

**INFORMATION SYSTEM POLICY AND CORPORATE GOVERNANCE
IN FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE**

BY

KAMARKOR SAMWEL RUTTO

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE AWARD OF MASTER OF BUSINESS
ADMINISTRATION, SCHOOL OF BUSINESS,**

UNIVERSITY OF NAIROBI

OCTOBER 2013

DECLARATION

This research project is my original work and has not been presented for an award in any other university

Signed: _____

Date: _____

Kamarkor Samwel Rutto

D61/61526/2010

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

Signed _____

Date: _____

Mr. J. K Lelei

Lecturer

Department of Management Science

University of Nairobi

ACKNOWLEDGMENT

First and foremost, I thank the Almighty God for the grace throughout my study at the University of Nairobi; I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of them.

I am highly indebted to my project supervisor Mr. Joel Lelei, Lecturer at the School of Business University of Nairobi and the department staff at large for their guidance and constant supervision as well as for providing necessary information regarding the project and also for their support in completing the project. In addition, I would like to express my gratitude towards my Family for their kind co-operation and encouragement which helped me in completion of this project.

To the industry, I would like to express my special gratitude and thanks to industry persons for giving me such attention and time. My thanks and appreciations also go to my fellow Students who have shared with me in developing the project and people who have willingly helped me out with their abilities.

DEDICATION

I dedicate this project to my family and friends. A special feeling of gratitude goes to my loving wife Patricia for the support, many thanks to our little son Ciaran for understanding my most absence from home.

ACRONYMS AND ABBREVIATIONS

CCG	Centre for Corporate Governance
CEO	Chief Executive Officer
CGP	Corporate Governance Practice
CIO	Chief Information Officer
ERP	Enterprise Resource Planning
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IIA	Information and Infrastructure Assurance
IS	Information Systems
IT	Information Technology
NSE	Nairobi Securities Exchange

ABSTRACT

The study focused on firms listed at the Nairobi Securities Exchange. Its objectives were to establish the extent to which Information System Policy has been implemented and to determine the relationship between Information System implementation levels and Corporate Governance. The study was prompted by Institutional turbulences as a result of poor corporate governance mainly caused by improper implementation of Corporate Information System Policy. The study used a descriptive survey. The data was collected using structured questionnaire that captured data on respondent demographics, firms demographic, Information System Policy Implementation level and Corporate Governance the data were analyzed using frequency distributions, percentages, measures of central tendencies such as Mean and Standard deviation, the results were presented using frequency distribution curves, distribution tables and line graphs. From the study findings, it was clear that the listed firms had a well-organized Information System Policy and Implementation that has offered improved running of the organization, Corporate Governance a good measure of firms overall performance, showed that there is a large extent on the level of firms Information System Policy Implementation and the firm's Corporate Governance. Considering the objectives of the study, the outcome bought a strong conclusion that for listed firms at the Nairobi Securities Exchange, there is a conclusion that there is a strong relationship between Information System Implementation level and the firm's Corporate Governance.

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CHAPTER ONE

INTRODUCTION

1.1 Background

Corporate governance is the system by which organizations are directed and controlled. The business dependency on information technology has resulted in the fact that corporate governance issues can no longer be solved without considering information technology policy. According to (Dingle, 1975), decision making in many sectors of society will occur more swiftly, and will rely to some extent on the flow of information, and will be more rationale, corporate governance relies heavily in the underlying IT governance which is a component of Information System policy. This therefore shows that the Information technology, in any firm can influence strategic opportunities as outlined by the enterprise and can provide critical input to strategic plans. In this way, Information System Policy enables the enterprise to take full advantage of its information, and can be seen as a driver for corporate governance (Macson, 2008).

1.1.1 Information System Policy

Information policy in a corporate Organization can be defined as the set of all public/private laws, regulations and policies that encourage, discourage, or regulate the creation, use, storage, access, and communication and dissemination of information, (Kyriazoglou, 2010). It thus encompasses any other decision-making practice with society-wide constitutive efforts that involve the flow of information and how it is processed.

Information System policy is a business issue, not just a technology issue. The reason organizations want to govern information should be for sound business purposes. Corporate knowledge and data are arguably the most important assets of any organization. Corporations must ensure the confidentiality, integrity and availability of their data. Corporate Information Systems policy provides several benefits. They provide a standard baseline of security policy modules and checks, based on the organization's

information security policies and standards. They establish a solid, saleable basis for an enterprise-wide product deployment such as enterprise resource planning. Policies heighten security awareness of company personnel. They also help organizations demonstrate their commitment to protecting their vital information assets (Symantec, 2008).

In the public arena, there are several fundamental issues that comprise information policy. Most prominent are public policy issues concerned with the use of information for democratization and commercialization of social life. These issues include, inter alia, digital environment, such as intellectual property, economic regulations, and freedom of expression, confidentiality or privacy of information, Information security, access management, and regulating how the dissemination of public information occurs (Bateman, 2011).

There are a number of components that constitute Information System policy; statement on disaster recovery and business continuity, data sharing policy, incident response and audit mechanism, information handling policy, equipment disposal policy, remote working policy, removable media policy, system security policy, personnel/physical security policy. All through the components, risk management is a key component in IS policy, this will probably be the largest section of the IS Security Policy as it has many elements to cover. Risk management looks at an organization's IS assets exposure to environmental risks. Risk management is continuous and must be reevaluated whenever changes occur to the IS assets' environment. These paragraphs should include such elements as those that affect the IS Security environment. Elements like the following must be included under this section (McConnell, 2002).

It is also possible to use information security policies to drive forward new company initiatives, with the policy acting as the channel for future projects which move towards better security and general practices. For example, an information security policy stating that a certain type of encryption is required for sensitive information sent by email may (with prior consultation with the appropriate technical experts) help to promote the need to develop such a capacity in the future. The presence of this requirement in policy has

made sure the impetus to develop the email encryption project has remained strong. In short, an information security policy should be a useful tool for protecting the security of the Enterprise, something that all users can turn to in their day to day work, as a guide and information source. All too often however, security policies can end up simply on a shelf little read, used, or even known of by users and disconnected from the rest of company policy and security practice (National Computer Board Mauritius, 2010).

within the organizational, a number of functional business units do act as the major players in delivery of effective Information System policy, responsibilities are for individuals like; Vice President in Charge of information Systems Security, Chief Information Officer, Chief Information Security Officer, Internal Audit, etc. Functional responsibilities usually cover Project Sponsors (Managers), Chief Technology Officer, and the Information Systems security Officer and are sure to include roles and responsibilities for all levels of management and employees (Holderness, 2009).

1.1.2 Corporate Governance

Corporate governance refers to the system of rules, practices and processes by which a company is directed and controlled. Corporate governance essentially involves balancing the interests of the many stakeholders in a company - these include its shareholders, management, customers, suppliers, financiers, government and the community. Since corporate governance also provides the framework for attaining a company's objectives, it encompasses practically every sphere of management, from action plans and internal controls to performance measurement and corporate disclosure (Coleman, 2007).

Corporate governance is a set of relationship, these relationships, which involve various rules and incentives, provide the structure through which the objective s of the company are set, and the means of attaining these objectives as well as monitoring performance are determined. Thus, the key aspects of good corporate governance include transparency of corporate structures and operations; the accountability of managers and the boards to shareholders; and corporate responsibility towards stakeholder (Mallin, 2007).

Corporate governance requires a clear understanding of the Respective roles of the board, management and shareholders, their relationships with each other, and their relationships with others that have an interest in the corporation/entity and its well - being. Relationships of the board and management with shareholders should be characterized by transparency and appropriate engagement; their relationships with employees should be characterized by fairness; their relationships with the communities in which they operate should be characterized by good citizenship; and the heir relationships with government should be characterized by a commitment to compliance (Center for Corporate Governance, 2004).

The board of directors has the important role of overseeing management performance on behalf of shareholders. Its primary duties are to select and oversee a well – qualified and ethical chief executive officer who, with other management, runs the corporation on a daily basis, and to monitor management's performance and adherence to corporate and ethical standards. Effective corporate directors are diligent monitors, but not managers, of business operations. Management, led by the CEO, is responsible for running the day – to – day operations of the corporation and properly informing the board of the status of these operations (Routale, 2012).

Management's responsibilities include strategic planning, risk management and financial reporting. Shareholders invest in a corporation by buying its stock and receive economic benefits in return. Shareholders are not involved in the day – to – day management of corporate operations, but they have the representatives (directors) to look out for their interests and to receive the information they need to make investment and voting decisions. Shareholders also should expect that a corporation/entity will be responsive to issues and concerns that are of widespread interest to its long – term shareholders. Effective corporate governance requires a proactive, focused state of mind on the part of directors, the CEO and senior management, all of whom must be committed to business success through the maintenance of the highest standards of responsibility and ethics.

Although there are a number of legal and regulatory requirements that must be met, good governance is far more than a "check the box" list of minimum board and management policies and duties. In addition, even the most thoughtful and well – drafted policies and procedures are destined to fail if directors and management are not committed to enforcing them in practice (nairobi-business, 2012). A successful corporate governance structure for any corporation is a working system for principled goal setting, effective decision making, and appropriate monitoring of compliance and performance. Through this vibrant and responsive structure, the board of directors, CEO and senior management can interact effectively and respond quickly and appropriately to changing circumstances, within a framework of solid corporate values, to provide long – term value to shareholders.

1.1.3 IS Policy Implementation and Corporate Governance

Using the System Theory model (Open System deliberation) IS in the area of Corporate Governance can be discussed as a direct result of Organizational Management. While the management in all corporate organizational can be termed as the act of coordinating the efforts of people to accomplish desired goals and objectives using available resources efficiently and effectively. Management comprises planning, organizing, staffing, leading or directing and controlling an organization (a group of one or more people or entities) proper laid Organizational Information System Policy and implementation makes management realize integrated optimal modern business processes of marketing, logistic, production, just-in-time, materials, total quality, finance, and Human resource management (Blair, 1995).

Several studies have indicated that for Organizations to achieve an effective and most efficient Corporate Governance System, there is need to have a proper IS policy in place and also ensure it is implemented to the latter. Good governance relies on scientific decision making mechanisms and the premise is timely, accurate and complete information (Holderness, 2009). But in CGS the information bottle-neck obstructs the information flow among the stakeholders. With the development of information and network technology and the ever-changing environment of enterprises, information is

getting Corporate Governance more and more important to guarantee effective and efficient CG. The adoption, construction and application of CGIS are necessary and operational to good governance (Weian, 2008).

1.1.4 The Nairobi Securities Exchange

With over 50 years of existence, the Nairobi Securities Exchange comprises approximately 65 listed companies with a daily trading volume of over USD 5 million and a total market capitalization of approximately USD 15 billion. Aggregate foreign ownership limit of Nairobi Securities Exchange listed companies is 75%. Almost all NSE listed companies are open to additional foreign investment, including multinational subsidiaries. Nairobi Stock Exchange (NSE) has a double responsibility for development and regulation of the market operations to ensure efficient trading. For an efficient stock exchange, the companies listed in NSE are expected to be financially health so as to ensure economic growth of a country (CMA, 2013).

According to the Economic Survey 2010, SMEs account for about 80 per cent of the country's total employment outside small-scale agriculture and contribute to about 40 per cent of GDP. This notwithstanding, SMEs operate under a myriad of constraints including those of inadequate infrastructural facilities, high rate of enterprise mortality; low level of entrepreneurial skills; lack of a conducive operating environment; restricted market access and cumbersome regulatory requirements. Numerous firms have listed at the NSE, once listed firms ownership change from Private to Public ownership, with huge capital base generated; the impact of such firms in the economy is huge thus contributing a lot to the Kenya's GDP.

Companies that list at the NSE are both locally and internationally, generally structured from across the industry base, including service based, agricultural and manufacturing industries, telecoms, Financial and allied among others, firms go public for numerous reason ranging from, to raise more capital for business expansions, to improve level of governance of the company since listed companies have benchmarks for business reputation, business may also list so as to acquire entry in to a very new market segment (Holderness, 2009).

The Nairobi Securities Exchange being the leading securities exchange in East and Central Africa, there are a number of environmental factors listed companies within it face, majorly of the challenged have a negative impact on the performance of the firm's corporate governance, and as a result companies need to cushion their operation with good governing structures. IS policy formulation and implementation is paramount for these companies (Kirkpatrick, 2004). The IS Policy play a major role as it Protect people and information, set the rules for expected behavior by users, system administrators, management, the board, and security personnel, Authorize security personnel to monitor, probe, and investigate, Define and authorize the consequences of violation, Define the company consensus baseline stance on information security, Help minimize risk, Help track compliance with regulations and legislation.

More important, the ability of countries to attract foreign capital is affected by their systems of corporate governance and the degree to which corporate management is compelled to respect the legal rights of lenders, bondholders, and non-controlling shareowners. Individual and institutional investors will refrain from providing capital or will demand a higher risk premium for their capital from enterprises in countries without effective systems of corporate governance than from similar enterprises in countries having strong corporate governance standards (Adesida, 2012).

One can also say that because of its role in capital formation, corporate governance has important consequences for economic efficiency and growth. Effective corporate governance imposes a discipline on firm managers to maximize returns to the firm. With the movement throughout the world toward the expansion of private sectors and the creation of more competitive market economies, effective systems of corporate governance are seen as key variable enabling countries to derive real economic benefits from these fundamental economic changes (Mallin, 2007).

In view of the current concern with corporate governance for listed Companies at the Nairobi Securities Exchange and its far reaching implications for economic activity, financial strength, and international relations, this proposal will considers the nature of corporate governance, the various models and forms that it takes in NSE Listed

companies and how Information System model can be a key factor in laying down proper corporate governance (La Porta, 2002).

1.2 Statement of the Problem

The numerous high-profile cases of corporate governance failure have focused the minds of governments, regulators, companies, investors and the general public on the weaknesses in corporate governance systems and the associated threat posed to the integrity of financial markets. In response, numerous research works have revealed that there are a number of actors that dictates the level of Corporate Governance in an Organization, IS policy framework and its implementation is one of them (OECD, Policy Framework for Investment, 2011). As per findings, corporate governance is therefore about building credibility, ensuring transparency and accountability as well as maintaining an effective channel of information disclosure that would foster good corporate performance.

Many other researchers have examined the relationship between variety of governance mechanisms and firm performance. However, the results are mixed. Some examine only the impact of one governance mechanism on performance, while others investigate the influence of several mechanisms together on performance (DHS Sensitive Systems Policy USA, 2011). There is a wide gap that exists since mild of them covers effects of Level of Corporate Information System Policy Implementation on corporate governance and performance specifically in the listed companies that do operate at the Nairobi Securities Exchange in Kenya.

The study done in Kenya by the Centre for Corporate Governance focused on governance practices in the commercial banking sector in Kenya (CCG, 2004). More so, the many unpublished work done in Kenya followed suit by focusing corporate governance in general with only one study among them focusing on the relationship between implementation level of Capital Markets Authority guidelines on corporate governance and profitability of companies listed at the Nairobi Stock Exchange (NSE). It is against

this background that the researcher found it necessary to carry out a study on level of Information System Policy Implementation and corporate governance and its effects on performance in the Kenyan Listed companies at the NSE.

Information System policy provides for awareness framework by senior corporate officers, a by providing a clear understanding of the enterprise's appetite for organization information policy, understanding of compliance requirements, transparency about the significant risks to the enterprise and embedding of risk management responsibilities into the IT organization. Performance Measurement: This tracks and monitors strategy implementation, project completion, resource usage, process performance and service delivery, using, for example, balanced scorecards that translate strategy into action to achieve goals measurable beyond conventional accounting (Maches, 2010).

Companies listed at the Nairobi Securities Exchange are always on the need for more capital injection for purposes of business expansion, these calls for need of proper corporate governance practice as provided by the NSE policies, (nairobi-business, 2012). As a core factor towards realization of effective and efficient corporate governance of listed firms at the NSE, the proposed project intends to establish the importance of proper IT Policy and implementation of the same towards realization of proper Corporate Governance in organization. Therefore, for listed companies at the NSE, what is the importance of IS policy as a major component of corporate governance, and to what extent does it need to be implemented?

1.3 Research Objective

The objectives of the study are;

- a) To establish the extent to which Information System Policy has been implemented for firms listed in Nairobi Securities Exchange.
- b) To establish the relationship between Information System policy implementation and Corporate Governance for firms listed in Nairobi Securities Exchange.

1.4 Value of the Study

With concrete findings on the stated research objective, establishment of evidence on how listed firms at the Nairobi Securities Exchange have their Information System policy geared towards corporate governance will be important information for, government authorities, corporate investors, business consultants.

Several interested parties of Corporate Governance and Information system policy implementation will find this study an important document, the area of study has become an issue of worldwide importance under any institution with or without public domain structure. The Corporate entity has a vital role to play in promoting economic development and social progress. It is the engine of growth internationally, and increasingly responsible for providing employment, public and private services, goods and infrastructure as such business consultants will find a point of reference in the study. In addition government institutions will need this vital information when it comes to national distribution of state resourced, listed firms is just an indication of how corporate firms are performing nationally, and thus state ministries such as that of Trade and Industry will be well informed when it comes to economic related planning.

Students in institutions of higher learning will also find a bench mark position to carry their studies in the same field of. In addition managers will use the findings to justify the need of aligning there IS policy towards realization of proper corporate governance systems. Finally other players in the field of the corporate governance under different contextual area will find the research findings as important.

CHAPTER TWO

LITERATURE REVIEW

2.1 Information System Policy

The IT Governance Institute¹ defines IT Governance as ‘an integral part of enterprise governance and consists of the leadership and organizational structures and processes that ensure that the organization's IT sustains and extends the organization's strategies and objectives’. By this definition ‘IT governance’ can be seen to encompass the full range of information systems and IT management activities, together with a governance ‘layer’ encompassing the need to provide assurance to stakeholders that the requisite policies, structures and systems are in place to manage information systems and IT effectively and that these are aligned to the institution’s strategic objectives (wilfred, 2008).

Corporate Information System policy describes the management structure and foundation related to how Information is shared both internally and externally, it also provides a framework to measure progress and compliance. (DHS Sensitive Systems Policy USA, 2011) Policies can be are organized under three areas: First, Management Controls Focus on managing both the system information security controls and system risk. These controls consist of risk mitigation techniques and concerns normally addressed by management (Sandrah, 2011).

Secondly, Operational Controls, focus on mechanisms primarily implemented and executed by people. These controls are designed to improve the security of a particular system, or group of systems and often rely on management and technical controls. Thirdly Technical Controls, Focus on security controls executed by information systems. These controls provide automated protection from unauthorized access or misuse. They facilitate detection of security violations, and support security requirements for applications and data (Bateman, 2011).

Components of IS Policy

The main components of information systems are computer hardware and software, telecommunications, databases and data warehouses, human resources, and procedures. The hardware, software, and telecommunications constitute information technology (IT), which is now ingrained in the operations and management of organizations. The information's System security that touches on the entire above component cuts across and has been considered the key player in the field of the policy. With view of the components, objective(s) of the policy in a general overview fashion, it normally states why the policy was written. What the policy covers, and equally, what the policy does not cover. It should say, by whose authority this policy been written. It should list any exceptions to the policy, i.e. if another policy covers a certain aspect, then this policy does not (Zhuang, 1999).

Another major component is the IS risk management framework: This will probably be the largest section of the IS Security Policy as it has many elements to cover. Risk management looks at an organization's IS assets exposure to environmental risks. Risk management is continuous and must be reevaluated whenever changes occur to the IS assets' environment. These paragraphs should include such elements as those that affect the IS Security environment. Elements like the following must be included under this section (Bateman, 2011).

In addition, IS Roles and Responsibilities players is another factor of consideration, there is need to explain the roles of the different departments and individuals in following and enforcing this policy there are basically two types of responsibilities, Organizational and Functional. Organizational responsibilities are for individuals like; Vice President in Charge of information Systems Security, Chief Information Officer, Chief Information Security Officer, Internal Audit, etc. Functional responsibilities usually cover Project Sponsors (Managers), Chief Technology Officer, and the Information Systems security Officer and are sure to include roles and responsibilities for all levels of management and employees. This section could also be used to create functional roles for various

individuals within an organization and to designate an S Security Department and their roles and responsibilities (Adesida, 2012).

2.2 Corporate Governance

Corporate governance is a major issue for all private and public companies and their stakeholders. With increasing corporate and economic globalization, corporate governance has international relevance in developing countries as well as for the global economic powers. Corporate governance is about balance. It is about balancing the interests of shareholders with those of other stakeholders in an organization - suppliers, customers, investors, employees and the community at large. It is about balancing short-term needs with the long-term sustainability of an organization. It is about protecting investors by balancing business enterprise with accountability (Willis, 2010).

As Kenya evolves in terms of democracy and seeking to position itself as the investor's destination of choice in the East and Central Africa region, the subject of corporate governance in Kenya has been top of the agenda for many years. Despite tight regulatory framework, corporate governance continues to weaken in Kenya to some extent. Kenya in specific, distress was raised specifically on the way in which organizations were managed and controlled. According to Centre for Corporate Governance of Kenya (CCG, 2004), focus on corporate governance in the financial sector is crucial mostly because the publically owned (listed companies) are becoming highly exposed to scrutiny by the public and many lessons were learnt because of the risks involved including adverse publicity brought about by failings in governance and stakeholder relations for instance, the collapse of banks such as Euro bank, Trust bank and Daima bank has highlighted in the released report (CCG, 2004).

To a further extend, the study further affirms that funding of banks as well as ownership of other companies is a crucial issue for management of banks as these makes them a significant stakeholder in their own right. It was also observed that governance in listed companies is a considerable more complex issue than in other Limited companies. This is because they try to comply with same codes of good governance as other firms but

factors like internal control, capital adequacy and funding, risk management and compliance all have an impact on their matrix of governance.

According to (Blair, 1995) issues in corporate governance revolve around ownership and control. She asserts that companies need to experiment with different governance arrangements, such as choosing directors to represent particular constituencies, or making more radical arrangements like leveraged buyouts or worker-owned companies. More so, public policy should encourage, or at least not impede, such experimentation. Blair goes on to state that 'ownership of private property is the central mechanism by which incentives are created for the efficient use of resources in a free market economy'. Although numerous individuals from suppliers to employees have a stake in the success of companies, the strategic decisions are made by the Corporate Executives (Nambiro, 2007).

Hence the main challenge in corporate governance is how do you make these executives accountable to the shareholders whose investment is at risk, while still giving them the freedom, the incentives and the control over the resources they need to create and seize investment opportunities and to be tough competitors, this is with the mind that they are the day to day watch dog of the institution and do have large control of information that gets to the Board and the Public as well. She further gives a number of mechanisms used to align the interests of the executives and those of the shareholders which include but not limited to boards of directors, executive compensation, active use of ownership prerogatives by large shareholders like institutional investors (internal mechanisms) and the market for corporate control like acquisitions (external mechanisms).

Components of Corporate Governance

The corporate governance framework of an organization is the system of risk management, law, regulation and practice within which it operates. Public policy makers and stock exchanges around the world see the benefits of corporate governance and are setting deadlines for adherence to their own preferred corporate governance frameworks.

The five major pillars considered to be the key players and a measure in corporate governance frameworks, (GabrielLubale, 2012) are; Accountability which is considered leadership that must be ready to account, good level of efficiency and effectiveness hence leadership for results and not poked down in process, probity and integrity or Integrity and fairness purported to be leadership that is honest, faithful and diligent; obedient to the canons of Natural Law of Justice and Rule of Law, responsibility, considered as leadership that is capable, representative and conscious of its obligations, transparent and open leadership, Leaders should accurately and timely disclosure of information relating to all economic and other activities of the corporation; be true stewards (Kirkpatrick, 2004).

All these five pillars point to a common center, the need for open and trusted information policy across all the stakeholders of an organization, with proper IS policy in place and adherences to its implementation, all the above will ensure firms realize; Protection of shareholder rights to vote and influence critical corporate strategies, Strengthened boards through appointment of more skilled independents, Curbs on techniques that protect failing management teams, Wider use of international accounting standards, Greater disclosure of executive remuneration (Adesida, 2012).

2.3 Corporate Governance outside Kenya

In the United Kingdom, listed companies are required under the Listing Rules either to comply with the provisions of the Code or explain to investors in their next annual report why they have not done so. If shareholders are not satisfied they can use their powers, including the power to appoint and remove directors, to hold the company to account. In turn, investors are encouraged to sign up to the Stewardship Code, which sets standards for monitoring and engaging with the companies in which they invest, (Anste, 2012).

There are a number of advantages to the 'comply or explain' approach. Its inherent flexibility means that it is possible to set more demanding standards that can be done through hard rules. Experience has shown that the vast majority of companies attain these

standards. In addition, requiring companies to report to shareholders rather than regulators means that the decision on whether a company's governance is adequate is taken by those in whose interest the board is meant to act. The Stewardship Code similarly makes investors more accountable to their clients and beneficiaries, as well as helping companies (ForOrganization, 2013).

In the European market, self-regulation has been essential to the initiatives of stock exchanges that aim at the amendment of listing rules and the adoption of codes of best practices and other guidelines on the governance structure of listed corporations. According to Conner (1995:16), disclosure, and not compliance, is at the heart of these self-regulatory initiatives: "Companies are not required to structure their governance activities around the guidelines, but they will be expected to explain how their board has addressed the issues raised in the guidelines." The Cadbury Code - for example - assumes that a voluntary code coupled with disclosure is the best strategy to improve corporate governance standards in the UK (Finch, 1994). The first compliance reports indeed suggest that self-regulatory initiatives to improve corporate governance standards are increasingly being adopted by directors.

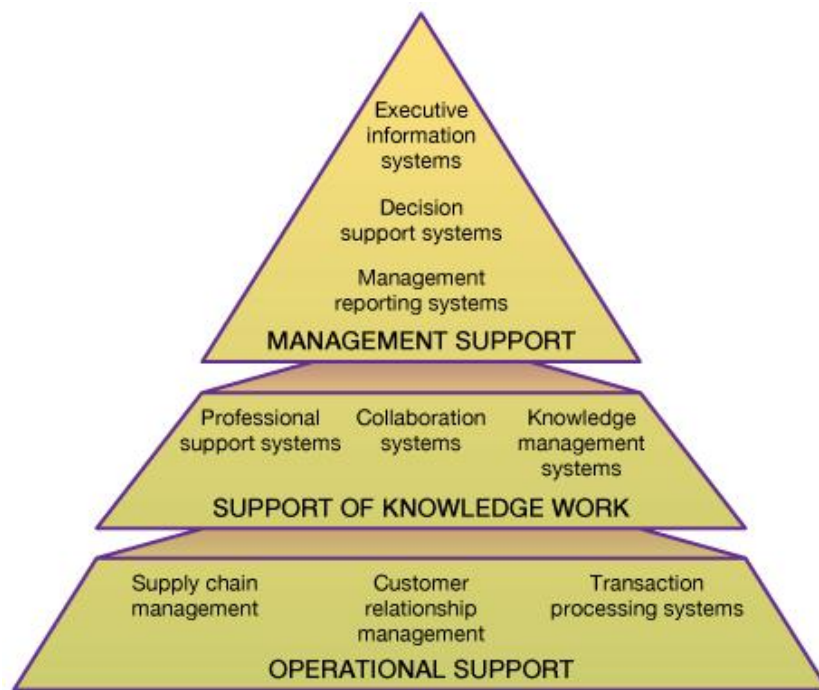
2.4 IS policy Implementation and Level of Corporate Governance

Proper installed IS Policy also ensures there is an adhered information reporting to the relevant both internal and external stakeholders of the institution. Thus the systems approach views organizations as a whole and involves the study of the organization in terms of the relationship between technical and social variables with the systems. Thus changes in one part, technical or social, will affect other parts and therefore the whole system, many organizations are implementing cutting age technologies such as Enhanced Resource Planning (ERP), cloud computing among other technologies as a way of enhancing integrated management of organization (Bateman, 2011).

Information systems support operations, knowledge work, and management in organizations. (The overall structure of organizational information systems is shown in the figure 1 below, according to (Britannica Inc., 2012. Information systems consist of three layers: operational support, support of knowledge work, and management support.

Operational support forms the base of an information system and contains various transaction processing systems for designing, marketing, producing, and delivering products and services. Support of knowledge work forms the middle layer; it contains subsystems for sharing information within an organization. Management support, forming the top layer, contains subsystems for managing and evaluating an organization's resources and goals this is a key role of the board when it comes to corporate governance.

Figure 1: Overall structure of organizational systems



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As a reflection services, resources and structures are the primary components of information systems and IT management. The governance activity sits above and overlaps with management, and is primarily concerned with ensuring that management is effective and that activities are aligned to institutional priorities (Dingle, 1975).

The Governance' perspective is concerned with the relationships between governors and executive management and between executive managers and operational management. These relationships are expressed in three key issues: *Vision*. - The institution should have an approved institutional 'vision' which should be translated into appropriate

strategies, including an information strategy and/or an IT strategy. *Alignment*-The institution should ensure that information systems and IT are aligned to the institutional vision and strategy and Assurance - The institution should be able to provide assurance to its stakeholders that its Information systems are aligned to strategy (Zhang, 2011).

2.5 Relationship between Corporate Governance and Performance

Relevant research works have been done in the study to reveal the level of linkage between corporate governance and Organizational performance (Tandelilin, 2007) managers and owners of banks showing efforts and intention to implement good corporate governance increase market credibility and subsequently collect funds at lower cost and risk. From the research finding, it can be argued that better corporate governance will lead to high performance. This is supported by an empirical study done by (La Porta, 2002) on firms' performance from a number of developed countries evidence from their findings showed that there is higher valuation of firms in countries with better protection of minority shareholders.

In an attempt to bring more credibility to the study of relationship between corporate governance and firm performance, (Coleman, 2007) did a study in Africa targeting 103 listed firms on Ghanaian, Nigerian, Kenyan and South African stock exchanges. In conclusion He came up with a number of findings, the study indicate that large and independent boards enhance firm value and that when a CEO serves as board chair, it has negative effect on performance and such firms employ less debt. He also found that a CEO's tenure in office enhances firms' profitability while board activity intensity has a negative effect on firm profitability. The study also revealed that while larger boards employ more debts, the independence of a board has a significant negative relationship with short-term debt. Further, the researcher notes that the size of audit committees and the frequency of their meetings have a positive influence on market-based performance measures and institutional shareholding essentially sends a positive signal to potential investors thereby enhancing market valuation of firms (Coleman, 2007).

A number of theories were used to seize the relationship of Information System Policy Implementation and Corporate Governance, this section reviews some of the corporate governance theories with a view to understand how they relate to governance. Several theories exist that attempt to highlight the objective of the firm and how the firm should be responsible in meeting its obligations. This study looked at main theories that have influenced corporate governance development together with the players that form corporate governance, Information System policy forms one of the key pillars that contribute to the development of corporate governance. Agency theory has been the most dominant issue in corporate governance and the principal-agent theory is generally considered the starting point of this debate. Agency theory hypothesizes that in the modern corporation, in which share ownership is widely held, managerial actions depart from those required to maximize shareholder returns (Mallin, 2007). In addition, Stewardship theory offers an alternative to agency theory by suggesting that when a convergence of values exists between principals and agents or when organizations promote unselfish values, responsible behavior results by internal means (Dicke, 2000). Lack of trust referred to by the agency theory regarding authority and ethical behavior is what is replaced by this theory which is one of the key distinguishing features of it (Donaldson & Davis, 1991).

According to Mallin (2007), Transaction Cost Economics (TCE) theory though closely related to agency theory views the firm as a governance structure. She notes that certain economic benefits to the firm exist when a firm undertakes transactions internally rather than external. Mallin further states that in its turn, the firm becomes larger, the more transactions it undertakes and will expand up to the point where it becomes cheaper or more efficient for the transaction to be undertaken externally. Stiles and Taylor (2001) point out that this theory is concerned with managerial discretion and it assumes that managers are given to self-interest seeking and moral hazard and that they operate under bounded rationality. The theory also regards the board of directors as an instrument of control hence, managers will tend to sacrifice rather than maximize profit of course not being in the interests of shareholders just like the agency theory (Mallin, 2007).

2.6 Knowledge Gap

As a process and system of Information system policy, corporate governance is the Processes and Systems by which a company is governed which ensure appropriate checks and balances”. In this case, essence is to ensure: Good performance of the organization, proper accountability to all stakeholders, and mitigation of conflicts of interest (Blair, 1995). These points specifically to a single major pillar that builds corporate governance that is call for ‘Proper Information System Policy and implementation of the same. Other research findings have established that corporate governance performance is as a moment of many underlying functional systems within the organization, a good pointer is in the case of the high-profile collapses of Enron Corporation and MCI Inc. involved in accounting fraud? (Suarez, 2012) Hence, corporate governance requires listed companies to have comprehensive internal controls addressing not only financial risks but also risks relating to the environment, business reputation and health and safety, proper IS policy formulation and implementation is key to realization of proper corporate governance.

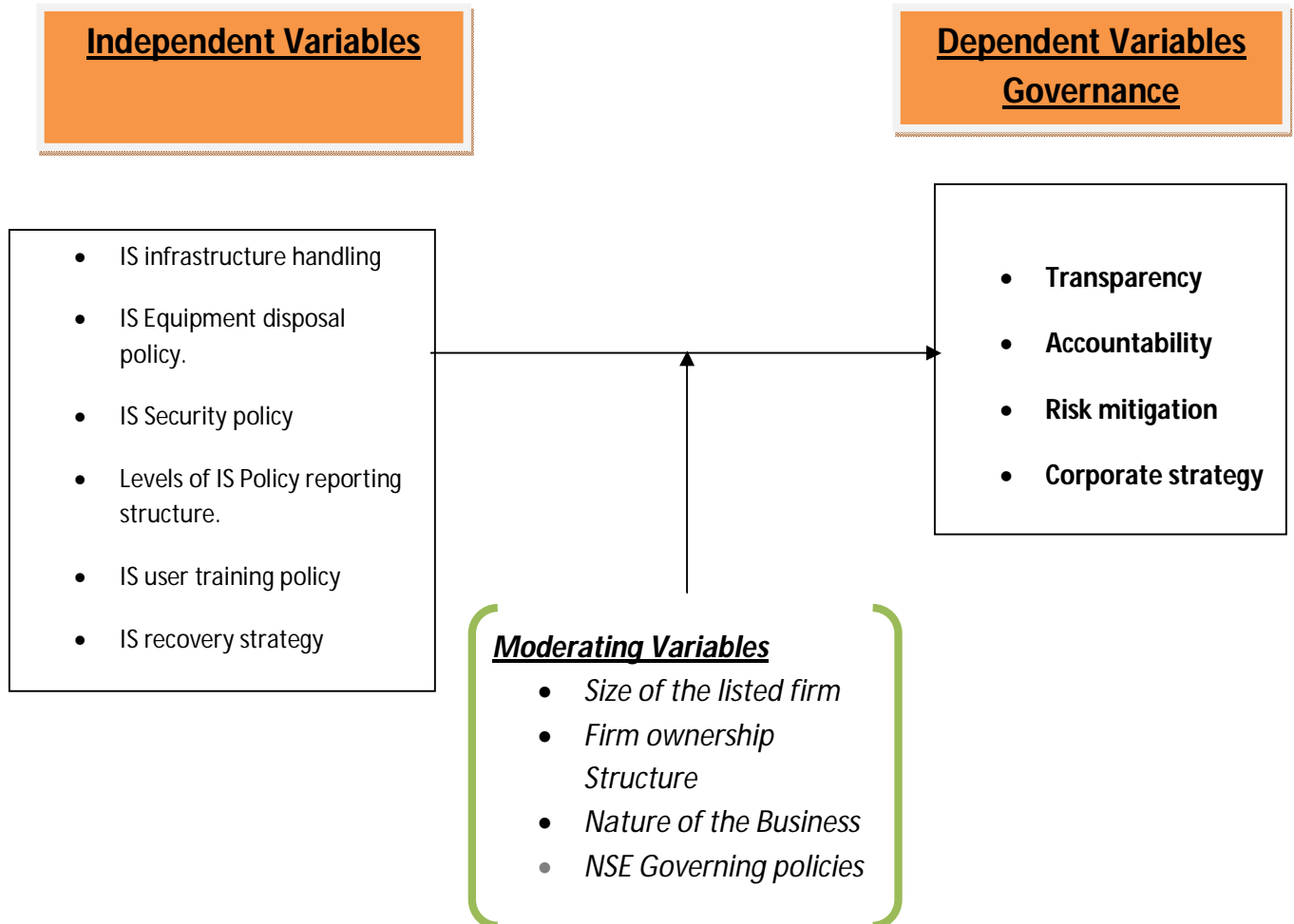
While Corporate Governance is scaled to take care of the Organizations stakeholders interest, Information policy is scaled to ensure number of benefits are realized within the organization, it provides for; Strategic Alignment: This focuses on ensuring the linkage of business and IT plans; defining, maintaining and validating the IT value proposition; and aligning IT projects and operations with enterprise operations, Value Delivery: This is about executing the value proposition throughout the delivery cycle, ensuring that IT delivers the promised benefits against the strategy, concentrating on optimizing costs and proving the intrinsic value of IT. Resource Management: This is about the optimal investment in, and the proper management of, critical IT resources: applications, information, infrastructure and people. Key issues relate to the optimization of system knowledge and technical infrastructure (Maches, 2010).

To a large extent, the many unpublished work done in Kenya followed suit by focusing corporate governance in general with only one study among them focusing on the relationship between implementation level of Capital Markets Authority guidelines on corporate governance and profitability of companies listed at the Nairobi Stock Exchange

(NSE). It is against this background that the researcher found it necessary to carry out a study on level of Information System Policy Implementation and corporate governance and its effects on performance in the Kenyan Listed companies at the NSE.

2.7 Conceptual Framework

With the discussions capture in the literature review, the proposal will consider the independent variable, dependent variable and the moderating variable as below.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology used in carrying out the study. Specifically, it discusses the research design used, the population, of data collection and data analysis and presentation procedure or techniques.

3.2 The Research Design

The research used a descriptive survey, the design was chosen in order to gather enough data that would bring the true reflection of the level of relationship between the extent to which IS policy has been implemented and its impact in the level of the corporate governance. According (Singh, 2010), research design is a set of advanced decisions that make up the master plan specifying the methods and procedures for collecting and analyzing the needed information In order to establish the impact of proper Information System Policy Implementation towards realization of efficient and effective performance of Corporate Governance structure for listed companies at the Nairobi Securities Exchange. The design has a number of benefits as large amounts of data can be collected with relative ease from a variety of people and also the design can be used to investigate problems in realistic settings.

3.3 The Population

The population consisted of all firms that are listed within the Nairobi Securities Exchange. According to there were a total of 64 listed companies, (see appendix III). In this case, all the sectors described at the NSE were considered, including, Energy & Petroleum, Manufacturing and allied, Banking, Insurance, Telecommunication & IT, Construction & Allied, Investment, Automobile & Accessories among others (NSE, 2013).

3.4 Data Collection

A semi-structured questionnaire consisting of both closed and open-ended questions was used. The questionnaire was personally administered to the Organization ICT managers or relevant acting officers to collect primary data from the listed firms, the questionnaire were divided into three parts; the demographic related (Part A) the information system implementation section (Part B) and the information system policy for corporate governance section (Part C). Each was geared to capture raw data that would be used at the analysis stage.

3.6 Data Analysis

The questionnaires were collected and edited, responses coded to facilitate basic statistical analysis. For the data collected from Part A, statistical methods used were measures such as frequency distribution and percentages were used to deduce their distribution. While for the data collected in Part C and D of the questionnaire, statistical methods that captures measures of central tendencies such as Mean and Standard deviation were used to derive the relationship between the dependent variable (Level of Corporate Governance in listed Firms at Nairobi security Exchange) and the independent variables,(Information System Policies and level of their implementation), the results were discussed and presented in tables.

CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Response Rate

The study targeted 63 respondents (heads of Information System or Information Technology) of all the publically listed firms at the Nairobi Securities Exchanges distributed 33 respondents completely filled in and returned the questionnaires contributing to 53%, shared in Table 1. This response rate was reached due to the data collection procedure, where the researcher personally administered questionnaires and waited for respondents to fill in, and also by use of web activated questionnaire that improved the response rate. In addition, frequent phone calls were made as a follow up on the respondents to manage the filling on time. The 47% questionnaires that were not returned were due to reasons like, the respondent were not available on dedicated time to fill them in at that time and neither were there deputy acting on the same capacity were available to provide the requested information with persistence follow-ups there were no positive responses from them. The response rate demonstrates a willingness of the respondents' to participate in the survey.

Table 1: Response rate

<u>Response Status</u>	<u>Frequency</u>	<u>%</u>
Responded	33	53%
Not Responded	30	47%
<u>TOTAL</u>	<u>63</u>	<u>100</u>

Source: Field Data

4.2 Demographic Characterization of the Respondents

The study found it vital to ascertain the broad information of the respondents since it structures the assistance under which the study can fairly entrance the relevant information. The analysis relied on this information of the respondents to classify the different results according to their knowledge and responses.

4.2.1 Gender Profile

Respondents were required to indicate their gender. Data collected on this part of the questionnaire were analyzed and results tabulated. According to the findings, majority (64%) of the respondents were male while the rest (36%) were female as depicted in Table 2. This implies that through the questionnaire, both male and female respondents were reached.

Table 2: Response rate

<u>Respondent Gender</u>	<u>Frequency</u>	<u>%</u>
Male	21	64%
Female	12	36%
<u>TOTAL</u>	<u>33</u>	<u>100</u>

Source: Field Data

4.2.2 Age Bracket

As depicted in Table 3, the respondents were drawn from all the age groups that range from 25 years to 46 years, almost half of the respondents (37%) were within bracket 36-40 years, 24% were within 41-45 years, 15% were between 31-35 years while the rest (24%) were shared equally (12%) by those between 26-30 years and over 45 years. The age distribution implies that majority of the respondents in the listed firms at Nairobi Securities Exchange are of mid age.

Table 3: Age Bracket Distribution

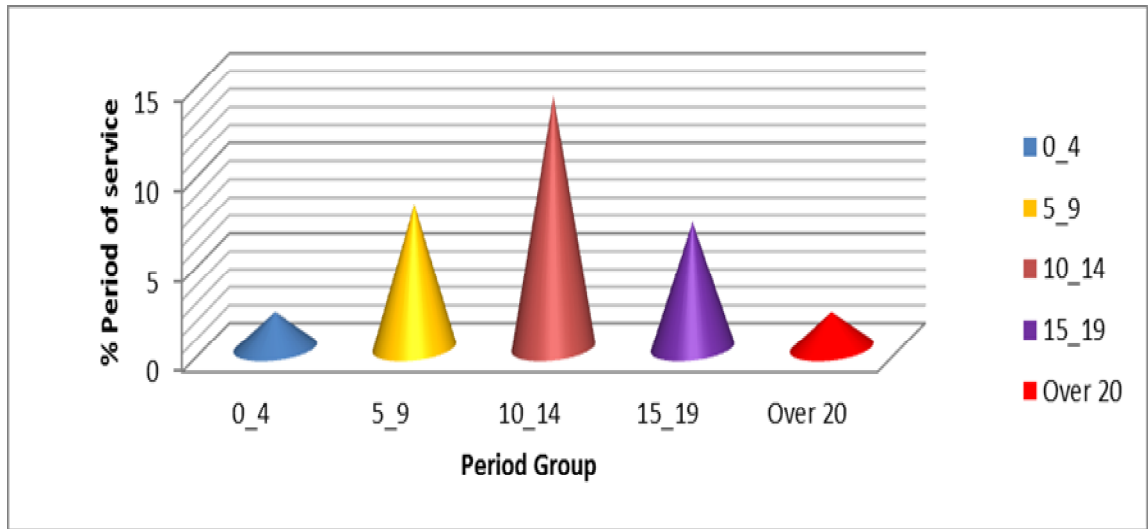
<u>Respondent Age Bracket</u>	<u>Frequency</u>	<u>%</u>
Over 45	4	12%
41 -44	8	24%
36 -40	12	37%
31 -35	5	15%
26 – 30	4	12%
<u>TOTAL</u>	<u>33</u>	<u>100</u>

Source: Field Data

4.2.3 Length of service

Figure 2 illustrates working duration of the respondents in their respective listed firm, from the findings majority (43%) of the respondents had worked in the their respective listed firm for a period of 10-14 years, 24% had worked for a period of 5-9 years, 21% had worked over 15-19 years to the same extent, 6% had served in their respective firms for over 20 years of consistent service, the remain 6% had worked within the organization for lest that 5 years of service. This implies that most of the respondents that were targeted by the study had worked for a plentiful time thus they were conversant of the information that the study sought pertaining to the organization. Considering the objective of the study, the majority of the respondents had worked enough to sufficiently deliver the required implementation if Information System policy that could go hand in hand with support of good corporate governance.

Figure 2 Length of service



Source: Field Data Analysis

4.2.4 Education Level

The respondent were asked to indicate their highest level of education as a way of determining whether the respondent possessed the right level of skills to match the objective of the study depicted in Table 4, the researcher through the questionnaire was also inquisitive to determine the highest level of the academic qualification that the respondent held. Majority (56%) of the respondents were post graduates degree holders, 38% held undergraduate degree as their highest level of education while 6% held diploma as their highest academic qualifications.

Table 4: Respondent Highest Education Level

<u>Respondent</u>	<u>Education</u>	<u>Frequency</u>	<u>%</u>
	<u>Level</u>		
	Masters	18	56%
	Undergraduate	13	38%

Diploma	2	6%
<u>TOTAL</u>	<u>33</u>	<u>100</u>

Source: Field Data

4.2.5 Listed Firms Demographics

As shown in Table 5, the study aimed to determine the diverse operational structure of the listed firms at the Nairobi Securities Exchange. A number of tested parameters responded with the following. Over 60% of the respondents recorded that their firms are locally owned, while the remaining 40% was shared between regional and international ownership. The operational period of the listed firms was as well sought for; the respondent's response showed that over 80% of the firms had operated at the Nairobi Securities Exchange. As a call to measure the robust operational mechanism of the firms the, the questionnaire sought to measure the number of operational outlets that each listed firm has. From the respondent's feedback, at an average, the listed firms each operated over 10 fully functional outlets within Kenya. This commanded over 95% of the all the responds received.

Table 5: Listed Firms Ownership Structure

<u>Ownership</u>	<u>Frequency</u>	<u>%</u>
Locally owned	26	60%
Cross Ownership	7	40%
<u>TOTAL</u>	<u>33</u>	<u>100</u>

Source: Field Data

4.2.6 Duties of the respondents

The study aimed to investigate duties performed by the respondents Table 6. The respondents gave different roles that were under their line of command such as being the key strategic decision maker in Information's Systems Policy, of an assistant in their line

of duty as far as Information System Policy formulation and implementation is concerned.

Table 6: Duties Respondent

<u>Respondent Duty</u>	<u>Frequency</u>	<u>%</u>
Strategic/ Manager	13	38%
Line Manager	18	56%
Deputy Line Manager	2	6%
<u>TOTAL</u>	<u>33</u>	<u>100</u>

Source: Field Data

4.3 Information System Policy Implementation

Information Systems (IS) and IT-based systems are an important aspect of the Firms normal business processes. Whilst these systems have enormous potential to make information much more accessible to the staff and stakeholders, (and external partners), and to greatly improve firms efficiency, there is a need to ensure that Information System Policies are properly in place properly designed and that their implementation is effectively managed.

Table 7, the study required the respondent to indicate the level of existence of specific Information System policies that were viewed to be key drivers of Corporate Governance. Amongst those information System policy that are drivers of corporate governance include, Comprehensive Information system policy, Information System training policy, Information System security policy, Information access policy, Information System equipment disposal policy, Information System recovery policy, Information System web access policy and Information System incident response policy.

From the findings on Table 7, respondents strongly agreed that comprehensive Information system policy within their organization was in place (M=4.06) with a slight

standard deviation of 0.21, to the same extent the respondent largely agreed that they have Information System Training Policy and was being implemented (M=3.56) with a small standard deviation of 0.012, Information System Security Policy according to the respondent was being well implemented (M=4.03) with a small standard deviation of 0.18, while Information access policy according to respondent was being implemented (M=4.12) with a standard deviation of 0.29. The Information System equipment disposal policy implementation registered a high positive response (M=3.30).

Out of the reached respondent Information System recovery policy was being well implemented within their firms (M=3.54) with a small standard deviation of 0.02, Information System web access policy was agreed by majority respondents as being well implemented (M=3.06) with a standard deviation of 0.29 while Information System incident response policy was being well managed by majority firms (M=3.18) with a small standard deviation of 0.17. The respondent's distribution analysis is as per the Table 7. Each was measure against a scale of 1 -5 with each scale unit representing the following.

Table 7: Listed firms Information System Policy Implementation Levels

<i>IS policy implementation measurement tool</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>N</i>
1. Comprehensive Information system policy	4.06	0.21	33
2. Information System training policy	3.56	0.011	33
3. Information System security policy	4.03	0.18	33
4. Information access policy	4.12	0.27	33
5. IS equipment disposal policy	3.30	0.11	33
6. Information System recovery policy	3.54	0.02	33
7. Information System web access policy	3.06	0.29	33

8. Information System incident response policy	3.18	0.17	33
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Source: Field Data

In addition to expressing the variability of a population, the standard deviation is commonly used to measure confidence in statistical conclusion was applied to the respondent's responses from the various listed organization, from the list as shown in table 6 above, there was strong confidence in the respondents data with the highest standard deviation standing at 0.29 while the majority registered less than that. The closeness of the standard deviation value to the mean provides confidence in the research showing that the small number of respondents that did not return the questionnaires could still have had same response.

4.4 Contribution of Information System Implementation on corporate Governance

According to Table 8, the study aimed to establish whether respondents' Listed Firms had a set Information System Policy Implementation level that do have an impact on the level of firms Corporate Governance, and the effect on the general firm performance on the stakeholders interest. According to the findings table, all respondents indicated that there is a strong relationship between the firm's information System structure, policies, the level of their implementation and the impact these have on the firm's corporate governance. This implies that the most of the organization had a well outlined Information System Policies planning that are clear to everyone in the organization that gives directive on service delivery. To measure the impact of each Information System policy, measure of standard deviation was performed.

The mean and standard deviation were calculated from these responses ,the means are interpreted using the same scale so that a mean of 3.00 is taken to mean moderate extend and that of 4.00 to mean large extend as per Table 8, overall Information System policy had a M=4.03 (with a small standard deviation of 0.15) towards impacting the firm's Corporate Governance, the Information System Training Policy Implementation had a M=4.06 and a marginal standard deviation of 0.18 while Information Access Policy had recorded a M=3.87 and a standard deviation of 0.01.

From the respondent's feedback, IS equipment disposal policy its impact on corporate governance recorded a M=4.00 and a standard deviation of 0.12, Information System recovery Policy had a M=3.73 and a standard deviation of 0.16. To the same strong relationship, Information System Web Access policy recorded a strong mean M=3.73 and a standard deviation of 0.16, the system incident response policy had a mean M=0.57 and a standard deviation of 0.31.

Table 8: Impact of Firms Information System Policy Implementation on Corporate Governance

<i>IS policy implementation measurement tool</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>N</i>
1. Overall Information system policy	4.03	0.15	33
2. Information System training policy	4.06	0.18	33
3. Information System security policy	4.06	0.18	33
4. Information access policy	3.87	0.01	33
5. IS equipment disposal policy	4.00	0.12	33
6. Information System recovery policy	3.73	0.15	33
7. Information System web access policy	3.73	0.16	33
8. Information System incident response policy	3.57	0.31	33

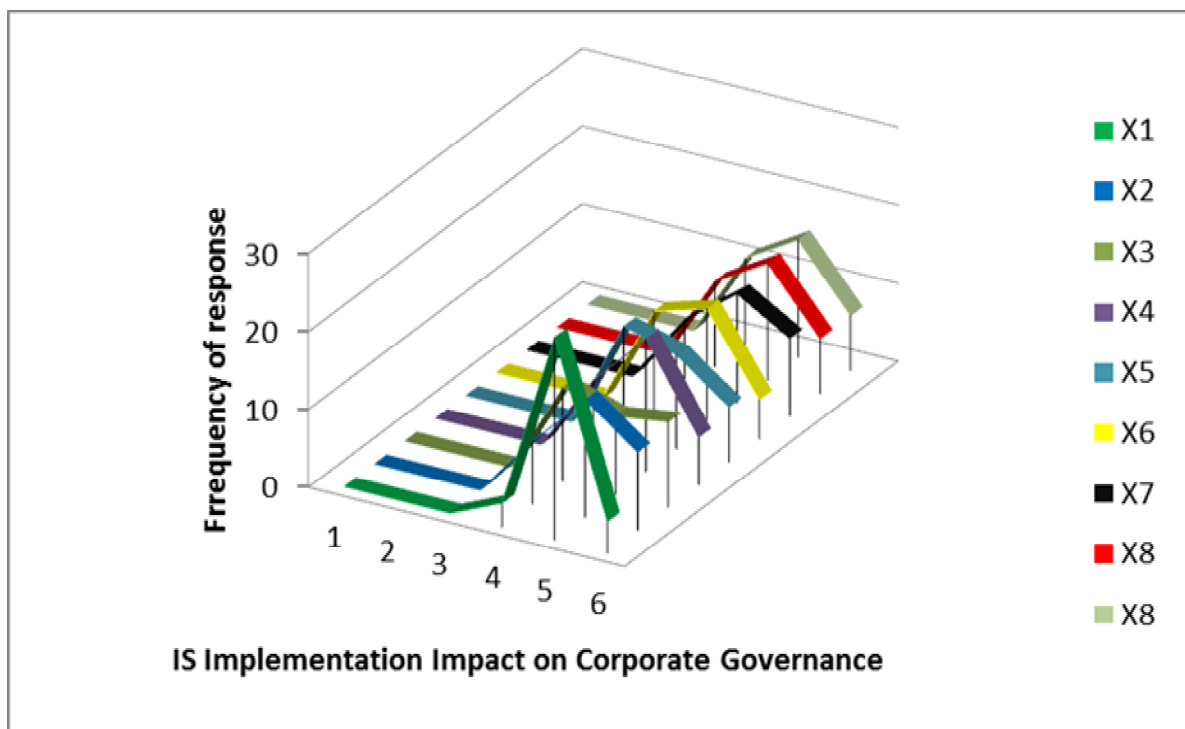
Source: Field Data

4.4.1 Frequency Distribution

Figure 3 shows the frequency distribution on the extent to which the respondent agree that there is an impact on Corporate Governance resulting from implementation of Information System Policy, with consideration of all the eight independent variable (Comprehensive Information system policy, Information System training policy,

Information System security policy, Information access policy, Information System equipment disposal policy, Information System recovery policy, Information System web access policy and Information System incident response policy). The following frequency curve was plotted Figure 4.4.1, the indication was that majority of the responses all through the eight variable strongly agreed there Information System Policy Implementation had an impact on Corporate Governance

Figure 3 *Frequency Distribution on IS Policy Implementation impact on Corporate Governance*



Source *Field Data*

Where *X1 – X8 are the eight independent variables*

Y = Corporate Governance, X1 = Comprehensive Information System policy X2 = Information System training policy, X3 = Information System security policy, X4 = Information access policy, X5 = IS equipment disposal policy, X6 = Information System recovery policy, X7 = Information System web access policy, X8 = Information System incident response policy

4.4.2 Impact of Information System Policy on specific Components of Corporate Governance

The Implementation of Information System Policy in listed firms do bring about an impact on the specific components of corporate governance, the respondents were requested to answer the extent to which each of a specific Information System Policy has impacted on its numerous components of corporate governance.

Table 9 list the distribution of how each component has been impacted, the responses where interpreted using the same scale of 1-5 so that a mean of 3.00 is taken to mean moderate extend and that of 4.00 to mean large extend. Overall corporate governance measure with Mean of 3.98 with standard deviation of 0.16, firms Vision and Mission Mean of 4.02 and a standard deviation of 0.2, while the firms accountability measured a Mean of 3.78 and a standard deviation of 0.11. Firms Transparency scored a mean of 4.01 and a standard deviation of 0.21.

Respondent response on Information System impact on firm's accountability gave a Mean of 4.06 with a standard deviation of 0.24. While impact on firms faith and delight was a Mean of 3.9 and standard deviation of 0.15, while the impact on firms efficiency and effectiveness recorded a Mean of 4.01 and standard deviation of 0.20. On the firms ethical standards, from the respondents feedback a Mean of 3.87 was registered and a standard deviation of 0.15.

Table 9: Impact of Information Policy Implementation on specific Components of Corporate Governance

<i>IS policy implementation measurement tool</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>N</i>
1. The firm has Information System policy in place that Support corporate governance	3.98	0.16	33
2. Information System policy support the firms vision and mission	4.02	0.21	33

3. Information security policy has brought improvements Firms Accountability.	3.78	0.11	33
4. Information security policy has resulted in improved Firms' transparency.	4.01	0.21	33
5. The firms' equipment disposal/acquisition policy resulted in improving your Firms' accountability.	4.06	0.24	33
6. The current underlying information protection policy provided for firms faith and delight.	3.90	0.15	33
7. The current underlying information sharing policy led to firms efficiency and effectiveness	4.01	0.20	33
8. Information system policy incident reporting policy has ensured sustainability of high ethical standards.	3.87	0.15	33

Source: Field Data

4.4.3 Contribution of Corporate Governance Practice to Organization Performance

The study was inquisitive to determine whether good Information System Policy implementation (one of the core factors in building effective corporate governance) contributes directly to listed firms performance through the corporate governance architecture human resources contribute to good performance Table 8. Majority (75%) of the respondents were of the opinion that Information System Policy practices contribute good corporate governance performance of the employee while 425% think otherwise. Respondents argued that due to the existence of Strategic Information System Policy practices in the organization that cater for their need that free them from stress where their grievances and welfare were tackled by responsible personnel hence increase their commitment to their role improving their performance. This affirmed that organization with well outline Strategic Information System Policy practices and fully implemented do well in the market unlike organization with poor Information System Policy practices.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the data findings on the levels of Information System Policy implementation for listed Firms at the Nairobi Securities Exchange and its influence on the corporate governance performance for the same listed firms in Kenya. The conclusions and recommendations are drawn there to. The chapter is therefore structured into summary of findings, conclusions, recommendations and area for further research.

5.2 Summary of the Findings

The study focused on the level of information System Policy implementation for listed Firms at the Nairobi Securities Exchange and its influence of the implementation levels on the corporate governance structure and performance for the same listed firms in Kenya. From the study findings, it was clear that the listed firms had a well-organized Information System Policy and Implementation that has offered improved running of the organization. Corporate Governance a good measure of the implementation levels of the information System policy in place, showed that there is a large extent on the level of firms Information System Policy Implementation and the firm's Corporate Governance.

In the same light respondents organization offered training and development programs to improve employees' competency in areas of Information System strategy formulation and implementation, which were facilitated by set human resource management practices set. Recruitment and selection training and development practice and discipline administration were the main human resource management practices exercised by majority of the organization.

With the analysis of the highest level of education posted by the respondent, majority were of post graduate level, this illustrates that most of the staffs entrusted to manage the

strategic decision related to Information System policy formulation and implementation in the listed firms at Nairobi Securities Exchange are literate, well trained hence they are capable to develop, implement and monitor/evaluate high level Information System policies that the listed firms need to improve in their area of corporate governance

On contribution of the Information System Policy practices to organization performance, the study found that Information System Policy practices contribute to good performance of the employee. Further the study found that organization frequently review human resource policies and procedures as well as recruiting and selecting suitable employees on the available job vacant hence contributing to good performance. The study also found that customer satisfaction, increase production and improved working environment were some of the impacts realized by the application of human resource management practices in the organization.

To the training program, the study established that the need to improve performance of the organization and to reduce costs from incompetency were the main reason behind formulation of the training program. On the same, the study found that there was relationship between employees training and their level of performance within the organization where trained staffs perform well than those who have never attended any training session.

5.3 Conclusions

The study sought to establish influence of Information System Policy practices Listed Companies at the Nairobi Securities Exchange in Kenya and the impact of the same in firms Corporate Governance. Based on the findings, the study concluded that Information System Policy practices where one of the main roles is to excellent corporate governance for the sake of shareholders interest for the listed firms. On the same the study concluded that continuous Information System strategic realignment, training and development practice and discipline administration were the key main firms resource that will build the concept of enhanced Corporate Governance by most of the organizations thought he IS departments.

On the study of level of implementation of Information Strategic levels practices firms Corporate Governance Levels, the study concluded that good System implementation practices contribute to good performance of the employee due to frequently review HR policies and procedures as well as recruiting and selecting suitable employees, this was indicated by the demographic analysis performed. Additionally, the study concluded that customer satisfaction, increase production and improved working environment were realized due to application of better IS policy a key factor of corporate governance practices in the organization.

On training program, the study concluded that organization formulate training program with aim of improving performance of the organization and reducing costs from incompetency. Inclusively, the study concluded that there was relationship between employees training and their level of performance within the organization where trained staffs perform well than those who have never attended any training session.

5.4 Recommendations

The study recommended that for the Nairobi Securities Exchange Listed firms to maintain high level of Corporate Governance performance and retain high governance structure as expected by the Regulator the Capital Markets Authority, there is need for these firms to ensure good structural placement. Corporate Governance consists of the set of policies and internal controls by which organizations, irrespective of size or form, are directed and managed. Information Systems Policy Implementation and its governance is a subset of organizations 'overall (corporate) governance program.

For organization to retain its standard of service delivery without compromising on organizations corporate governance, it must ensure that the individual running units that make up the entire organization must be well managed. In addition, these units must work and coordinate to operate all their function seamlessly so as to register a positive construction in their various operations. The unit managers, through their policy framework should give proper directive to the employees in order to improve their efficiency and competence. On the same the study recommended that empowerment and development of the staffs is vital in the organization, especially on professional

positioning of strategy implementation employees, hence there is a need to offer training and other subsidiaries training to motivate staffs toward working.

Further, the study recommended that for the organization to achieve its main objective must recognize practicing good human resource management practices and more particularly consider employees initiatives, in this case, ensure the right age mix, gender mix, and technology proficiency mix is adhered to while recruiting the business line managers. Additionally, the study recommended that organization should consider Information System Policy Implementation employees as an ongoing activity and not a one off event, this will ensure that the organization continues to align itself to the best Information Management model that support the proper running and coordination of all the business entity to ensure effective service delivery that enhance customer satisfaction hence maintenance of good reputation which translates to proper corporate governance.

5.5 Limitation of the study

The Study was limited to those firms that are listed at the Nairobi Securities Exchange; this was due to resource constraints such as money and time. The respondents were members of staff working under the targeted department of information Systems, and since it was only one department they might have likely to be biased when it comes to appraising their performance, as such other department ought to be considered for a conclusive response.

Furthermore most of the respondents were well known to the researcher and might have responded with a biased mindset, in addition since all the questions were derived from specific strategic area, some of the respondents might or might not have had a full information disclosure relating to the same. Lastly the data relied on primary data only, listed firms do not operate in a vacuum, they operate in an industry that is regulated, as such, and there is secondary source of factors that do have an impact in the organizations performance. For effective analysis, this needs to be considered.

5.6 Suggestions for Further study

Given the findings of the study, further research may be conducted to establish the firms' corporate governance needs. This study focused on firms listed at the Nairobi Securities Exchange. However, there are other non-listed firms which are family-owned or owned by groups of persons. More in-depth empirical study on the merits and demerits of family ownership structure and how it impacts on firm value should be conducted. Maybe the resource dependency theory can better explain the success of such companies. There is also a need to establish how corporate governance may evolve in these companies and what can be done to better align the interest of controlling family ownership and other shareholders.

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APPENDIX I

Research Questionnaire

Instructions for Completing the Information Technology Officer's Questionnaire

Please fill in the following questionnaire (directions have been given in each section)

Research Questionnaire

Instructions for Completing the Information Technology Officer's Questionnaire

Please fill in the following questionnaire (directions have been given in each section)

PART A – DEMOGRAPHIC INFORMATION

INDIVIDUAL

1. Please indicate your Gender

Male []

Female..... []

2. Please specify your age bracket

18 – 25 years []

26 – 30 years []

31 – 35 years []

36 – 40 years []

41 – 45 years []

46– 50 years []

51– 55 years []

Over 55 years []

3. What is your Position at the firm?

State

4. What is your highest level of educational training?

Level

Certificate []

Diploma []

Bachelor's Degree []

Master's Degree []

Doctoral Degree []

Other (Specify)

5. How long have you worked with the current firm?

Year

0-4 Years []

5-9 Years []

10-14 Years []

15 –19 Years []

Over 20Years []

FIRM

6. What is the category of firms' operation as per the NSE listing category?

Category

Agriculture []

Commercial and Services... []

Telecommunication and IT..... []

Automobiles []

Banking and insurances..... []

Manufacturing... []

Energy and petroleum..... []

Banking []

7. How long has your firm been operating since it was listed at the NSE

Years

0-5 Years []

5-9 Years []

10-14 Years []

15 –19 Years []

Over 20Years []

8. What is the current shareholding structure of the firm?

Locally owned []

Foreign owned []

Government controlled majority shares.....[]

Owned by both local and foreigners []

Other specify

9. Specify number of branches operated by the firm in Kenya?

10 and below []

Between 11 – 20 []

Between 21 – 30 []

Above 30 []

10. Is the firm listed in any other international Securities exchange (Y/N)?

YES [] NO []

If yes on above state country

PART B – INFORMATION SYSTEM POLICY IMPLEMENTATION

To what extent has the firm implemented each of the information system policies below. Tick to indicate the extent using scale;

(1 = No extent at all, 2 = Small extent, 3 = moderate extent, 4 = large extent, 5 = very large extent)

<i>IS policy implementation measurement tool</i>	1	2	3	4	5
9. Comprehensive Information system policy					
10. Information System training policy					
11. Information System security policy					
12. Information access policy					
13. IS equipment disposal policy					
14. Information System recovery policy					
15. Information System web access policy					
16. Information System incident response policy					

17. In your opinion, to what extent does your firm ensure conformity of Information System policy implementation, *tick one.*

No extent at all	Little extent	Moderate extent	Large extent	Very large extent

18. How does your company handle the update/formulation of information System Policy

<i>Members involved</i>	<i>Tick</i>
ICT professionals	[]
Members of Management	[]
Management and Board Committee	[]
Other (Specify)

PART C – INFORMATION SYSTEM POLICY FOR EFFECTIVE CORPORATE GOVERNANCE

To what extent has each of the following IS policies contributed to Corporate Governance in your firm? Tick one using the scale;

(1 = No extent at all, 2 = Small extent, 3 = moderate extent, 4 = large extent, 5 = very large extent)

<i>IS policy implementation measurement tool</i>	1	2	3	4	5
1. Overall Information System policy					
2. Information System training policy					
3. Information System security policy					
4. Information access policy					
5. IS equipment disposal policy					
6. Information System recovery policy					
7. Information System web access policy					
8. Information System incident response policy					

19. In your opinion, to what extent does your firm ensure conformity of better Corporate Governance Practice, *tick one*.

No extent at all	Little extent	Moderate extent	Large extent	Very large extent

For each of the following, tick to indicate the impact of Information System policy on Corporate Governance indicators. Using the scale;

(1 = No extent at all, 2 = Small extent, 3 = moderate extent, 4 = large extent, 5 = very large extent)

<i>IS policy implementation measurement tool</i>	1	2	3	4	5
1. The firm has Information System policy in place that Support corporate governance					
2. Information System policy support the firms vision and mission					
3. Information security policy has brought improvements in Firms Accountability.					
4. Information security policy has resulted in improved Firms' transparency.					
5. The firms' equipment disposal/acquisition policy has resulted In improving your Firms' accountability.					
6. The current underlying information protection policy has provided for firms faith and delight.					
7. The current underlying information sharing policy has led to firms efficiency and effectiveness					
8. Information system policy incident reporting policy has ensured sustainability of high ethical standards.					

APPENDIX II

The Comprehensive list of listed companies at NSE

AGRICULTURAL
<u>Eaagads Ltd Ord 1.25</u>
<u>Kapchorua Tea Co. Ltd Ord Ord 5.00</u>
<u>Kakuzi Ord.5.00</u>
<u>Limuru Tea Co. Ltd Ord 20.00</u>
<u>Rea Vipingo Plantations Ltd Ord 5.00</u>
<u>Sasini Ltd Ord 1.00</u>
<u>Williamson Tea Kenya Ltd Ord 5.00</u>
<u>Express Ltd Ord 5.00</u>
<u>Kenya Airways Ltd Ord 5.00</u>
<u>Nation Media Group Ord. 2.50</u>
<u>Standard Group Ltd Ord 5.00</u>
<u>TPS Eastern Africa (Serena) Ltd Ord 1.00</u>
<u>Scangroup Ltd Ord 1.00</u>
<u>Uchumi Supermarket Ltd Ord 5.00</u>
<u>Hutchings Biemer Ltd Ord 5.00</u>
<u>Longhorn Kenya Ltd</u>
<u>AccessKenya Group Ltd Ord. 1.00</u>
<u>Safaricom Ltd Ord 0.05</u>
<u>Car and General (K) Ltd Ord 5.00</u>
<u>CMC Holdings Ltd Ord 0.50</u>
<u>Sameer Africa Ltd Ord 5.00</u>

<u>Marshalls (E.A.) Ltd Ord 5.00</u>
<u>Barclays Bank Ltd Ord 0.50</u>
<u>CFC Stanbic Holdings Ltd ord.5.00</u>
<u>I&M Holdings Ltd Ord 1.00</u>
<u>Diamond Trust Bank Kenya Ltd Ord 4.00</u>
<u>Housing Finance Co Ltd Ord 5.00</u>
<u>Kenya Commercial Bank Ltd Ord 1.00</u>
<u>National Bank of Kenya Ltd Ord 5.00</u>
<u>NIC Bank Ltd Ord 5.00</u>
<u>Standard Chartered Bank Ltd Ord 5.00</u>
<u>Equity Bank Ltd Ord 0.50</u>
<u>The Co-operative Bank of Kenya Ltd Ord 1.00</u>
<u>Jubilee Holdings Ltd Ord 5.00</u>
<u>Pan Africa Insurance Holdings Ltd Ord 5.00</u>
<u>Kenya Re-Insurance Corporation Ltd Ord 2.50</u>
<u>Liberty Kenya Holdings Ltd</u>
<u>British-American Investments Company (Kenya) Ltd Ord 0.10</u>
<u>CIC Insurance Group Ltd Ord 1.00</u>
<u>Olympia Capital Holdings ltd Ord 5.00</u>
<u>Centum Investment Co Ltd Ord 0.50</u>
<u>Trans-Century Ltd</u>
<u>B.O.C Kenya Ltd Ord 5.00</u>
<u>British American Tobacco Kenya Ltd Ord 10.00</u>
<u>Carbacid Investments Ltd Ord 5.00</u>

<u>East African Breweries Ltd Ord 2.00</u>
<u>Mumias Sugar Co. Ltd Ord 2.00</u>
<u>Unga Group Ltd Ord 5.00</u>
<u>Eveready East Africa Ltd Ord.1.00</u>
<u>Kenya Orchards Ltd Ord 5.00</u>
MANUFACTURING AND ALLIED
<u>A.Baumann CO Ltd Ord 5.00</u>
CONSTRUCTION AND ALLIED
<u>Athi River Mining Ord 5.00</u>
<u>Bamburi Cement Ltd Ord 5.00</u>
<u>Crown Berger Ltd Ord 5.00</u>
<u>E.A.Cables Ltd Ord 0.50</u>
<u>E.A.Portland Cement Ltd Ord 5.00</u>
ENERGY AND PETROLEUM
<u>KenolKobil Ltd Ord 0.05</u>
<u>Total Kenya Ltd Ord 5.00</u>
<u>KenGen Ltd Ord. 2.50</u>
<u>Kenya Power & Lighting Co Ltd</u>
<u>Umeme Ltd Ord 0.50</u>
GROWTH ENTERPRISE MARKET SEGMENT
<u>Home Afrika Ltd Ord 1.00</u>

