introduction

This chapter presents the findings of the study tabulated and presented in narratives and tables for ease of explanation and understanding for the reader. The main objective was to investigate IT- Business strategy alignment practices in Kenyan Parastatals. This was through determination of the practices parastatals use to align IS and Business strategies, determination of the extent of IS-Business strategy alignment in parastatals in Kenya and establishing challenges of IS-Business strategy alignment.

### 4.2 Demographic Information of the Respondents

The demographic factors covering parastatals and the respondents are discussed in this chapter.

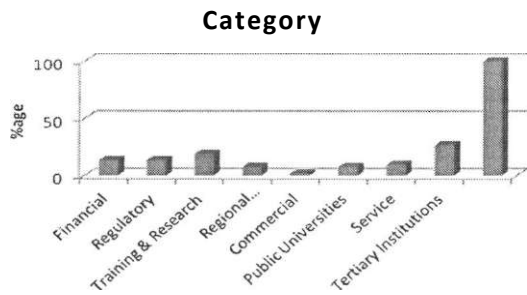
#### 4.2.1 Category of the Parastatals

*Table 4.1: Distribution of responses by category*

Category	Frequency	Percent	Valid Percent	Cumulative Percent
1 Financial	7	13.5	13.5	13.5
2 Regulatory	7	13.5	13.5	27
3 Training & Research	10	19.2	19.2	46.2
4 Regional Development	4	7.7	7.7	53.9
5 Commercial	1	1.9	1.9	55.8
6 Public Universities	4	7.7	7.7	63.5
7 Service	14	26.9	26.9	90.4
8 Tertiary Institutions	5	9.6	9.6	100
Total	52	100	100	

**Source: Research data**

The majority of the respondent parastatals were service institutions at 60.2% while the rest were 39.8% as shown on Figure 4.1.



**Figure 4.1: Category of Respondents**

#### 4.2.2 Gender of Respondents

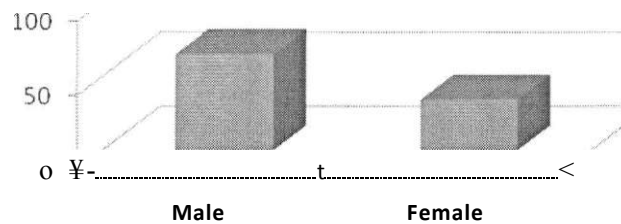
*Table 4.2: Distribution of respondents by gender*

<i>Distribution of Respondents by gender.</i>		Frequency	Percent	Valid Percent	Cumulative Percent
1	Male	34	65.4	65.4	65.4
2	Female	18	34.6	34.6	100.0
	<b>Total</b>	<b>52</b>	<b>100</b>	<b>100</b>	

**Source: Research data.**

Table 4.2 shows most of the staff are male at 65.4%. Females were 34.6%. The gender analysis is also represented on Figure 4.2.

### Distribution of Respondents by gender.



**Figure 4.2: Gender of Respondents**



### 4.2.3 Career Specialization

**Table 4.3: Distribution of career specialization**

<i>Distribution of highest level of career specialization</i>		Frequency	Percent	Valid Percent	Cumulative Percent
1	Business Oriented	38	73.1	73.1	73.1
2	IT Oriented	14	26.9	26.9	100
	<b>Total</b>	<b>52</b>	<b>100</b>	<b>100</b>	

**Source: Research data**

Table 4.3 shows that most of the respondents have a business orientation at 73.1%. This is compared to IT orientation of 26.9%. It's interesting to note that IT orientation fared poorly although it is the subject of this study. It points to the need for concerted efforts to sensitize the Parastatals to shift their orientation in order to enjoy benefits of IT adoption. This rhymes well for the study as it shows that those in charge of IT-Business strategy in parastatals have not appreciated the competitive advantage of a sound IT oriented strategy. These findings are also represented on Figure 4.3.

### Distribution of highest level of career specialization



**Figure 4.3: Career Specialization.**

#### 4.2.4 Number of Years worked for current employer

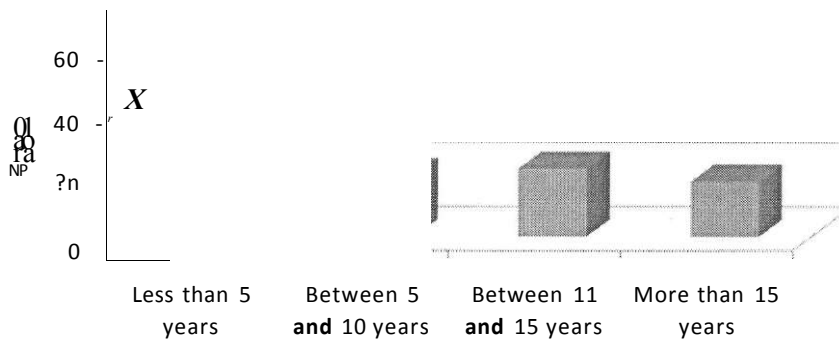
**Table 4.4: Years worked for the current employer.**

<i>Distribution of years worked for the current employer.</i>		Frequency	Percent	Valid Percent	Cumulative Percent
1	Less than 5 years	22	42.3	42.3	42.3
2	Between 5 and 10 years	10	19.2	19.2	61.5
3	Between 11 and 15 years	11	21.2	21.2	82.7
5	More than 15 years	9	17.3	17.3	100.0
	Total	52	100.0	100.0	

**Source: Research data**

From Table 4.4 , we find that 42.3% of the respondents have worked in the Parastatals for less than five years. Another 21.2% have worked between 11-15 years while 19.2% have worked for between five and ten years. It's interesting to note that only 17.3% of respondents have worked for more than 15 years as confirmed graphically by figure 4.4 below.

**Distribution of years worked for the current employer.**



**Figure 4.4: Distribution of work by department.**

#### 4.2.5 Presence of a Business Strategy in the Organization

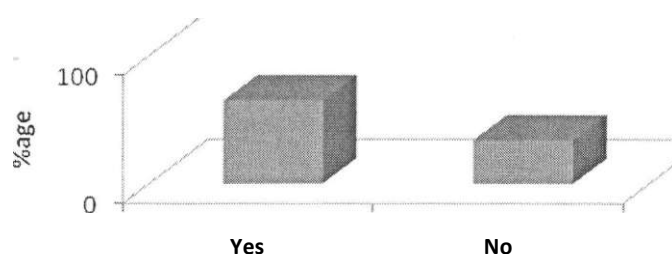
*Table 4.5: Business Strategy in the Organization.*

<i>Distribution of Presence of Business Strategy.</i>		Frequency	Percent	Valid Percent	Cumulative Percent
1	Yes	34	65.4	65.4	65.4
2	No	18	34.6	34.6	100.0
	Total	52	100.0	100.0	

**Source: Research data**

The Table 4.5 illustrate that majority of the parastatals have a business strategy at 65.4% as compare to 34.6% of the respondents who reported that they do not have. It's interesting to note that this is opposite of what is reflected in the results for IT strategy as reflected on Table 4.6 below. This is confirmed graphically by figure 4.5 below.

#### Distribution of Presence of Business Strategy.



**Figure 4.5: Presence of Business Strategy.**

#### 4.2.6 Presence of a IT Strategy in the Organization

*Table 4.6: IT Strategy in the Organization.*

<i>Distribution of Presence of IT Strategy.</i>		Frequency	Percent	Valid Percent	Cumulative Percent
1	Yes	20	38.5	38.5	38.5
2	No	32	61.5	61.5	100.0
	Total	52	100.0	100.0	

**Source: Research data**

Table 4.6 illustrates that majority of the parastatals do not have an IT strategy at 61.5% as compare to 38.5% of the respondents who reported that they do have. It's interesting to note that this deviates from what was reflected in the results for business strategy as reflected on Table 4.5. This is confirmed graphically by Figure 4.6.

Distribution of Presence of IT Strategy.

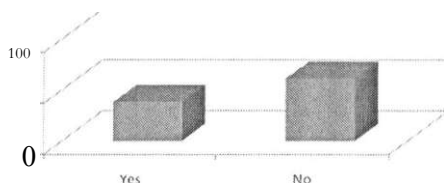


Figure 4.6: Presence of IT Strategy.

#### 4.2.7 Significance of a IT to the Organization

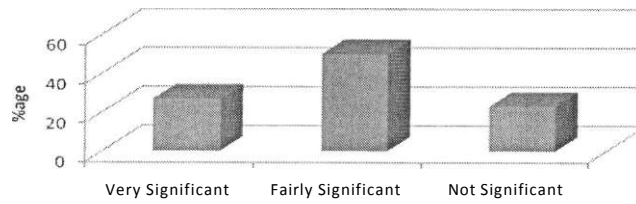
Table 4.7 '*Significance of IT to the Organization.*

<i>Distribution of Significance of IT to the Organization.</i>		Frequency	Percent	Valid Percent	Cumulative Percent
1	Very Significant	14	26.9	26.9	26.9
2	Fairly Significant	26	50.0	50.0	76.9
3	Not Significant	12	23.1	23.1	100.0
	Total	52	100.0	100.0	

Source: Research data

Table 4.6 shows that majority of the parastatals consider IT to be significant in the organization with 26.9% responding that it was very significant. Another 50% felt that it was fairly significant. That leaves only 23.1% who felt it was not significant. This scenario is confirmed graphically by Figure 4.7.

**Distribution of Significance of IT to the Organization.**



**Figure 4.7: Significance of IT to the Organization**

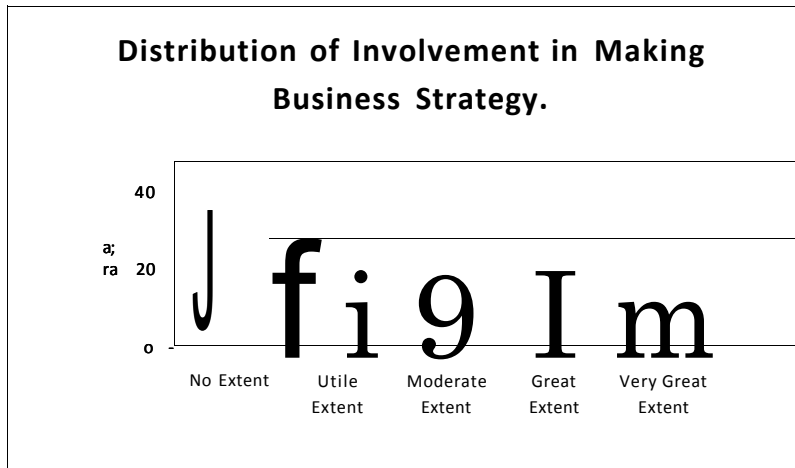
**4.2.8 Extent of Involvement in Making Business Strategy**

*Table 4.8: Involvement in Making Business Strategy.*

<i>Distribution of Involvement in Making Business Strategy.</i>		Frequency	Percent	Valid Percent	Cumulative Percent
1	No Extent	17	32.7	32.7	32.7
2	Little Extent	9	17.3	17.3	50.0
3	Moderate Extent	9	17.3	17.3	67.3
4	Great Extent	10	19.2	19.2	86.5
5	Very Great Extent	7	13.5	13.5	100.0
Total		52	100.0	100.0	

**Source: Research data**

Table 4.8 shows that majority of the respondents felt that they are not involved in making business strategy with 32.7%. Another 17.3% felt the same but to a little extent. A similar number felt to a moderate extent. There is also a record 31.7% who felt they were involved in making business strategy to a great extent. This is further demonstrated on Figure 4.8.



**Figure 4.8: Involvement in Making Business Strategy**

#### 4.2.9 Extent of Involvement in Making IT Strategy

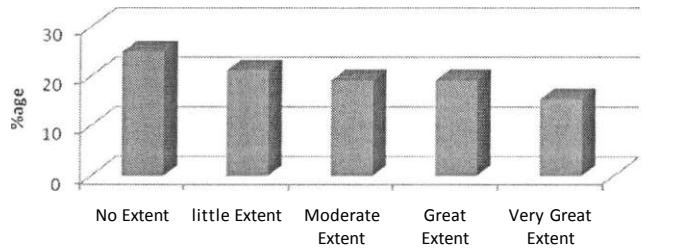
*Table 4.9.-Involvement in Making IT Strategy.*

<i>Distribution of Involvement in Making IT Strategy.</i>		Frequency	Percent	Valid Percent	Cumulative Percent
1	No Extent	13	25.0	25.0	25.0
2	Little Extent	11	21.2	21.2	46.2
3	Moderate Extent	10	19.2	19.2	65.4
4	Great Extent	10	19.2	19.2	84.6
5	Very Great Extent	8	15.4	15.4	100.0
	Total	52	100.0	100.0	

**Source: Research data**

We find in Table 4.9 above that 25% of the respondents felt that they are not involved in making IT strategy to no extent with another 21.2% responding to a little extent. Another 19.2% felt the same but to a moderate extent. A similar number felt to a great extent. There is also 15.4% who felt they were involved in making IT strategy to a very great extent. This is further demonstrated on Figure 4.9.

### Distribution of Involvement in Making IT Strategy.



**Figure 4.9: Involvement in Making IT Strategy**

#### 4.2.10 Importance of Strategic Alignment Within the Organization

»

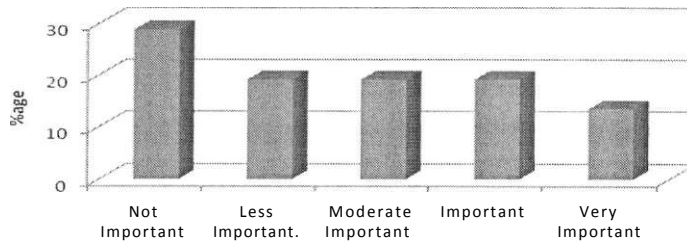
**Table 4.10: Importance of Strategic Alignment.**

<i>Distribution of Strategic Alignment.</i>	<i>Important of Strategic Alignment.</i>	Frequency	Percent	Valid Percent	Cumulative Percent
1	Not Important	15	28.8	28.8	28.8
2	Less Important	10	19.2	19.2	48.1
3	Moderate Important	10	19.2	19.2	67.3
4	Important	10	19.2	19.2	86.5
5	Very Important	7	13.5	13.5	100.0
	Total	52	100.0	100.0	

**Source: Research data**

From Table 4.10 above, it's clear 28.8% of the respondents felt that strategic alignment within the organization was not important. Some 19.2% felt that strategic alignment within the organization was less important. A similar percentage felt that it was not important to a moderate extent and the same number felt it was important. There is also 13.5% who felt it is important to align strategy within the organization. This is further demonstrated on Figure 4.10.

### Distribution of Importance of Strategic Alignment.



**Figure 4.10: Importance of Strategic Alignment**

### 4.3 IT-Business Strategy Alignment

In order to investigate the various practices in IT-Business strategy alignment, the study used a likert-type scale in which 5,4,3,2 and 1 represented continuum scores for 1-No extent, 2-Little extent, 3-Moderate extent, 4-Great extent, 5-Greatest extent *respectively*. These enabled the tabulation and interpretation of the responses from the research instrument. The main statistics derived are mean, standard deviation and variance. The mean illustrated the extent to which the respondents agreed or disagreed with the statements put forth on the practices in IT-Business strategy alignment among parastatals in Kenya. This is well elaborated in Table 4.11 and narratives below which show the respondents and the statistics.



**Table 4.11: Practices in IT-Business Strategy Alignment**

<b>Practices</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Variance</b>
Active involvement of business manager during strategic formulation	52	2.98	1.146	1.31:
Active involvement of IT manager during strategic formulation	52	3.56	1.349	1.82C
Use of management skill of business decision makers	52	2.85	1.274	1.622
Use of management skill of IT decision makers	52	2.92	1.607	2.58:
Consensus between business and IT decision makers	52	2.85	1.377	i.89:
Business strategy focus on organization long term goals	52	3.19	1.221	1.49:
IS strategy focus on organizational long term goals	52	3.33	1.264	1.59:
IS clarity with business goals	52	2.62	1.239	1.53:'
IS consistence with business goals	52	3.90	1.192	1.42:
Strategic oriented decision making process	52	2.29	1.177	1.38(
Supportive organizational culture	52	2.87	1.715	2.94:
Organizational structure that provides mechanisms for accountability and ownership	52	3.29	1.473	2.17(
Use of IT project steering committee	52	2.83	.834	.69 i
Use of project management methodologies	52	3.60	1.257	1.57'

**Source: Research data**

We find that there is overwhelming agreement on the practices of IT-Business strategy alignment. The most overwhelming response was on IS consistence with business goals with a mean of 3.90. This was followed by use of project management methodologies with a mean of 3.60. There is also active involvement of IT manager during strategic formulation with a mean of 3.56. IS strategy focus on organizational long term goals had a mean of 3.33 pointing to an above average acceptance by the respondents.

The standard deviations (SD) also point to the same picture portrayed by the mean. The highest SD is for the proposition on supportive organizational culture with a SD of 1.715 followed by use of management skill of IT decision makers as a major practice in strategy alignment among parastatals in Kenya with a SD of 1.607. The lowest standard deviation was 0.834 for use of IT project steering committee.

The table also shows the result of the variances for each response. Again we note that the fact that there is agreement on practices in IT-Business strategy alignment. Supportive organizational culture had the highest variance of 2.942 pointing to the fact it a strong component in the practices of IT-Business strategy alignment among parastatals in Kenya. The lowest variance was 0.695 touching on use of IT project steering committee.

#### **4.3.1 Factor Analysis - Practices in IT-Business Strategy Alignment**

The first objective of the study was to determine the practices in IT-Business strategy alignment among parastatals in Kenya. From the literature review, the researcher identified 14 variables (practices) in IT-Business strategy alignment. The variables are listed as follows;

1. Active involvement of business manager during strategy formulation
2. Active involvement of IT manager during strategy formulation
3. Use of management skill of business decision makers
4. Use of management skill of IT decision makers
5. Consensus between business and IT decision makers
6. Business strategy focus on organizational long term goals
7. IT strategy focus on organizational long term goals
8. IS clarity with business goals
9. IS consistence with business goals
10. Strategy oriented decision making process
11. Supportive organizational culture
12. Organizational structure that provides mechanisms for accountability and ownership
13. Use of IT project steering committee
14. Use of project management methodologies

The 14 variables were included in the questionnaire and the respondents were asked to state the extent to which they agreed with the statements. A likert scale with; 1 -No extent, 2-Little extent, 3-Moderate extent, 4-Great extent, 5-Greatest extent *respectively* was

used to analyze the responses. From the factor analysis, a total of 4 components with Eigen values greater than 1 accounted for 64.731% of the factor analysis. The process and result of factor analysis are discussed in this section.

Communality is the proportion of variance that each item has in common with other items. The proportion of variable that is unique to each item is then the respective item's total variance minus the communality. Table 4.11 shows communalities. The extraction method was the principle component analysis

**Table 4.12: Communalities.**

<b>Practices in IT-Business Strategy Alignment</b>	<b>Initial</b>	<b>Extraction</b>
Active involvement of business manager during strategic formulation	1.000	0.472
Active involvement of IT manager during strategic formulation	1.000	0.713
Use of management skill of business decision makers	1.000	0.632
Use of management skill of IT decision makers	1.000	0.615
Consensus between business and IT decision makers	1.000	0.786
Business strategy focus on organization long term goals	1.000	0.673
IS strategy focus on organizational long term goals	1.000	0.343
IS clarity with business goals	1.000	0.774
IS consistence with business goals	1.000	0.761
Strategic oriented decision making process	1.000	0.621
Supportive organizational culture	1.000	0.823
Organizational structure that provides mechanisms for accountability and ownership	1.000	0.720
Use of IT project steering committee	1.000	0.709
Use of project management methodologies	1.000	0.421

**Source: Research data**

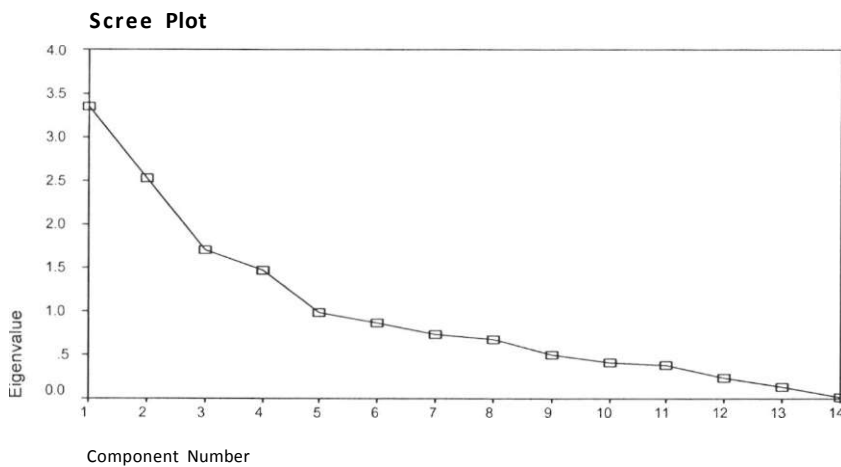
**Table 4.13: Total Variance Explained - Practices In IT-Business Strategy Alignment**

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.350	23.929	23.929	3.350	23.929	23.929
2	2.526	18.046	41.975	2.526	18.046	41.975
3	1.713	12.236	54.212	1.713	12.236	54.212
4	1.473	10.519	64.731	1.473	10.519	64.731
5	.990	7.070	71.801			
6	.871	6.225	78.026			
7	.728	5.201	83.226			
8	.674	4.811	88.037			
9	.501	3.581	91.618			
10	.406	2.897	94.515			
11	.386	2.758	97.273			
12	.235	1.681	98.954			
13	.129	.923	99.877			
14	.017	.123	100.000			

**Source: Research data**

Table 4.12 represents the total original variance of all factors. Principle component analysis was used to extract factors which totaled 14. Eigen values indicate the relative importance of each practice accounting for a particular set and hence those with a small Eigen value were left out. According to Table 4.12, only 4 practices were considered significant for analysis.

**Figure 4.11 Practices In IT-Business Strategy Alignment**



The Scree plot is a plot of factor Eigen values against the components numbers. According to Figure 4.11, we only consider 4 factors because the curve tends to flatten from the fourth component onwards, due to relatively low factor Eigen value.

Factor analysis, Principal Component Analysis was used to extract the key practices in IT-Business strategy alignment. This required Varimax with Kaiser Normalization which gave a rotation and converged in five iterations. The results are displayed in Table 4.13.

**Table 4.14:Component Matrix**

FACTOR	Component			
	1	2	3	4
Supportive organizational culture	<b>0.843</b>	-0.12	0.066	0.306
Use of IT project steering committee	<b>0.827</b>	0.088	-0.049	0.124
IS consistence with business goals	<b>0.579</b>	-0.485	0.307	-0.31
Consensus between business and IT decision makers	0.279	<b>0.597</b>	-0.173	-0.568
Use of management skill of business decision makers	0.102	<b>0.511</b>	0.598	0.044
IS strategy focus on organizational long term goals	0.094	0.507	-0.12	0.25
Use of management skill of IT decision makers	0.074	-0.691	-0.109	0.347
Active involvement of IT manager during strategic formulation	0.048	-0.477	-0.695	-0.04
Active involvement of business manager during strategic formulation	-0.07	0.123	<b>0.612</b>	0.278
IS clarity with business goals	-0.09	0.51	-0.367	<b>0.61</b>
Business strategy focus on organization long term goals	-0.423	-0.501	0.417	0.264
Use of project management methodologies	-0.549	0.25	-0.059	-0.23
Strategic oriented decision making process	-0.688	0.156	-0.125	0.328
Organizational structure that provides mechanisms for accountability and ownership	-0.741	-0.277	0.115	-0.283

The Component matrix contains the relative Eigen values in respect of each factor. Each factor belongs to one of the 4 sets of factors extracted, and is determined by the Eigen values of the factors to each set. Table 4.13 shows which set of each factor falls into.

From the component transformational matrix shown as Table 4.13, all the factors showed a positive correlation with each other. The correlation is significant at 0.01 level (2-

tailed). The analysis confirms that no single practice can independently influence the IT-Business strategy alignment.

Factor isolation involves isolating each of the variable factors and grouping them based on their factor loadings on each set. Table 4.14 shows the factors grouped with a minimum correlation of +/-0.55.

**Table 4.15'.Isolation of Factors**

<b>Practices in IT-Business Strategy Alignment</b>	<b>Factor Component</b>
Supportive organizational culture	<b>Factor 1</b>
Use of IT project steering committee	
IS consistence with business goals	
Use of project management methodologies	
Strategic oriented decision making process	
Organizational structure that provides mechanisms for accountability and ownership	
Consensus between business and IT decision makers	<b>Factor 2</b>
Use of management skill of business decision makers	
IS strategy focus on organizational long term goals	
Use of management skill of IT decision makers	
IS clarity with business goals	
Business strategy focus on organization long term goals	
Use of management skill of business decision makers	<b>Factor 3</b>
Active involvement of IT manager during strategic formulation	
Active involvement of business manager during strategic formulation	<b>Factor 4</b>
Consensus between business and IT decision makers	
IS clarity with business goals	

The factor extraction gave four components. The variable components were the factors which are practices of IT-Business strategy alignment. From the Table 4.14, Group factor 1 was composed of; Supportive organizational culture, Use of IT project steering committee, IS consistence with business goals, Use of project management

methodologies, Strategic oriented decision making process and Organizational structure that provides mechanisms for accountability and ownership

Group factor 2 was composed of; Consensus between business and IT decision makers, Use of management skill of business decision makers, IS strategy focus on organizational long term goals, Use of management skill of IT decision makers, IS clarity with business goals, Business strategy focus on organization long term goals and Use of management skill of business decision makers

Group factor 3 was composed of; Active involvement of IT manager during strategic formulation and Active involvement of business manager during strategic formulation.

Group factor 4 was composed of; Consensus between business and IT decision makers and IS clarity with business

It is clear that most of the factors listed in the questionnaire were grouped together by their correlation with each other, which brought down to a total of 4 main group factors. The most number of factors elements were in groups 1 and 2.

#### **4.4 Activities Performed in the Process of Alignment Between Business and IT Strategy**

In order to investigate the activities performed in the process of alignment between business and IT strategy among parastatals in Kenya a likert-type scale in which 1,2,3,4 and 5 represented continuum scores for *1-No extent, 2-Little extent, 3-Moderate extent, 4-Great extent, 5-Greatest extent respectively*. These enabled the tabulation and interpretation of the responses from the research instrument. The main statistics derived are mean and standard deviation. The mean illustrated the activities performed in the process of alignment between business and IT strategy among parastatals in Kenta. This is well elaborated in the table and narratives below which show the respondents and the statistics.

**Table 4.16:Activities in the Process ofAlignment Between Business and IT Strategy.**

Activities	N	Mean	Std. Deviation	Variance
Identify business strategy that links to IT strategy	52	3.15	.998	.995
Identify IT strategy that links to business strategy	52	3.21	1.258	1.582
Matching business need to IT	52	3.37	1.268	1.609
Establish common architecture to alignment	52	2.96	1.171	1.371
Develop an enterprise IT-Business model	52	2.92	1.152	1.327
Develop management skill of business and IT decision makers	52	3.31	1.164	1.354
Make strategic oriented decision	52	3.21	1.160	1.347
Develop organization structure that provides mechanisms for IT Business alignment	52	2.83	1.324	1.754
Enhance organizational culture to support alignment	52	3.21	1.391	1.935
Develop a mitigation strategy	52	2.85	1.289	1.662
Develop an implementation plan	52	2.92	1.341	1.798
Create processes for management of IT in relation to business strategy	52	3.27	1.374	1.887
Create processes for governance of IT in relation to business strategy	52	2.88	1.263	1.594
Form a common architecture vision between lines of business and IT	52	2.96	1.386	1.920

Source: Research data

The table shows that majority of the respondents agree that Matching business need to IT is a major activity in their daily jobs. They also agreed that developing management skill for business and IT decision makers is paramount in parastatals in Kenya. This is very clear going by the mean of the responses which were 3.37 and 3.31 respectively. These two have a major impact on IT-Business strategy alignment in the parastatals in Kenya. This is followed by creation of processes for management of IT in relation to business strategy with a mean of 3.27. The success of any IT-Business strategy relies heavily on processes and how they are implemented. Most of the respondents believe on the propositions put forth with a SD of 1.39 for those agreeing that there is need to enhance organizational culture to support alignment activities among the parastatals. This is true for all organizations. There was a significant record of the variance for the propositions with outcomes ranging from a high 1.935 to a low of 0.995.



#### **4.4.1 Activities Performed in the Process of Alignment between Business and IT Strategy**

The second objective of the study was to determine the activities performed in the process of alignment between business and IT strategies among parastatals in Kenya. From the literature review, the researcher identified 14 variables (activities) performed in the process of alignment between business and IT strategy. The variables are listed as follows;

1. Identify business strategy that links to IT strategy
2. Identify IT strategy that links to business strategy
3. Matching business need to IT
4. Establish common architecture to alignment
5. Develop an enterprise IT-Business model
6. Develop management skill of business and IT decision makers
7. Make strategic oriented decision
8. Develop organization structure that provides mechanisms for IT Business alignment
9. Enhance organizational culture to support alignment
10. Develop a mitigation strategy
11. Develop an implementation plan
12. Create processes for management of IT in relation to business strategy
13. Create processes for governance of IT in relation to business strategy
14. Form a common architecture vision between lines of business and IT

The 14 variables were included in the questionnaire and the respondents were asked to state the extent to which they agreed with the statements. A likert scale with; 1-No extent, 2-Little extent, 3-Moderate extent, 4-Great extent, 5-Greatest extent *respectively* was used to analyze the responses. From the factor analysis, a total of 6 components with Eigen values greater than 1 accounted for 70.205% of the factor analysis. The process and result of factor analysis are discussed in this section.

Communality is the proportion of variance that each item has in common with other items. The proportion of variable that is unique to each item is then the respective item's

total variance minus the communality. Table 4.15 shows communalities. The extraction method was the principle component analysis

**Table 4.17: Communalities.**

<b>Activities Performed in the Process of Alignment between Business and IT Strategy</b>	<b>Initial</b>	<b>Extraction</b>
Identify business strategy that links to IT strategy	1.000	.385
Identify IT strategy that links to business strategy	1.000	.653
Matching business need to IT	1.000	.746
Establish common architecture to alignment	1.000	.607
Develop an enterprise IT-Business model	1.000	.650
Develop management skill of business and IT decision makers	1.000	.706
Make strategic oriented decision	1.000	.780
Develop organization structure that provides mechanisms for IT Business alignment	1.000	.670
Enhance organizational culture to support alignment	1.000	.809
Develop a mitigation strategy	1.000	.688
Develop an implementation plan	1.000	.733
Create processes for management of IT in relation to business strategy	1.000	.803
Create processes for governance of IT in relation to business strategy	1.000	.739
Form a common architecture vision between lines of business and IT	1.000	.860

**Source: Research data**

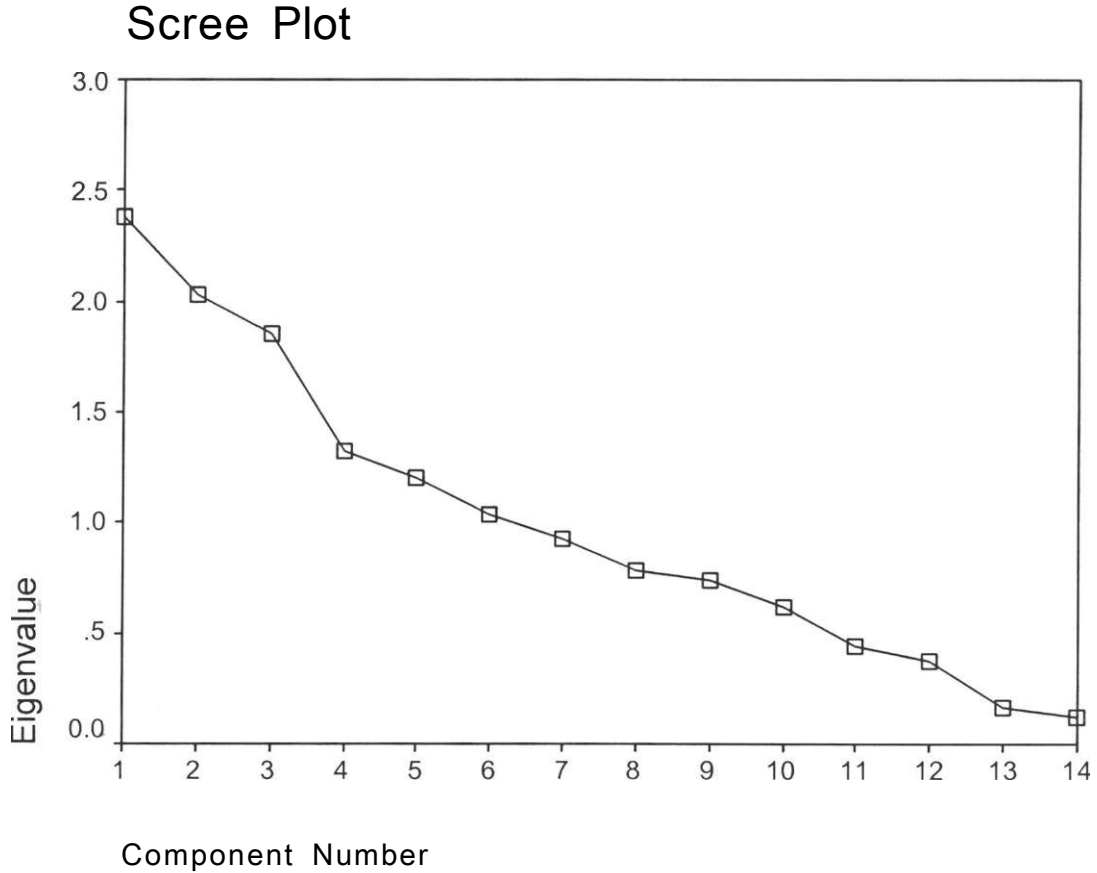
**Table 4.18: Total Variance Explained - Activities in the Process of Alignment between Business and IT Strategy**

Total Variance Explained						
Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.379	16.993	16.993	2.379	16.993	16.993
2	2.028	14.485	31.478	2.028	14.485	31.478
3	1.854	13.243	44.721	1.854	13.243	44.721
4	1.319	9.421	54.142	1.319	9.421	54.142
5	1.207	8.624	62.766	1.207	8.624	62.766
6	1.041	7.439	70.205	1.041	7.439	70.205
7	0.93	6.641	76.846			
8	0.78	5.57	82.416			
9	0.735	5.251	87.667			
10	0.618	4.417	92.084			
11	0.44	3.143	95.227			
12	0.373	2.662	97.889			
13	0.17	1.217	99.105			
14	0.125	0.895	100			

**Source: Research data**

Table 4.16 represents the total original variance of all factors. Principle component analysis was used to extract factors which totaled 14. Eigen values indicate the relative importance of each activity accounting for a particular set and hence those with a small Eigen value were left out. According to Table 4.16, only 6 activities were considered significant for analysis.

*Figure 4.12 Activities in the Process of IT-Business Strategy Alignment*



The Scree plot is a plot of factor Eigen values against the components numbers. According to Scree plot below, we only consider 6 factors because the curve tends to flatten from the fourth component onwards, due to relatively low factor Eigen value.

Factor analysis, Principal Component Analysis was used to extract the key activities in the process of business and IT strategy. This required Varimax with Kaiser Normalization which gave a rotation and converged in twelve iterations. The results are displayed in Table 4.19.

**Table 4.19: Component Matrix**

FACTOR	Component					
	1	2	3	4	5	6
Identify business strategy that links to IT strategy	0.104	0.419	0.239	0.308	-0.073	0.204
Identify IT strategy that links to business strategy	-0.45	-0.053	0.656	0.023	-0.089	0.095
Matching business need to IT	0.649	0.093	-0.512	-0.178	-0.12	-0.088
Establish common architecture to alignment	-0.389	0.227	0.395	0.112	0.376	0.306
Develop an enterprise IT-Business model	0.205	0.479	-0.342	0.395	0.286	-0.153
Develop management skill of business and IT decision makers	0.246	-0.509	0.322	-0.174	0.375	-0.336
Make strategic oriented decision	-0.405	-0.007	-0.159	0.098	-0.762	0.022
Develop organization structure that provides mechanisms for IT Business alignment	0.403	0.07	0.461	-0.442	-0.123	-0.282
Enhance organizational culture to support alignment	-0.541	-0.24	-0.45	0.368	0.154	-0.31
Develop a mitigation strategy	0.563	0.48	0.096	0.002	-0.121	0.342
Develop an implementation plan	0.057	-0.777	-0.044	0.081	-0.165	0.301
Create processes for management of IT in relation to business strategy	-0.495	0.604	0.108	-0.151	-0.032	-0.396
Create processes for governance of IT in relation to business strategy	0.461	-0.196	0.261	0.641	0.095	0.002
Form a common architecture vision between lines of business and IT	-0.305	0.034	-0.444	-0.46	0.381	0.461

**Source: Research data**

The Component matrix contains the relative Eigen values in respect of each factor. Each factor belongs to one of the 6 sets of factors extracted, and is determined by the Eigen values of the factors to each set. Table 4.17 shows which set of each factor falls into.

From the component transformational matrix shown as Table 4.17, not all the factors showed a positive correlation with each other. The correlation is significant at 0.01 level (2-tailed). The analysis confirms that no single practice can independently influence the IT-Business strategy alignment.

Factor isolation involves isolating each of the variable factors and grouping them based on their factor loadings on each set. Table 4.18 shows the factors grouped with a minimum correlation of +/-0.55.

**Table 4.20: Isolation of Factors**

<b>Activities Performed in the Process of Alignment Between Business and IT Strategy</b>	<b>Factor Component</b>
Matching business need to IT	<b>Factor 1</b>
Develop a mitigation strategy	
Create processes for governance of IT in relation to business strategy	
Develop organization structure that provides mechanisms for IT Business alignment	
Create processes for management of IT in relation to business strategy	
Enhance organizational culture to support alignment	
Create processes for management of IT in relation to business strategy	<b>Factor 2</b>
Develop a mitigation strategy	
Develop management skill of business and IT decision makers	
Develop an enterprise IT-Business model	
Identify business strategy that links to IT strategy	
Develop an implementation plan	
Matching business need to IT	<b>Factor 3</b>
Develop organization structure that provides mechanisms for IT Business alignment	
Form a common architecture vision between lines of business and IT	
Identify IT strategy that links to business strategy	
Enhance organizational culture to support alignment	
Create processes for governance of IT in relation to business strategy	<b>Factor 4</b>
Develop organization structure that provides mechanisms for IT Business alignment	
Form a common architecture vision between lines of business and IT	
Make strategic oriented decision	<b>Factor 5</b>
Form a common architecture vision between lines of business and IT	<b>Factor 6</b>

**Source: Research data**

The factor extraction gave six components. The variable components were the factors which are activities performed in the process of alignment between IT and Business strategy. From the Table 4.18, Group factor 1 was composed of; Matching business need to IT, Develop a mitigation strategy, Create processes for governance of IT in relation to business strategy, Develop organization structure that provides mechanisms for IT Business alignment, Create processes for management of IT in relation to business strategy, Enhance organizational culture to support alignment.

Group factor 2 was composed of; Create processes for management of IT in relation to business strategy, Develop a mitigation strategy, Develop management skill of business and IT decision makers, Develop an enterprise IT-Business model, Identify business strategy that links to IT strategy, Develop an implementation plan.

Group factor 3 was composed of; Matching business need to IT, Develop organization structure that provides mechanisms for IT Business alignment, Form a common architecture vision between lines of business and IT, Identify IT strategy that links to business strategy, Enhance organizational culture to support alignment.

Group factor 4 was composed of; Create processes for governance of IT in relation to business strategy, Develop organization structure that provides mechanisms for IT Business alignment and form a common architecture vision between lines of business and

Group factor 5 was composed of; Make strategic oriented decision

Group factor 6 was composed of; Form a common architecture vision between lines of business and IT

This clearly shows that most of the factors listed in the questionnaire were grouped together by their correlation with each other, which brought down to a total of 6 main group factors. The most number of factors elements were in groups 1, 2, 3 and 4.

#### 4.5 Challenges of IT-Business Strategy Alignment.

The researcher also sought to find the challenges of IT-Business strategy alignment among parastatals in Kenya. To this end, the researcher used a likert-type scale in which 1,2,3,4 and 5 represented continuum scores for *1-No extent, 2-Little extent, 3-Moderate extent, 4-Great extent, 5-Greatest extent respectively*. These arrangements enabled the tabulation and interpretation of the responses from the research instrument. The main statistics derived are mean and standard deviation. The mean illustrated the extent to which the respondents agreed or disagreed with the stated challenges of IT-Business strategy alignment among parastatals in Kenya. This is well elaborated in the table and narratives below which show the respondents and the statistics.

**Table 4.21: Challenges of IT-Business Strategy Alignment.**

<b>Challenges</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Varian</b>
Unclear understanding of business needs	52	3.38	.932	
Lack of consensus between business and IT decision makers	52	4.54	.641	<i>L</i>
Inactive involvement of managers during strategy formulation	52	4.62	.491	<i>A</i>
Insufficient human resource to be used in strategy alignment	52	4.92	.269	
Little management skills of business decision makers	52	4.54	.641	<i>%L</i>
Little management skills of IT decision makers	52	3.23	.581	
Lack of focus on organization long term goals	52	2.92	.269	
Unsupportive organization culture	52	3.38	.491	<i>.z</i>
Lack of communication between business and IT decision makers	52	2.92	.269	<i>(</i>
Lack of consensus and clarity in the involved team	52	1.69	.466	
Wrong feedback from either the business or IT team	52	1.08	.269	
Lack of clear decision structure	52	2.31	.466	<i>.z</i>
Financial incapability to support alignment	52	2.69	.919	<i>.I</i>
No well prioritized IT efforts	52	2.54	1.019	<i>1.(</i>
Limited participation of IT team as integral part of line business management team	52	2.31	.919	<i>.i</i>
Non supportive organization structure	52	2.31	.466	<i>.z</i>
Lack of IT strategy in place	52	2.08	.269	
Lack of Business strategy in place	52	1.69	.919	<i>A</i>
Limitations imposed by IT service plan	52	1.69	.466	

**Source: Research data**



We find from table 4.13 above shows that the respondents agreed with the propositions put across regarding the challenges of IT-Business strategy alignment among parastatals in Kenya. Insufficient human resource to be used in strategy alignment was highlighted as the major challenge in the process with a mean of 4.92. This was followed by inactive involvement of managers during strategy formulation with a mean of 4.62. The other challenged with a high mean is lack of consensus between business and IT decision makers and little management skills of business decision makers each with a mean of 4.54. The same trend has been demonstrated by the SD and variance. On the challenge on lack of well prioritized IT efforts, there was a SD of 1.019 noting that the responses were varied among the parastatals. The variance also painted the same scenario with lack of well prioritized IT efforts being noted as a major challenge with a variance of 1.038.

#### **4.5.1 Challenges of IT-Business Strategy Alignment.**

The third objective of the study was to determine the challenges of IT-Business strategy alignment among parastatals in Kenya. From the literature review, the researcher identified 19 variables (challenges) encounters in the process of alignment between business and IT strategy. The variables are listed as follows;

1. Unclear understanding of business needs
2. Lack of consensus between business and IT decision makers
3. Inactive involvement of managers during strategy formulation
4. Insufficient human resource to be used in strategy alignment
5. Little management skills of business decision makers
6. Little management skills of IT decision makers
7. Lack of focus on organization long term goals
8. Unsupportive organization culture
9. Lack of communication between business and IT decision makers
10. Lack of consensus and clarity in the involved team
11. Wrong feedback from either the business or IT team
12. Lack of clear decision structure
13. Financial incapability to support alignment

14. No well prioritized IT efforts
15. Limited participation of IT team as integral part of line business management team
16. Non supportive organization structure
17. Lack of IT strategy in place
18. Lack of Business strategy in place
19. Limitations imposed by IT service plan

The 19 variables were included in the questionnaire and the respondents were asked to state the extent to which they agreed with the statements. A likert scale with; 1-No extent, 2-Little extent, 3-Moderate extent, 4-Great extent, 5-Greatest extent *respectively* was used to analyze the responses. From the factor analysis, a total of 5 components with "Eigen values greater than 1 accounted for 79.269% of the factor analysis. The process and result of factor analysis are discussed in this section.

Communality is the proportion of variance that each item has in common with other items. The proportion of variable that is unique to each item is then the respective item's total variance minus the communality. Table 4.19 shows communalities. The extraction method was the principle component analysis

**Table 4.22: Communalities.**

<b>Challenges of IT-Business Strategy Alignment</b>	<b>Initial</b>	<b>Extraction</b>
Unclear understanding of business needs	1.000	.892
Lack of consensus between business and IT decision makers	1.000	.487
Inactive involvement of managers during strategy formulation	1.000	.772
Insufficient human resource to be used in strategy alignment	1.000	.829
Little management skills of business decision makers	1.000	.850
Little management skills of IT decision makers	1.000	.768
Lack of focus on organization long term goals	1.000	.712
Unsupportive organization culture	1.000	.780
Lack of communication between business and IT decision makers	1.000	.477
Lack of consensus and clarity in the involved team	1.000	.809
Wrong feedback from either the business or IT team	1.000	.896
Lack of clear decision structure	1.000	.846
Financial incapability to support alignment	1.000	.836
No well prioritized IT efforts	1.000	.659
Limited participation of IT team as integral part of line business management team	1.000	.805
Non supportive organization structure	1.000	.921
Lack of IT strategy in place	1.000	.915
Lack of Business strategy in place	1.000	.914
Limitations imposed by IT service plan	1.000	.892

**Source: Research data**

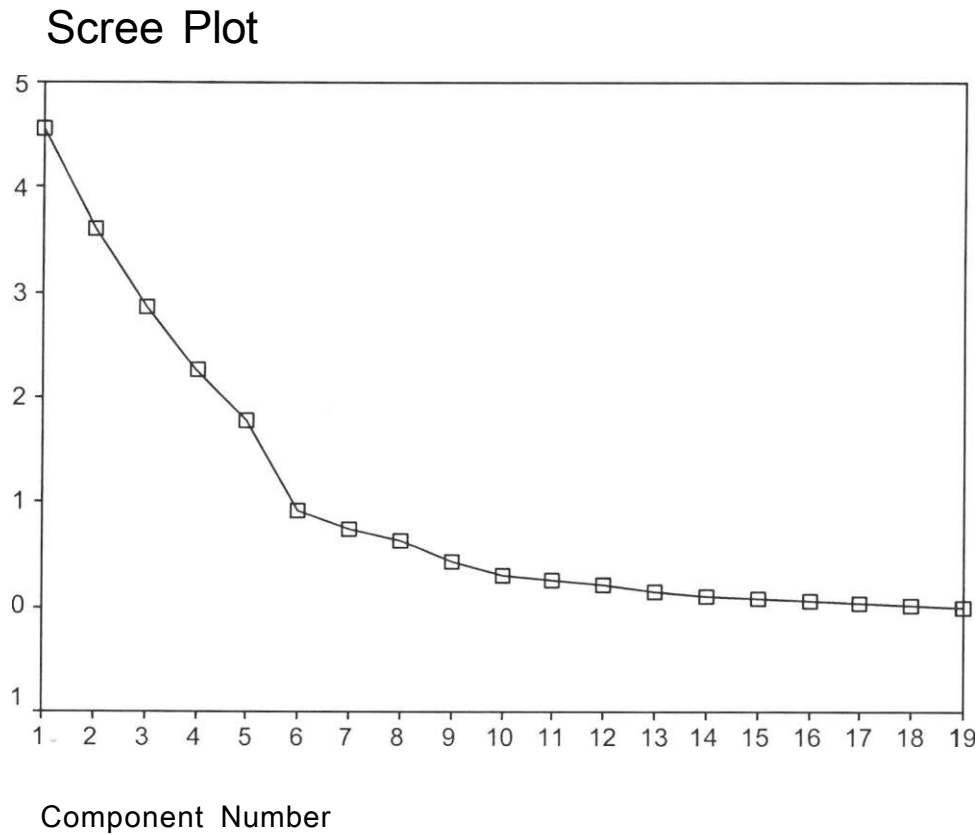
**Table 4.23: Total Variance Explained - Challenges in IT-Business Strategy Alignment**

Total Variance Explained						
Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.561	24.007	24.007	4.561	24.007	24.007
2	3.608	18.987	42.995	3.608	18.987	42.995
3	2.853	15.016	58.01	2.853	15.016	58.01
4	2.265	11.922	69.932	2.265	11.922	69.932
5	1.774	9.337	79.269	1.774	9.337	79.269
6	0.926	4.876	84.144			
7	0.741	3.9	88.044			
8	0.642	3.377	91.422			
9	0.43	2.262	93.683			
10	0.306	1.612	95.295			
11	0.254	1.339	96.634			
12	0.206	1.082	97.716			
13	0.157	0.825	98.541			
14	0.102	0.536	99.077			
15	0.073	0.386	99.463			
16	0.053	0.277	99.74			
17	0.028	0.146	99.886			
18	0.022	0.114	100			
19	5.95E-16	-3.13E-15	100			

**Source: Research data**

Table 4.20 represents the total original variance of all factors. Principle component analysis was used to extract factors which totaled 19. Eigen values indicate the relative importance of each activity accounting for a particular set and hence those with a small Eigen value were left out. According to Table 4.20 only 5 activities were considered significant for analysis.

*Figure 4.13 Challenges of IT-Business Strategy Alignment*



The Scree plot is a plot of factor Eigen values against the components numbers. According to Scree plot below, we only consider 5 factors because the curve tends to flatten from the fourth component onwards, due to relatively low factor Eigen value.

Factor analysis, Principal Component Analysis was used to extract the key challenges in IT - Business Strategy Alignment. This required Varimax with Kaiser Normalization which gave a rotation and converged in five iterations. The results are displayed in table 4.21.

**Table 4.24:Component Matrix**

FACTOR	Component				
	1	2	3	4	5
Non supportive organization structure	<b>0.913</b>	0.193	-0.033	-0.176	-0.133
Lack of IT strategy in place	<b>0.886</b>	0.015	-0.218	-0.173	-0.228
Lack of Business strategy in place	<b>0.846</b>	0.213	-0.13	-0.27	-0.25
Limited participation of IT team as integral part of line business management team	<b>0.841</b>	-0.091	-0.289	-0.072	-0.013
Lack of focus on organization long term goals	0.26	<b>0.703</b>	0.071	0.248	0.289
Little management skills of IT decision makers	0.314	<b>0.655</b>	-0.092	0.053	0.479
Little management skills of business decision makers	0.29	<b>0.598</b>	0.329	0.532	-0.126
Insufficient human resource to be used in strategy alignment	-0.003	<b>0.534</b>	0.223	0.692	-0.119
Lack of clear decision structure	0.142	-0.484	<b>0.75</b>	0.084	-0.146
Financial incapability to support alignment	0.351	-0.243	<b>0.697</b>	-0.077	0.401
Lack of consensus and clarity in the involved team	0.332	-0.586	<b>0.576</b>	0.149	-0.029
Wrong feedback from either the business or IT team	0.497	-0.529	<b>0.529</b>	0.062	0.293
Inactive involvement of managers during strategy formulation	-0.018	0.138	0.303	<b>0.645</b>	-0.495
Lack of consensus between business and IT decision makers	0.25	-0.039	-0.324	<b>0.534</b>	0.182
No well prioritized IT efforts	0.445	0.354	0.156	-0.15	<b>0.538</b>
Lack of communication between business and IT decision makers	-0.362	0.166	0.237	-0.037	<b>0.511</b>
Unclear understanding of business needs	0.038	-0.568	-0.507	0.461	0.314
Unsupportive organization culture	-0.611	0.463	0.281	-0.332	0.054
Limitations imposed by IT service plan	0.038	-0.568	-0.507	0.461	0.314

**Source: Research data**

The Component matrix contains the relative Eigen values in respect of each factor. Each factor belongs to one of the 5 sets of factors extracted, and is determined by the Eigen values of the factors to each set. Table 4.21 shows which set of each factor falls into.

From the component transformational matrix shown as Table 4.21, not all the factors showed a positive correlation with each other. The correlation is significant at 0.01 level

(2-tailed). The analysis confirms that no single practice can independently influence the IT-Business strategy alignment.

Factor isolation involves isolating each of the variable factors and grouping them based on their factor loadings on each set. Table 4.22 shows the factors grouped with a minimum correlation of +/-0.50.

**Table 4.25. 'Isolation of Factors**

<b>Challenges in IT-Business Strategy Alignment</b>	<b>Factor Component</b>
Non supportive organization structure	<b>Factor 1</b>
Lack of IT strategy in place	
Lack of Business strategy in place	
Limited participation of IT team as integral part of line business management team	
Lack of focus on organization long term goals	<b>Factor 2</b>
Little management skills of IT decision makers	
Little management skills of business decision makers	
Insufficient human resource to be used in strategy alignment	
Lack of clear decision structure	<b>Factor 3</b>
Financial incapability to support alignment	
Lack of consensus and clarity in the involved team	
Wrong feedback from either the business or IT team	
Inactive involvement of managers during strategy formulation	<b>Factor 4</b>
Lack of consensus between business and IT decision makers	
No well prioritized IT efforts	<b>Factor 5</b>
Lack of communication between business and IT decision makers	

**Source: Research data**

The factor extraction gave five components. The variable components were the factors which are challenges in IT-Business strategy alignment. From the Table 4.22, Group factor 1 was composed of; Non supportive organization structure, Lack of IT strategy in place, Lack of Business strategy in place, Limited participation of IT team as integral part of line business management team.

Group factor 2 was composed of; Lack of focus on organization long term goals, Little management skills of IT decision makers, Little management skills of business decision makers and Insufficient human resource to be used in strategy alignment

Group factor 3 was composed of; Lack of clear decision structure, financial incapability to support alignment, Lack of consensus and clarity in the involved team and wrong feedback from either the business or IT team.

Group factor 4 was composed of; Inactive involvement of managers during strategy formulation and Lack of consensus between business and IT decision makers.

Group factor 5 was composed of; No well prioritized IT efforts and Lack of communication between business and IT decision makers

This clearly shows that most of the factors listed in the questionnaire were grouped together by their correlation with each other, which brought down to a total of 5 main group factors. The most number of factors elements were in groups 1, 2, and 3.



# **CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

## **5.0 Introduction**

This study had three objectives. First was to determine the practices parastatals use to align IS and Business strategies. Second it also sort to identify the extent of IS-Business strategy alignment in parastatals in Kenya. Thirdly it looked at challenges of IS-Business strategy alignment. In theory, it seeks to elaborate so in light of prior studies in business-IT strategic alignment by different scholars that they presented different definitions and meanings to the concept of strategic alignment based on different perspectives in Kenya's parastatals.

## **5.1 Discussion**

From the data analysis, it was established that the majority of the respondents were male. It was also established majority of respondents were business oriented as opposed to IT orientation by 73.1% and 26.9% respectively. Majority have worked for less than 5 years in the parastatals. There was evidence that most of the parastatals do not have IT strategies but they consider it to be significant in the organizations policy making. The respondents also felt not involved to a great extend in the formulation of business strategies.

### **5.1.1 Effects of IT-Business Strategy Alignment.**

It was found that there is overwhelming agreement on the effects of IT-Business strategy Alignment in the parastatals. The factor analysis narrowed down to four sets of significant effects. The first group consisted of the presence of a supportive organizational culture, the use of an IT project steering committee, IS consistence with business goals, Use of project management methodologies, Strategic oriented decision making process and Organizational structure that provides mechanisms for accountability and ownership. The second set of effects included consensus between business and IT decision makers, Use of management skill of business decision makers, IS strategy focus on organizational long term goals, Use of management skill of IT decision makers, and IS clarity with business goals, Business strategy focus on organization long term goals and

Use of management skill of business decision makers. Another set of effects are active involvement of IT manager during strategic formulation and Active involvement of business manager during strategic formulation. Finally there was consensus between business and IT decision makers and IS clarity with business

### **5.1.2 Activities Performed in the Process of Alignment between Business and IT strategy**

The factor extraction gave five components consisting of variable components that were the challenges in IT-Business strategy alignment. Factor analysis helped group the activities with the first group consisting of non supportive organization structure, lack of IT strategy in place, lack of Business strategy in place, limited participation of IT team as integral part of line business management team. These points to strong inclination towards lack of goodwill on the parastatals to align IT and Business strategies.

The next set was composed of lack of focus on organization long term goals, little management skills of IT decision makers, little management skills of business decision makers and insufficient human resource to be used in strategy alignment. Group three was composed of lack of clear decision structure, financial incapability to support alignment, lack of consensus and clarity in the involved team and wrong feedback from either the business or IT team. The next group was composed of inactive involvement of managers during strategy formulation and lack of consensus between business and IT decision makers. Group five was composed of creating processes for governance of IT in relation to business strategy, developing organization structure that provides mechanisms for IT Business alignment and forming a common architecture vision between lines of business and IT. Finally, group six was composed of lack of well prioritized IT efforts and Lack of communication between business and IT decision makers

### **5.1.3 Challenges of IT-Business Strategy Alignment**

The factor extraction for this objective gave five components which are challenges in IT-Business strategy alignment. Group factor one was composed of; Non supportive organization structure, Lack of IT strategy in place, Lack of Business strategy in place, Limited participation of IT team as integral part of line business management team.

The group factor two was composed of lack of focus on organization long term goals, little management skills of IT decision makers, little management skills of business decision makers and Insufficient human resource to be used in strategy alignment. Again this objective points to lack of commitment to align IT and Business strategies.

The next group is composed of lack of clear decision structure, financial incapability to support alignment, lack of consensus and clarity in the involved team and wrong feedback from either the business or IT team, a clear indication of lack of goal congruency. In group 3, 4 and 5 we discovered Inactive involvement of managers during strategy formulation and Lack of consensus between business and IT decision makers.

There were also delays in creation of processes for governance of IT in relation to business strategy, developing organization structure that provides mechanisms for IT Business alignment and formation of a common architecture vision between lines of business and IT. This were also strengthened by lack of well prioritized IT efforts and communication between business and IT decision makers

## **5.2 Conclusions**

The factors affecting IT-Business strategy alignment process have been tested and proven from the research data. The role of parastatals in the process needs to be reviewed. Four types of alignment within organizations have been identified. These types of alignment are very well defined and hence suitable for use by any organization which is interested in aligning its business with IS strategy. Activities undertaken are meant to ensure that IS strategy is supposed to support as well as it is supported by the organizational goals, it's evident that there is need to look into the IT-business strategy alignment process and resolve the factors affecting it.

## **5.3 Recommendations**

Effective implementation process is a function of many facets as evidenced by the study. This is strengthened by the responses in the research. The government parastatals as the case study have to have the best systems to ensure that there is implementation of IT-

Business strategies integration. Every industry player with a responsibility on the implementation of IT-business strategies in the parastatals must practice high ethical standards to ensure compliance and prudent utilization of resources that make integration a success and ensure participation of IT team as integral part of line business management team.

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

This study covered Nairobi parastatals offices to represent all IT-business strategy alignment and its implementation in the country. This was due to time and other resources. The researcher relied on a questionnaire that required meeting many senior officers to have the responses in. This presented logistical challenges including reluctance by some respondent to being listed as part of the research. The study also presented technological hiccups in terms of data analysis and presentation. Given more resources and time, the study would have covered a larger sample and perhaps brought out more insight into the subject. The researcher had to find time from normal work duties thereby presenting a unique challenge to ensure he proceeds with the project while his work did not suffer.

#### **5.5 Suggestions for Further Research**

It would be helpful to replicate the study in another setting particularly in other major towns where the parastatals offices are located. The factors effecting the IT-business strategy implementation in parastatals in Kenya are varied and may even be better brought out if the study extended to private sectors. A careful assessment of the factors affecting the IT-business strategy alignment process is required from all sections including the public, governmental and non-governmental agencies. This ensures that communication between business and IT decision makers are inline with implementation of the IT-business strategies and IS adequately. The role of IT-business strategies is not only ensuring smooth running of business but also cut on business losses that occur as a result of non implementation of the same and ensures information security is observed. This calls for another study focusing on the information flow and security with regard to business strategies being aligned with IT.

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## **APPENDIX 1 - QUESTIONNAIRE**

### **IT-BUSINESS STRATEGY ALIGNMENT IN KENYAN PARASTATALS SURVEY QUESTIONNAIRE**

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 survey of IT-Business strategy alignment in Kenyan parastatals.

You have been selected participate in this study. I kindly request you to give the necessary assistance in data collection by filling out this questionnaire.

The information which you are going to provide will be used exclusively for academic purposes and will be treated with strict confidence.

Your cooperation will be highly appreciated

Thank you in advance

Yours faithfully

Dorcas Onyimbo

MBA Student

Department of Management Science

School of Business

University of Nairobi

### **SECTION A**

#### **BASIC INFORMATION**

1. Which is your organization category?



Financial corporations  Commercial/manufacturing corporations

Regulatory corporations  Public universities

Training and research institutions  Service corporations

Regional development authorities  Tertiary training institutions

2. What is your gender?

Male

Female

»

3. What is your career specialization?

Business oriented

IT oriented

Other

4. Give number of years you have worked for current employer.

5. Does your organization have a business strategy?

Yes

No

6. Does your organization have an IT strategy?

Yes

No

7. How significant is IT to your organization?

Very significant

Fairly significant

Not significant

8. To what extent are you involved in making business strategy in your organization?

No extent

Little extent

Moderate extent

Great extent

Very great extent

9. To what extent are you involved in making IT strategy alignment in your organization?

No extent  Little extent  Moderate extent   
 Great extent  Very great extent

10. How important is business strategic alignment within your organization?

Not important  Less important  Moderately important   
 Important  Very important

**SECTION B**

Tick to indicate the degree of the extent to which the following practices apply in IT-Business strategies alignment in your organization.

1-No extent, 2-Little extent, 3-Moderate extent, 4-Great extent, 5-Greatest extent

	1	2	3	4	5
Active involvement of business manager during strategic formulation					
Active involvement of IT manager during strategic formulation					
Use of management skill of business decision makers					
Use of management skill of IT decision makers					
Consensus between business and IT decision makers					
Business strategy focus on organization long term goals					
IS strategy focus on organizational long term goals					
IS clarity with business goals					
IS consistence with business goals					
Strategic oriented decision making process					
Supportive organizational culture					
Organizational structure that provides mechanisms for accountability and ownership					
Use of IT project steering committee					
Use of project management methodologies					
Others, (Specify)					

**SECTION C**

**ACTIVITIES PERFORMED IN THE PROCESS OF ALIGNMENT BETWEEN BUSINESS AND IT STRATEGY**

Tick to indicate the extent to which your organization performs the following activities in the process of IT-Business alignment.

1-No extent, 2-Little extent, 3-Moderate extent, 4-Great extent, 5-Greatest extent

	1	2	3	4	5
Identify business strategy that links to IT strategy					
Identify IT strategy that links to business strategy					
Matching business need to IT					
Establish common architecture to alignment					
Develop an enterprise IT-Business model					
Develop management skill of business and IT decision makers					
Make strategic oriented decision					
Develop organization structure that provides mechanisms for IT Business alignment					
Enhance organizational culture to support alignment					
Develop a mitigation strategy					
Develop an implementation plan					
Create processes for management of IT in relation to business strategy					
Create processes for governance of IT in relation to business strategy					
Form a common architecture vision between lines of business and IT					
Others activities (specify)					

**SECTION D**

**CHALLENGES OF BUSINESS/IT STRATEGY ALIGNMENT**

Tick to indicate the extent to which each of the following challenges is faced during IT-Business strategy alignment in your organization.

1-No extent, 2-Little extent, 3-Moderate extent, 4-Great extent, 5-Greatest extent

	1	2	3	4	5
Unclear understanding of business needs					
Lack of consensus between business and IT decision makers					
Inactive involvement of managers during strategy formulation					
Insufficient human resource to be used in strategy alignment					
Little management skills of business decision makers					
Little management skills of IT decision makers					
Lack of focus on organization long term goals					
Unsupportive organization culture					
Lack of communication between business and IT decision makers					
Lack of consensus and clarity in the involved team					
Wrong feedback from either the business or IT team					
Lack of clear decision structure					
Financial incapability to support alignment					
No well prioritized IT efforts					
Limited participation of IT team as integral part of line business management team					
Non supportive organization structure					
Lack of IT strategy in place					
Lack of Business strategy in place					
Limitations imposed by IT service plan					
Others if any(specify)					

THANK YOU FOR YOUR PARTICIPATION

## **APPENDIX 2 - LIST OF PARASTATALS IN KENYA**

1. Agricultural Finance Corporation
2. Agro-Chemical and Food Company Ltd
3. Athi Water Services Board
4. Bomas of Kenya Ltd
5. Capital Markets Authority
6. Catchment Area Advisory Committee
7. Catering Tourism and Training Development Levy Trustees
8. Central Water Services Board
9. Chemilil Sugar Company Limited
10. Coast Development Authority
11. Coast Water Services Board
12. Coffee Board Of Kenya
13. Coffee Research Foundation
14. Commission for Higher Education
15. Communication Commission of Kenya
16. Consolidated Bank of Kenya
17. Cooperative College of Kenya
18. Council for Legal Education
19. Deposit Protection Fund Board
20. East African Portland Cement Company
21. Egerton University
22. Ewaso Ng'iro South Development Authority
23. Export Processing Zone Authority
24. Export Promotion Council
25. Gilgil Telecommunications industries
26. Higher Education Loans Board
27. Horticultural Crops Development Authority
28. Horticulture Crops Development Authority
29. Industrial and Commercial Development Corporation
30. Industrial Development Bank
31. Investment Promotion Centre
32. Jomo Kenyatta University of Agriculture and Technology
33. KASNEB
34. Kenya Agricultural Research Institute
35. Kenya Airports Authority
36. Kenya Anti-Corruption Commission
37. Kenya Broadcasting Corporation
38. Kenya Bureau of Standards
39. Kenya Bureau of Standards
40. Kenya Civil Aviation Authority
41. Kenya College of Communication and Technology
42. Kenya College of Communications Technology
43. Kenya Dairy Board
44. Kenya Electricity Generating Company

45. Kenya Ferry Services Limited
46. Kenya Forestry Research Institute
47. Kenya Industrial Estates
48. Kenya Industrial Property Institute
49. Kenya Industrial Research and Development Institute
50. Kenya Institute Of Administration
51. Kenya Institute of Public Policy Research and Analysis
52. Kenya Literature Bureau
53. Kenya Marine and Fisheries Research Institute
54. Kenya Maritime Authority
55. Kenya Meat Commission
56. Kenya National Assurance Company
57. Kenya National Examination Council
58. Kenya National Library Service
59. Kenya National Shipping Line
60. Kenya National Trading Corporation Limited
61. Kenya Ordinance Factories Corporation
62. Kenya Pipeline Company Ltd
63. Kenya Plant Health Inspectorate Services
64. Kenya Ports Authority
65. Kenya Post Office Savings Bank
66. Kenya Railways Corporation
67. Kenya Re-insurance Corporation
68. Kenya Revenue Authority
69. Kenya Roads Board
70. Kenya Safari Lodges and Hotels
71. Kenya Seed Company Ltd
72. Kenya Sisal Board
73. Kenya Sugar Board
74. Kenya Sugar Research Foundation
75. Kenya Tourist Board
76. Kenya Tourist Development Corporation
77. Kenya Utalii College
78. Kenya Water Institute
79. Kenya Wildlife Service
80. Kenya Wine Agencies Limited
81. Kenyatta International Conference Centre
82. Kenyatta University
83. Kerio Valley Development Authority
84. Lake Basin Development Authority
85. Lake Victoria South Water Service Board
86. Lake Victoria South Water Service Board
87. Local Authority Provident Fund
88. Maseno university
89. Moi University
90. National Aids Control Council

91. National Bank of Kenya
92. National Cereals and Produce Board
93. National Council for Law Reporting
94. National Environmental Management Authority
95. National Hospital Insurance Fund
96. National Housing Corporation
97. National Irrigation Board
98. National Museums of Kenya
99. National Oil Corporation of Kenya Ltd
100. National Social Security Fund (NSSF)
101. National Water Conservation and Pipeline Corporation
102. National Co-ordinating Agency for Population and Development
103. New Kenya Co-operative Creameries
104. Non Governmental Organization's Co-ordination Bureau
105. Numerical Machining Complex
106. Numerical Machining Complex
107. Nyayo Tea Zones Development Corporation
108. Nzoia Sugar Company
109. Pest Control Products Board
110. Postal Corporation of Kenya
111. Pyrethrum Board of Kenya
112. Retirement Benefits Authority
113. Rift Valley Water Services Board
114. School Equipment Production Unit
115. South Nyanza Sugar Company
116. Sports Stadia Management Board
117. Tana and Athi Rivers Development Authority
118. Tea Board Of Kenya
119. Tea Research Foundation Of Kenya
120. Teachers Service Commission
121. Telkom (k) Ltd
122. University of Nairobi
123. University of Nairobi Enterprises and Services Ltd
124. Water Resources Management Authority
125. Water Services Regulatory Board
126. Western University College of Science and Technology