

**APPLICATION OF INFORMATION AND COMMUNICATION  
TECHNOLOGY AS A STRATEGIC TOOL IN INSURANCE COMPANIES  
IN KENYA.**

**BY**

**GITONGA BILHA WANGECHI**

**A Management Research Project Submitted In Partial Fulfillment Of The  
Requirements Of The Of The Degree of Master of Business Administration  
(MBA) the School of Business,University of Nairobi.**

**NOVEMBER 2010**

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background.**

Organizations exist as open systems and hence they are in continuous interaction with the environment in which they operate. The environment in which they operate is never static. All organizations lend themselves to this environment, which is highly dynamic, chaotic and turbulent such that it is not possible to predict what will happen and or when it will happen. Consequently, the ever changing environment continually presents opportunities and challenges. To ensure survival and success, firms need to develop capability and capacity to manage threats and exploit opportunities promptly. This requires formulation of strategies that constantly match capabilities to environmental requirements. Success therefore calls for proactive approach to business (Pearce and Robinson, 2003).

In today's business environment, competitive advantage goes to those companies most able to mobilize information and create systems to use knowledge effectively. Accurate, timely information allows organizational members to monitor progress and take corrective action promptly. Innovative, state of the art support systems can be a basis for competitive advantage if they give firm capabilities that rivals cannot match. Companies everywhere are running to install the support systems they need to participate in one or more segments of the rapidly expanding Internet economy and enable better execution of their business strategies. Well-conceived, state-of-the-art support systems can not only facilitate better strategy execution but also strengthen organizational capabilities enough to provide a competitive edge over rivals(Thompson and Strickland,2003).

The intensification of competition, bad underwriting practice, and negative publicity from collapsed insurance firms, poor management, and competition based on pricing and fraudulent claims have led to the collapse of over four insurance companies over the last fifteen years. In spite of the problems highlighted, companies within the sector still continue to register huge profits and

investors have also continued to eye this sector. It would therefore be worth identifying the reasons why top companies gain a sustainable competitive advantage in this crowded sector. The competitive advantage could be gained in underwriting business, settling claims, handling reinsurance among others. This study will focus in establishing the extent to which insurance companies in Kenya use information technology as a strategic tool in carrying out business (Reyhold, 1995).

### **1.1.1 Concept of Strategy**

The term strategy can be defined in as many ways as there are scholars and researchers in the field. The many definitions reflect the complexity and multi-faceted nature of strategic phenomenon in organizations (Barney 1996). Johnson, schools and Whittington (2005) define strategy as “the direction and scope of an organization over the long term which achieves advantage in a changing environment through its configuration of resources and competencies with the aim of fulfilling stockholders expectations.” Strategy is about winning (Teece 1995, Grant 1998).

Strategy has also been defined as the pattern or plan that integrates organizations major goals, policies and action sequence into a cohesive whole (Mintzberg, Quinn and Ghosal, 1999). Strategy is essential when rapid and discontinuous changes occur within the environment of the firm (Ansoff and McDonnell, 1990). This may be caused by saturation of transitional markets technological discoveries inside or outside the firm or sudden influx of new competitors. Without the benefit of a unifying strategy, chances are high that different parts of the organization will develop different contradictory and ineffective responses. The major task of managers is to assure success and therefore survival of companies they manage. Strategies useful in helping managers tackle the potential problems that face management companies (Aosa, 1998). Strategy is a tool that offers significant help in coping with the turbulence within the environment. It is therefore important that managers pay serious attention to strategy as a tool.

Strategy has also been defined as the pattern or plan that integrates organizations major goals, policies and action sequence into a cohesive whole (Mintzberg, Quinn and Ghosal, 1999). Strategy is essential when rapid and discontinuous changes occur within the environment of the firm (Ansoff and McDonnell, 1990). This may be caused by saturation of transitional markets technological discoveries inside or outside the firm or sudden influx of new competitors. Without the benefit of a unifying strategy, chances are high that different parts of the organization will develop different contradictory and ineffective responses. The major task of managers is to assure success and therefore survival of companies they manage. Strategies useful in helping managers tackle the potential problems that face management companies (Aosa, 1998). Strategy is a tool that offers significant help in coping with the turbulence within the environment. It is therefore important that managers pay serious attention to strategy as a tool.

Today, the key to survival in the highly competitive global environment for many firms is the ability to capitalize effectively on the immense potential of advancing technology and channel it for the economic and strategic well being of the company (Karanja, 2001). Porter (1980) emphasized the use of competitive strategy as the way to achieve competitive advantage and consequently emphasized the use of technology to empower the firm's capabilities. He argued that technology would enable the firm to excel in the competition. In the context of insurance, the advancement in technology presents a new opportunity to improve service quality in response to explosive economic environment and changing competitive additions. Such technology is in fact Information and Communication technology (ICT).

A business strategy articulates the overall direction of the business. Johnson and Scholes (2002) define strategy as the direction and the scope of an organization over the long-term, which achieves the advantage for the organization through the configuration of resources within the changing environment and to fulfill. The

term strategy can be defined in as many ways as there are scholars and researchers in the field. The many definitions reflect the complexity and multi- faceted nature of strategic phenomenon in organizations (Barney 1996). Johnson, schools and Whittington (2005) define strategy as “the direction and scope of an organization were the long term which achieves advantage in a changing environment through its configuration of resources and competencies with the aim of fulfilling stockholders expectations.” Strategy is about winning (Teece 1995, Grant 1998).

Collins and Montgomery (1998) sees strategy as a carefully constructed system of independent parts of the organization that actively directs executives decisions about the resources that the corporation will develop, the business the corporation will compete in, and the organization that will make it all come to life. For the strategy to be successful all these elements must be aligned to each other. An ICT strategy gives technological direction and purpose, organizes and deploys IT resources in the most effective manner and coordinates the stream of decisions being different members of the organization and the IT function .Strategy is about aligning every activity to create an offering that cannot easily be emulated by competitors.ICT is employed in the organizations relentless search for sustained uniqueness and out-performance in terms of value creation to customers, shareholders and stakeholders. Porters framework (1980) and the Resource Based View (RBV) of the firm (Warnerfelt, 1984) basically perceive the primary role of strategy as achieving a unique competitive advantage. Thus, the objective of ICT strategy becomes the effective and efficient use of technology to beat the competition either by excelling in the activities of the firm’s value chain that allows the firm to establish a dominant position in the industry, or through the mobilization of unique resources and capabilities.

Strategy links the organization and its environment thereby matching the resources and capabilities of an organization to that environment (Johnson and Scholes, 2002).An ICT strategy should therefore be consistent with the technological environment and seek to capitalize on opportunities the

environment offers. According to Porter (1998), for an organization to achieve competitive advantage over competition, it has to tap the advantage through cost leadership, innovation, focus, and speed. Organizations are creating, sustaining and compounding these advantages through ICT. ICT improves the organizations strategic capability thereby enabling organizations to provide product and service features that are valued by customers and by enhancing competitive performance.

Corporate strategy influences strategy through business strategies dictating the need for new information systems or other ICT capabilities. A business initiative can drive the need for new ICT projects that are required to realize the business objectives. However much a business becomes increasingly interconnected, ICT initiatives are becoming more synonymous to business initiatives. By offering new ways of doing business, new technology capabilities are influencing business strategies. While today e-commerce and extranets are commonplace, a few years ago they were prime examples of technology-business initiatives, where technology was driving and changing the way in which business could be conducted. Draft (1993), contends that managers can also use IT for greater formalization, standardization and centralization.

### **1.1.2 Information and Communication Technology**

Information and Communication Technology (ICT) was in the past viewed as an automation tool for existing business processes. Existing business needs specifically drove ICT developments. It is now widely recognized that this will often result in high investments and increased operating costs but in the anticipated improvements in performance. Today the central premise is that ICT is a lever for designing processes and therefore should not simply be overlaid on the existing organizational structure. Instead of creating the existing business processes as a constraint in the development of optimum ICT infrastructure, the basic logic of the processes itself is questioned (Kahigu, 2003).

The growth of IT systems and their pervasive use in business is a familiar development from the early 1980's. It is fundamentally changing the nature of the workplace (Stebbins et.al., 1995). Businesses are relying upon ICT to create competitive advantage thereby taking a new urgency to the business. ICT is being employed in the value adding activities; creating a new source of means to sustainable competitive advantage. It is increasingly through IT that customer attraction and loyalty are accomplished while competitor initiatives are muted. It is therefore not surprising that business strategy is more and more influenced, enabled, and dependent on the ICT strategy.

Over the years, development in information and communication technology (ICT) has played a significant role in the way we do business. Business entities have had to evolve their practices to cope with changes in information and communication technology. Those companies that successfully tap the powerful synergy resulting from the merger of technology and business strategy to transform their organizations are likely to experience an unparalleled competitive advantage, while the negative consequences for organizations that fail to act or whose efforts are unsuccessful will be far more significant than in the past.

It is evident that developments in information and communication technology have changed the way of doing business. Shultheis and Sumner (1995) point out those organizational impacts of information technology are significant. They note that the developments with regard to electronic mail systems, group and cooperative work systems among others are bringing transition to the information based organization. With such developments, organizations will be able to benefit from both internal expertise of expert systems and external consultants. They further observe that information and communication technology has changed the nature of the industries in which firms operate in terms of the products and services offered by altering the product development cycle or by increasing in the delivery speed; production economics in which a firm with nationwide network of distribution centers can serve regional markets and also reallocate inventories to

serve the national market; and lastly, with regard to markets, which have become more globalized and accessible. Consumers are becoming more informed and computer literate and thus accustomed to be electronically served. Organizations that are not able to offer electronic services to their customers may be at a competitive disadvantage.

### **1.1.3 The Insurance Industry in Kenya**

Insurance is the pooling of risks by policyholders with the aim of indemnifying them from unforeseen risks. The principle of insurance is that the losses of the few are paid by many. Its underlying purpose is to provide protection against the risk of financial loss, thus giving peace of mind to the policyholders. Life insurance is also a way of creating an immediate estate for ones dependants.

Insurance companies are financial institutions that function in the economy as part of the financial services industry. The financial services industry is made up of banks, building societies, insurance brokers, pension funds, fund management companies, stockbrokers, real estate companies, savings and credit societies etc. It has important effects on the performance of Kenya's economy, contributing approximately 11% to the Gross Domestic Product with insurance contributing about 3% to the GDP (Government of Kenya, Economic Survey 2004). Life insurance density (premium per capita) in 2008 was US\$3 while life insurance penetration (premiums as a percentage of Gross Domestic Product) was 0.87%. (Insurance Industry Annual Report 2008). As at 31<sup>st</sup> December 2008, the insurance industry had 42 registered insurance companies of which 22 wrote general insurance business only, seven wrote long term business only while fifteen were composite (both life and general).

Insurance promotes financial stability of individuals, families, and organization by indemnifying those who suffer loss or harm. Business failure without insurance leads to reductions in shareholders wealth and many kinds of negative externalities. Higher unemployment, loss of business, higher prices of products and services, less government tax revenue and rising government responsibilities



are few negative externalities associated with uninsured loss. This therefore implies that insurance promote financial stability by ensuring continuity in the face of adversity (Bashir, 2002).

The economic problems, in which an insurer is involved directly or indirectly, are for most of the time, long-term nature. This is why an insurer is concerned about investment spread as well as whether the investment policy reflects prudence and safety. In an economic downturn such as the one being experienced in the country currently, insurance companies have had a downslide of their non-life business against worsening claim ratios. Under these circumstances, it is only investment income that enables an insurer balance his operation equation. But this income has been greatly eroded by low returns experienced from our economy and non-performance of many assets.

Companies have emerged with friendlier and more flexible financial instruments in the insurance industry in giving hope to t he small savers in Kenya. But the successes of the sector, lies in the ability of the insurance companies adapting to the changing needs of the insurance buying public. Many insurance companies are preoccupied with selling the products they have designed thus lacking the flexibility to respond to the needs of the markets, specifically the consumers.

## **1.2 Statement of the Research Problem**

Information and Communication Technology (ICT) was in the past viewed as an automation tool for existing business processes. ICT offers organizations a wide range of possibilities for improving their competitiveness: they provide mechanisms for getting access to new market opportunities and specialized information services such as consulting, continuous training, new advisory modes, etc.; organizations can exchange real-time information and build closer relationships with their customers, suppliers and business partners; immediate customer feedback allows customer to react to fast changing customer demands and recognizing new market niches. This means that the organizations that are

able to exploit the potentials offers by ICT can handle innovative processes, such as Supply Chain Management, Customer Relationship Management, Knowledge Management, more effectively.

Until late 1970's, the insurance industry in Kenya, which dates back to the establishment of the colonial rule, operated in a rather stable environment. There was little demand for services, the products offered were quite standardized, government supervision was minimal and competition was relatively low. However, following the issuance of government directive in 1978 which required all foreign insurance companies to be incorporated in based organization, there arose a need to have fully fledged organizations that could operate without having to consult the parent company. Hence, the need to have them networked.

Whereas a number of studies have been done on organizational utilization of business: Kitur(2006); Kariuki(2004); Owuor(2003); Kahigu(2003); Abwao(2002); and Nyambati (2001) among others, no study has looked at the extent to which ICT in organizations has been applied as a strategic tool. For example, Kariuki (2004) studied IT strategy and organizational structure relationship among companies listed at the Nairobi Stock Exchange while Owuor (2003) looked at the use of IT as a facilitator of BPR in the vegetable oil industry. Abwao's (2002) study on IT applications in business management within insurance firms in Nairobi found out that insurance companies in Kenya have actually embraced the use of IT in carrying out their business. However, his study never investigated the extent to which ICT has been applied as a strategic tool in these companies. This study takes this perspective to bridge the existing gap in order to answer the extent to which insurance companies in Kenya use information and communication technology as a strategic tool in carrying out their business and identify the factors that lead to its use.

### **1.3 Objectives of the Study**

The objectives of the study are:

- i) To establish the extent to which insurance companies in Kenya use information technology as a strategic tool in carrying out their business.
- ii) To establish the extent to which ICT is used as a strategic tool.

### **1.4 Importance of the Study**

The findings of this study will contribute immensely towards the understanding and appreciation of the strategic value of IT not only to the insurance industry but also in other companies that have embraced the use of IT. The study will also contribute towards narrowing the existing knowledge gap in the field of information technology as a strategic resource among insurance companies. To the academics, the study will shed some light into the field of information technology and business management in general. It will also give an appreciation of the level of infiltration of IT into business management over the years across departments. The academicians will also use this study as a point of reference for further academic research in the field of information technology and its strategic importance in organizations and also judge the pace of its adaptation in Kenya.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Concept of Strategy**

Strategy is the direction and the scope of an organization over the long term; which achieves advantages for the organization through its configuration of resources within a changing environment, to meet the needs of markets and to fulfill stakeholder expectations (Johnson and Scholes, 2001). It is concerned with markets and products. It is about choosing where and how to compete, whom to appoint to senior positions and how to organize the organizations.

Organizations exist as open systems hence they are in continuous interaction with the environment in which they operate. The environment in which the organizations operate is never static. All organizations lend themselves to this environment which is highly dynamic, chaotic and turbulent that it is not possible to predict what will and/or when it will happen. To ensure survival and success, firms need to develop capability and capacity to manage threats and exploit emerging opportunities promptly. This requires formulation of strategies that constantly match capabilities to environment requirements. Success therefore calls for proactive approach to business (Pearce and Robinson, 2003).

In essence, strategy has to do with understanding where an organization will go in the future and how it will get there, through configuration of its resources within a changing environment to meet the needs of the market and fulfill the stakeholders' expectations. As the environment is always changing, an organization must configure its resources to match the changes. The changes may be mild or turbulent but must be matched accordingly to appropriate strategy.

### **2.2 Information and Communication Technology in Financial Organizations**

The introduction of client-server architecture reduced the cost of implementing systems they were originally implemented on the mainframe. This design also increased the appeal of Graphical User Interface and made it user-friendlier since more users were already familiar with such interfaces for Windows, Macintosh,

and Disk Operating System (DOS) (Haeckel et.al., 1993). Robson(1997) notes that the processing speed of the computers increased and the computer vendors also invested a lot of time in developing applications that would take advantage of the speed .This meant that there were more and more graphic and other multi-media effects that were incorporated to make the systems user-friendlier.

Martin et al. (1995) point out that the capabilities and potential of technology are increasing more rapidly than ever before. During the past three decades consumers have received about 30% more computer power each year for the same price. Competition among microprocessor companies and new advances in technology are accelerating the rate. In communication, the story is similar if not more striking as worldwide deregulation, optical fibre, digitization of networks, and the opening up of more of the wireless spectrum are generating even greater increase in cost-effectiveness and capability.

Developments in IT have seen the enhancement of communication technology. The use of Internet, Enterprise Resource Planning (ERP) Solution, Business Process Reengineering (BPR), and the common trend of outsourcing of IT services are among IT's applications in organizations' businesses Malone and Laubacher (1998) observe that the Internet is the greatest model of network organization that has yet to emerge and it reveals a startling truth: in an e-lance economy, the role of traditional business manager changes dramatically and sometimes disappears completely. The work of the temporary company is coordinated by centralized direction or control.

Economic and competitive pressures have focused managers' attention on white-collar productivity. As a result, information technology is replacing people in some aspects of information processing. Networks enable people to share information efficiently, to send and receive documents and proposals, to schedule meetings and to vote on proposals (Bensaou and Earl, 1998). Robson (1999) points out that the use of IT varies according to the hierarchy. As we go up the

hierarchy, the type of information changes from structured to unstructured or from programmable to un-programmable. The type of system also varies from transaction-based system through decision support systems for middle management and finally the executive information system.

The Internet has helped more use of e-commerce to do business all over the world and this

Has subsequently reduced the cost of marketing and general office operation costs .Observing that business has never been the same since the introduction of personal computers, Intel president and CEO Andy Grove outlined the company's direction to a group of business leaders. Basic to the strategy is Grove's belief that stand-alone computing is forever gone. All computing in future will be networking (Makau, 1997).

Implementation of enterprise planning solution provides a real time access to operating and financial data; the system allows companies to streamline their management structures, creating flatter, and more flexible democratic organizations. On the other hand, they also involve the centralization of control over information and the standardization processes, which are qualities more consistent with hierarchical command-and-control with uniform culture (Davenport, 1998).

Davenport (1998) further notes that the implication of enterprise planning should be viewed as an opportunity to re-look at the company's strategy and organization and not as a technological exercise. Due to the implication involved in implementing enterprise systems(ES), the top management must be involved in making decisions for instance on which module to implement, which areas of organization should be computerized and what trade-offs should be allowed. But Davenport contends that most CEO's, however, continue to view the installation of ES as primarily a technological challenge. They push the responsibility for it down to their IT departments because of ES's profound business implications and

in particular, the risk that technology itself might undermine a company's strategy – offloading responsibility to technologists is particularly very dangerous.

Hammer (1990) considers IT as the key enabler of BPR, which he considers as radical change. He prescribes the use of IT to challenge the assumptions inherent in the work processes that have existed since long before the advent of modern computer and communications technology. He argues that at the heart of reengineering is the notion of discontinuous thinking – or recognizing and breaking away from outdated rules and fundamental assumptions underlying operations. These rules of work design are organizational goals that no longer hold. He suggests that the following principles of reengineering: organize around outcomes, not tasks; have those who use the output of the processes perform the processes; subsume information processing work into real work that produces the information; treat geographically dispersed resources as though they were centralized: link parallel activities instead of integrating their results; put the decision where the work is performed and build control into the process; and capture the information once and at the source.

Lacity et al. (1995), out of their survey of 40 US and European companies that grappled with the issue of outsourcing, came to a conclusion that the strategic versus commodity approach led to disappointments. It is worth considering whether an IT system could be critical and not strategic. That is, a system could be crucially important without differentiating a firm from its competitors prior to making a decision to outsource. Outsourcing will ensure that a company maintains an edge by implementing the latest state-of-the-art systems while it has been proven that in-house IT departments tend to contend with their in-house capability by maintaining the status quo. This, coupled with the high staff turnover in the IT departments, is making most top management think of adopting outsourcing as a cheaper option of maintaining a sustainable competitive advantage. Lacity et al. point out that just because a system was business critical or strategic does not mean that all its elements had to be kept in-house.

Martin et al. (1995) note that today IT plays a role in most aspects of the company's business, from the development of new products to the sales and service, from providing market intelligence to supplying tools for decision analysis. For a global company, the ability to take information from multiple systems and make it broadly accessible to managers and employees is critical. Many observers believe that this fact, along with the increased opportunities for using IT to achieve strategic advantage, requires CEOs to re-examine what they need to know about this resource to manage it effectively. They further note that we are moving away from processing systems that give weekly or bi-weekly reports towards technologies that help us move information from our associates faster. In other words, we are moving away from systems that stand beside our business to technologies that are more integrated with the work of our associates. We are aware that managers have to ensure that information is accessible across the business. This requires companies to integrate their systems that have long been isolated from one another.

### **2.3 Information Technology and Organizational Strategy**

Chandler (1962) defines strategy as the determination of the long-run goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals. Johnson and Scholes (2002) define strategy as being about direction and scope of an organization over the long term. Therefore, strategy is a unifying theme that gives coherence and direction to the actions and decisions of individuals or organizations.

Business strategy focuses on building new advantages, which increase customer satisfaction and create distance from competitors, maintaining existing advantages and compressing or eliminating the advantages of competitors (Boar, 1998). Collins and Montgomery (1995) assert that competitive advantage can be attributed to the ownership of a valuable resource that enables a company to



perform better than competitors. Organizations need strategies to give direction and purpose, and to deploy resources in the most effective manner, and to coordinate the stream of decisions being made by different members of the organization. Success of the business strategy is attained if the company achieves its strategic objectives and targeted levels of financial performance.

From the foregoing, it follows that ICT strategy will focus on the impact of technology change in the environment and the development of appropriate ICT capabilities thereby ensuring that the company is positioned to take better advantage of technological opportunities available thereby using critical resources optimally. It is through the ICT strategy that organizations become aware and plan for changing technologies. The implementation of the ICT strategy is the responsibility of executive management assisted by ICT steering committee (De Haes and Van Grembergen, 2004).

ICT strategy contains the technology scope (how IT creates business opportunities), vision, the competencies (how IT creates business advantages) the governance structure (what external relationships IT depends on), security structure (how to mitigate risks inherent in the technology), infrastructure architecture and skills. IT governance is the responsibility of Board of Directors and executive management and an integral part of enterprise governance and consists of the leadership and organizational structures and processes that ensure that the organizations strategy and objectives are achieved (De Haes and Van Grembergen, 2004).

Because all resources depreciate, Collins and Montgomery (1995) note that an effective ICT strategy requires continual investment in order to maintain and build valuable resources. The ICT development plan (a critical component of ICT strategy) is a representation of the current and planned ICT systems in the time rooster, in the organizational and technical context and in their mutual linkage. Thus, an ICT development plan is the reference for all ICT investments of an

organization and forms an input to strategy implementation through the budgeting process. It further ensures that the adoption of ICT is systematic, planned, coordinated, and controlled within the strategy.

IT/ICT strategy is one of the functional strategies necessary for a company especially one that utilizes IT for its core business functions in addition to other supporting functions. Companies that intend to embrace IT for core function need to formulate comprehensive ICT strategies. Hogbin et al. (1994) observe that companies today face a variety of new challenges that demand focus on IT strategies. Markets continue to change more rapidly than ever, requiring enhanced flexibility within the organization. In order to remain competitive, companies must gather and utilize better information about customers in order to market to them successfully and to optimize products and services. Global markets are opening up and IT is allowing companies to have a broader geographic reach just as customers are gaining global tastes. The result of these changes is greater need for IT to be more responsive to the long-range needs of business strategy and for the other business to make better use of IT to stay competitive.

Boar (1997) outlines four central issues that should be analyzed in the development of an IT strategy. First is the business scope (essential characteristics of business-idea concept formula). Second is the alignment i.e. balancing purpose and activities across organizational groups (HR,R&D, Marketing, Production, among others) to achieve business goals, but cannot seek perfect harmony because this eliminates creativity and thereby competitiveness Third is the directives and assumptions i.e. IT planning should be responsive to company needs .Planning should occur in a staggered but parallel manner to the business planning activity. Finally, fourth is the position i.e. that which covers the analysis of current situation across multiple strategic dimensions.

A business should take full advantage of its ICT capability while at the same time the ICT capability should be able to support the business strategy. A lack of

alignment between the IT and the business could lead to sub-optimal use of resources and cause the organization to lose out on the synergistic benefits thereof. According to Waruingi (2003), the alignment of IT and business strategies contributes to the development of long-term sustainable competitive advantage. This alignment is a necessary condition for organizational effectiveness (Luftman, 1996). Neumann (1994) points out that lack of alignment between the IT and business strategies affects a company's competitiveness whereby the company will not be positioned to use critical resources optimally and therefore may be sidelined by companies that are taking better advantage of technological opportunities.

Porter and Millar (1985) observe that ICT's influence on communication and collaboration has seen the traditional hierarchies within the organizations falling apart resulting in flatter organizations and horizontal departments becoming common. ICT has facilitated various structures for improved and optimal performance and efficiencies. These include matrix structures, decentralized structures, global/divisional/group structures and wider span. Service organizations' (banking, insurance, publishing etc.) non-material products cannot exist without ICT. In many organizations, this is reflected by the presence of an IT representative in the senior management team acting as the link between the business and ICT. The placement of the representative and the IT function in the organizational structure has equally changed with the changing role of IT.

Collins and Montgomery (1995) point out that a company will be positioned to succeed if it has the best and most appropriate stock of resources for its business strategy. Businesses that have high dependence on IT and their processes and producers are IT intensive have strategically positioned IT in the organization structure. ICT sustains and extends the organization's strategy and objectives. Reyhold (1995) notes that the value attached to IT varies from company to company and even among different organizations within the same industry. For some, IT is perceived as a tool to improve organizational effectiveness and

profitability. For others, however, such technology is viewed as merely an administrative convenience, or worse, a necessary evil. Senior managers often feel that the company should receive greater benefits from its investment in IT. To increase the return on investment, IT must be tied to the business strategy of the organization. Successful companies within a given industry attempt to position themselves relative to their competition by: becoming the lowest cost producer or service provided within the industry; or developing specialized services or products that set the company apart from others in the industry; or concentrate on selling to a particular market or occupying a specific product niche. As well as ensuring IT supports corporate strategy, managers must be able to identify opportunities to seize a competitive advantage (Reyhold, 1995).

Several developments have taken place in business management over the past decades. Development in information technology has also necessitated change of ways of doing business away from the traditional ways. These developments have led to transformation in value chain, influence of global competition in the way business is done and the effects of liberalization of the economy.

### **2.3.1 Transformation of the Value Chain**

According to Porter (1985), competitive advantage grows out of the way an enterprise organizes and performs discrete activities. By performing these activities, the insurance companies create value for the policyholder and the ultimate value is measured in terms of the amount of premium that the policyholders are willing to pay for the risk. An insurance form is profitable if this value exceeds the collective cost of performing all of the required activities. To gain competitive advantage over its rivals, an insurance firm must either provide comparable value to the policyholder,, but perform activities more efficiently than its competitors(lower cost), or perform activities in a unique way that creates greater policyholder value and commands a price premium(differentiation). The operations of any insurance company could be divided into a series of activities

such as sales people making sales calls, underwriting of risk, intimation and settling of claims, and accessions of the risk to the re-insurer.

IT is permeating the value chain at every point transforming the way value activities are performed and the nature of the linkages among them. It is also affecting competitive scope and reshaping the way products meet buyer needs. The basic effects explain why information technology has strategic significance and are different from many other technologies businesses use (Porter, 1985). ICT is applicable in all the value adding activities through processes to management and administration of the various activities. This is evidenced in Porter (1998) who shows IT being pervasive in the value chain; observable and used in every generic category of the value activity in the chain.

### **2.3.2 The Global Markets**

Jarillo (1997) notes that the flow of money and information is now global and corporations of any nationality are buying, selling, and investing in each growth region of the world. Unlike earlier times, this does not mean relocating 'armies of professionals' for years on end. These professionals can now control and respond to events and deploy their expertise from central computer hubs located where they live. Consumer buying habits are also changing. According to Hope and Hope (1997), global marketing is leading to more homogeneous buying patterns. Most firms are getting towards coming up with world-class products. Global shopping via internet is creating huge marketing opportunities for any enterprising organization that can display its goods on the World Wide Web (WWW) and deliver products directly to the customer.

Martin et al. (1995) point out that in an increasing competitive world, IT is critical to the development of more effective operational and management processes. To serve customers well, companies need to be proficient in half a dozen key areas: reduced cycle time, reduce asset levels (e.g. inventory and people), faster development of new products, improved customer service, increasing

empowerment of employees, and increased knowledge sharing and learning. IT is a critical resource of accomplishing all these goals. Jarillo (1997) asserts that as many skills are computer based and more easily transferable, corporate loyalty to a particular place or region will decline. Survey of a wide range of industries by Porter (1998) revealed that IT is changing the rules of competition in three ways: First, advances in IT are changing the industry structure. Second, IT is an increasingly important lever that companies can use to create competitive advantage. A company's search for competitive advantage through IT often also spreads to affect the industry as competitors imitate the leaders' strategic innovations. Finally, information evolution is spawning completely new businesses. These three effects are critical for understanding the impact and hence the extent of use of IT in a particular company and in a particular industry and for formulating effective IT strategy and. Porter (1988) further points out that the information revolution is giving birth to completely new industries in three distinct ways: First, it makes new business technologically feasible. Second, IT can also spawn new businesses by creating derived demand for new products, and third, IT creates new businesses within old ones. A company with IT processing embedded in its value chain may have excess capacity or skills that can be sold outside.

On the changing part of employment, Rifkin (1997) notes that the primary driving force is the reengineering of work and displacement by technology of routine jobs. Hope and Hope (1997) assert that not only are jobs disappearing but the way the remaining work is performed is also changing. The traditional worlds of career – based jobs, with contract employment, holiday and pensions entitlements and clear defined promotions structures is giving ways to part time work, contract work, project teams, self employment, and other types of independent workgroup activity – often separated from the apron of the organization itself.

Handy (1997) note that employees who are not connected to the core task of the business will soon find themselves in a new relationship with former employees.

They will become more or less independent actors of businesses contractual support network jobbers, piece workers consultants, accommodators,' temps' of all sorts and degree, all plying their different trades and skills.

### **2.3.3 The Changing Face of Competition**

After surveying a wide range of industries, we find that technology is changing the rules of competition in three ways. First, advances in information technology are changing the industry structure. Second, information technology is an increasingly important lever that companies can use to create competitive advantage. A company's search for competitive advantage through information technology often also spreads to affect the industry as competitors imitate the leader's strategic innovations .Finally, information evolution is spawning completely in new businesses. These three effects are critical for understanding the impact of information technology on a particular industry and for formulating effective strategic responses (Porter, 1998).

The structure of an industry is embodied in five competitive forces that collectively determine industry profitability: the power of buyers, the power of suppliers, the threat of new entrants, the threat of substitutes, and the rivalry among existing competitors. The collective strength of the five forces varies from industry to industry, as does the average profitability. The strength of each of the five forces can only change, either improving or eroding the attractiveness of an industry (Porter, 1998).

In any company, IT has a powerful effect on competitive advantage in either cost or differentiation. Information technology affects value activities themselves or allows companies to gain competitive advantage by exploiting changes in competitive scope (Porter, 1998).Information revolution has given birth to completely new industries in three distinct ways. First, it has made new businesses technologically feasible. Second, information technology has spawn new businesses by creating derived demand for new products. Third, information

technology has created new businesses within old ones. A company with information processing embedded in its value chain may have excess capacity or skills that can be sold outside (Porter, 1998).

#### **2.3.4 Changes in Organizational Structure**

Many leading edge companies have now recognized around group-wide networks focusing particularly on how work is performed. This is essentially a horizontal model with business process at its heart, teams as its implementers, and a clear focus on highly skilled, creative workforce that consistently delivers profitable products and services to profitable customers. Perception of status and work has also changed team members who now work for customers, not for superiors, and their authority derives from what they know rather than who they are (Hope and Hope, 1997).

As communication technologies advance and become more efficient, the dominant business organization of the future may not be a stable, permanent corporation but rather elastic network that may sometimes exist for not more than a day or two. When projects need to be undertaken, requests for proposal will be transmitted or electronic wall ads posted, individuals or small teams will respond, a network will be formed and new workers will be brought on as their particular skills are needed. Once the project is done, the network will be disbanded (Malone and Laubacher, 1998).

Malone and Laubacher (1998) note that even within large corporations, traditional command and control management is becoming less common. Decisions are increasingly becoming less common. Decisions are increasingly being pushed lower down in organizations. Workers are being rewarded not for efficiently carrying out orders but for figuring out what needs done and then doing it.



### **2.3.5 The Changing Pattern of Employment**

The primary driving force is the reengineering of work and displacement by technology of routine jobs. Andersen Consulting estimates that in just one service industry, commercial banking and thrift institutions, reengineering will mean a loss of 30 to 40 percent of jobs over seven years (Rifkin, 1997).

Not only are jobs disappearing but the way the remaining work is performed is also changing. The traditional worlds of career-based jobs, with contract employment, holiday and pensions entitlements and clear defined promotions structures is giving ways to part-time work project teams, self employment, and other types of independent workgroup activity – often separated from the apron strings if the organization itself (Hope and Hope,1997).

Employees who are not connected to the core task of the business will soon find themselves in a new relationship, if any, to their former employers. They will become more or less independent actors of business's contractual support network–jobbers, pieceworkers, consultants, accommodators, 'temps' of all sorts and degree, all plying their different trades and skills (Handy,1997).

## **CHAPTER THREE: RESEACH METHODOLOGY**

### **3.1 Research Design**

The study was conducted through a cross-sectional survey involving all the insurance companies in Nairobi. This is a descriptive study that answers the questions of what and how of a research study. This type of study was suitable for the study being carried out because the study was concerned with measurement of same variables across all respondents in the same industry at a particular point in time. Cooper and Emory (1995) recommend this type of design for studies carried out at once and representing same variables at a particular point in time.

### **3.2 Population of Study**

The population of study in this study included all insurance companies in Kenya. The number of companies was forty two (42) as at December 2008 as per the list that was obtained from the Commissioner of Insurance. A census survey was used because all the insurance companies in the country are few and are all located in Nairobi.

### **3.3 Data Collection Method**

The study used primary data which was collected using semi-structured questionnaire. The questionnaire was divided into four sections. Section one was seeking to gather general information about the company(Organization profile); section two was seeking information about the organization's Business strategy, section three solicited data on organizational ICT strategy; and section four laid focus on the extent to which ICT has been applied in the organization. The study targeted General Managers in the respective companies. The questionnaire was administered through mail/or "drop and pick" later method.

### **3.4 Data Analysis**

Data collected was edited for completeness and consistency, coded, labeled, and keyed into the SPSS program for analysis. Frequency tables and charts were used to present the findings upon which interpretations and conclusions were made. Frequencies and percentages helped determine the proportion of respondents for each of the strategic application statements. The findings were then presented in frequency tables.

## **CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION**

### **4.1 Introduction**

The study was designed with the objective of determining the strategic role of information and communication technology among insurance companies in Kenya. The data that was analyzed was provided by general managers of the respective insurance companies. Out of the forty-two insurance companies, all of which were served with questionnaires, only twenty-eight responded by returning filled questionnaires. This formed 66.7% response rate, which the study considered suitable for analysis.

To achieve study objective, respondents were required to respond to general organizational profile and strategic planning issues in their companies. They were then presented with statements describing the strategic role of ICT in their organizations on which they were to indicate the extent to which companies used ICT for each of the strategic role described: not at all; very little extent; moderate extent; great extent; and very great extent as applicable in their respective organizations by scoring on a 5-point Likert scale. This chapter covers analysis of the research findings and discussions in line with the objective of study.

### **4.2 Organizational Profile**

The aspects which were considered under organizational profile include those which could determine the extent to which organizations use ICT in business operations. These include ownership structure, organizational size, and geographic coverage. The findings of the study are explained and discussed below.

Under ownership structure, the study considered two aspects viz. local ownership and a company being a subsidiary of multinational company with public shareholding. These perspectives will determine the level of inter-company networking that will be required to ensure that the organizations' operations are run sufficiently. A locally owned company will not require an elaborate networking as a subsidiary of a multinational company will. The data was captured by keying into the system. The findings of the study are presented in the table below.

**Table 4.2a: Ownership Structure**

	<b>Frequency</b>	<b>Percent</b>
Local	22	78.6
Subsidiary	6	21.4
Total	28	100.0

The results show that 28 respondents, 78.6% are locally owned while 21.4% are subsidiaries of multinational companies. It is therefore evident that most of the companies operating in the industry are locally owned and their adoption and use of information and communication technology would be for reasons other than inter-company networking with other subsidiaries and head offices as would be for reasons other than intercompany networking with other subsidiaries and head offices as would be for companies which are subsidiaries of multinational companies.

Organizational size by number of in the companies was sought for purposes of having the general view of the extent of downsizing as a result of embracing the use of ICT and also as a measure of how large the organization is. Table 1b presents the research findings, which indicate that most organizations 29(96.7%) have less than 500 employees with only one (3.3%) having between 501 and 1000 employees.

**Table 4.2b: Organizational Size (Number of Employees)**

	<b>Frequency</b>	<b>Percent</b>
Below 500	27	96.4
501-1000	1	3.6
Total	28	100.0

The results indicate that most of the organizations have maintained a low number of employees possibly due to their bid to downsize and instead have utilized technology to do most of the business operations.

Lastly, under organizational profile, the research looked at the organizations dispersion in terms of geographical coverage, that is, the markets that organizations serve looking at three main perspectives: local, regional, and international. This aspect relates to, to some extent, the ownership structure in terms of information and communication technology requirements. The study findings are presented in Table 4.2c.

**Table 4.2c Geographical Coverage**

	<b>Frequency</b>	<b>Percent</b>
Local	24	85.8
Regional	2	7.1
International	2	7.1
Total	28	100

The results indicate that out of 28 respondents that participated in the study ,majority of them(85.8%) serve the local market, that is operate only within

Kenya.7.1% of them serve regional markets(East African Region), while the other 7.1% serve international(worldwide) markets. The results are in line with those of ownership structure as most of the companies are locally owned, hence serving the local market. Similarly, their information and communication technology requirements will be for other reasons other than foreign branches and inter-company networking.

Cross tabulated results indicated that 90.9% of the 22 insurance companies that are fully locally owned also serve the local market while the remaining 9.1% serve the regional markets. Further, the results indicate that 66.7% of companies that are subsidiaries of multinational companies serve the local market while the remaining 33.3% serve internal markets. These results underscore the reasons why some insurance companies would embrace the use of information and communication technology in a more extensive scale than others coupled with the ability of the individual company to invest in such undertaking. The cross tabulated results are presented in Table 4.2d below.

**Table 4.2d: Ownership-Geographical Coverage Cross Tabulation**

Ownership	Geographical Coverage			
	Local	Regional	International	Total
Local	20	2		22
Subsidiary	4		2	6
Total	24	2	2	28

The market coverage of the insurance companies was also cross tabulated against organizational size and results indicate that 85.2% of the companies which are smaller in size serve the entirely local market. Table 1e presents the findings as shown below.

**Table 4.2e: Organizational Size – Geographical Coverage Cross Tabulation**

Operational Size		Geographical Coverage			Total
		Local	Regional	International	
	Below 500	23	2	2	27
	501 - 100	1			1
	Total	24	2	2	28

### **4.3 Organizational Business Strategy**

An organization's strategy is a product of planning process whose degree of formality lies between two extremes: highly formal and highly informal. Highly formal means that the authority, responsibilities and discretion of the decisions makers is specified which may involve consultancy. Formal indicates that the responsibilities and discretion of the decision makers were specified but not followed keenly. Semi formal means that decision making involves involving consultation within management and middle level management. The findings of the study regarding the degree of formality or the kind of planning followed by insurance companies are shown in Table 4.3(a) below.

**Table 4.3(a): Degree of Formality in Strategic Planning**

	Frequency	Percent
Highly Formal	9	32.1
Formal	14	50
Semi formal	5	17.9
Total	28	100.0

Results of the research indicate that a significant proportion (32.1%) of the companies follow a highly formalized strategic planning process.

Strategy development in organizations is an exercise that is undertaken through extensive consultations with various stakeholders. The study intended to establish whether insurance companies develop their strategies within themselves without



involving external parties like consultants, and if so the mode that is adopted. It was the feeling of the researcher that the implemented study of any organization has to be owned by the implementers, hence the way and/or where such strategy is developed determines its success or failure. The findings of the study are shown in Table 4.3(b) below.

**Table 4.3(b) In-house Development of the Company’s Business Strategy**

	<b>Frequency</b>	<b>Percent</b>
Yes	25	89.3
Partly	3	10.7
Total	28	100.0

According to the study findings, 25 companies out of the 28 studied companies (89.3%) were found to have their strategies developed in-house. This is in contrast with the 3 (10.7%) companies that have their strategies partly developed with external parties. The findings confirm commonly held expectations that a strategy largely developed by external parties cannot be fully owned by organizational members and it is felt to be imposed on them, hence bound to fail at implementation stage.

The strategic planning process is ever continuous and for the developed strategies to be successfully implemented, milestones have to be determined through reviews that are out at certain times during the implementation period. Study findings show in table 4.3(c) below indicate that 50% of the companies that participated in the study review their strategies once a year; 37.7% review their strategies frequently while 14.3% of the companies review theirs twice a year. For the organizations that develop their strategies in-house, the most commonly mode is by way of management retreats which involve senior and middle management teams; others do it through executive retreats which only involve senior management group, while others revise their strategies through consultative

workshops which bring on board all levels of management(Senior, Middle, and Line Managers).

**Table 4.3(c) Review of Companies' Business Strategy**

	<b>Frequency</b>	<b>Percent</b>
Once a year	14	50
Twice a year	4	14.3
Frequently	10	35.7
Total	28	100.0

The results indicate that companies attach great importance to the review of their strategies, a process which feeds back information that is equally important to the organization for the purposes of containing deviations from the expected results and enable the companies assess success or failure for their implementation. Upon seeking to find out the management groups that carry out the review exercise, it was found out that most reviews (71.4%) are done by the senior management while the rest (28.6%) are done by the board of directors.

**Table 4.3(d): Composition of the Company Business Strategy Review**

	<b>Frequency</b>	<b>Percent</b>
Board of Directors	8	28.6
Senior Management	20	71.4
Total	28	100.0

It is evident from the above results that most insurance companies have extensively engaged in strategic planning. Further, the results epitomize the fact that the strategic planning process in these companies is too a large extent formal. These findings form the basis on which subsequent research findings will be interpreted and discussed. It was pivotal for the study to establish the existence of ICT strategy among the studied companies in order to pave way for evidenced and fact-precedented interpretation and discussion of the extent to which

information and communication technology is used in the companies. Pertinent issues regarding ICT strategy are handled in the following section.

#### **4.4 Information and Communication Technology Strategy**

Strategy is about aligning every activity to create an offering that cannot easily be emulated by competitors. An ICT strategy gives technological direction and purpose, organizes and deploys ICT resources in the most effective manner, and coordinates the stream of decisions being made by different members of the organization and the ICT function. ICT is applied in the organization’s research for sustained uniqueness and out-performance in terms of value creation for customers, shareholders, and stakeholders. An ICT strategy should therefore be consistent with the technological environment and seek to capitalize on opportunities the environment offers.

In this study, it was found out that of the 28 companies, 85.7% of them have fully fledged IT department. However, the absence of such a department in the 4 companies does not rule out the adoption and use of ICT in carrying out their business. Table 4.4(a) below shows the study findings.

**Table 4.4(a): Existence of Information Technology Department**

	<b>Frequency</b>	<b>Percent</b>
Yes	24	85.7
No	4	14.3
Total	28	100.0

The results underscore the fact that for an organization to achieve a competitive advantage over competition, it has to tap this advantage through cost leadership innovation, focus and speed. Organizations are creating, sustaining and compounding these advantages through ICT. ICT improves the organization’s strategic capability thereby enabling organizations to provide product and service features that are valued by customers and enhancing competitive performance.

Hence existence of a fully-fledged IT department in majority of the organizations could be motivated by their to not only achieve competitive advantage but be able to sustain it.

The companies that participated in the study were found to varied periods of existence in the Kenyan business environment. Some have been in existence for more than two decades while others have only a few years of existence. It was then presupposed that the more years a company has been in existence, the more is the likelihood of the company having had its IT department in existence for considerably a longer period as well. The research findings are shown below.

**Table 4.4(b): Period of Existence of Information Technology Department**

	<b>Frequency</b>	<b>Percent</b>
Under 1 year	3	10.7
1 – 5 years	6	21.4
5 – 10 years	6	21.4
Over 10 years	13	46.5
Total	28	100.0

From the study findings in Table 3(b) above, it is evident that 46.5% of the companies have had fully-fledged IT departments for over 10 years. An equal proportion of 21.4% each have had fully –fledged IT departments for 1-5 years and 5-10 years respectively while 10.7% of the companies have had their IT departments for less than one year.

As earlier observed, an organization’s ICT strategy gives technological direction and purpose, organizes and deploys IT resources in the most effective manner, and coordinates the stream of decisions being made by different members of the organization and the IT function. Research whether the companies have explicitly crafted ICT strategy is shown below.

**Table 4.4(c): Information Technology Strategy among Companies**

	<b>Frequency</b>	<b>Percent</b>
Yes	23	82.1
No	5	17.9
Total	28	100.0

The results indicate that 82.1% of the companies indicated in the study have ICT strategy, while the rest 17.9% of the companies indicated that they did not have the strategy. The results are in line with the widely embraced expectation that business strategy should lead ICT strategy with IT being the component of business just as much as other core functions' are. If IT is not in the service of the business strategy, then IT is just a technology in the business that falls short of translating business strategy into information technology. Conversely, the ICT strategy should influence the business creating a symbiotic relationship.

Any strategy development process leads to a plan of some sort which is eventually implemented as a firm's strategy. The period covered by such a plan varies depending on the developments in the business environment, which might necessitate review and or change of the strategy to match the changes in the environment. It was the intention of the study to establish the period which the companies' ICT strategy covers. The findings are presented in table 4.4(d) below.

**Table 4.4(d): Information Technology Strategy Planning Period**

	<b>Frequency</b>	<b>Percent</b>
1 Year	8	28.6
3 Years	12	42.9
5 Years	7	25
Over 5 Years	1	3.5
Total	28	100.0

The results indicate that 42.9% of the companies studied had ICT plans that cover 3 years; 25% had their plans covering a period of 5 years; 28.6% plans covering less than one year while 3.5% had plans covering over 5 years. The results show that most companies had their ICT plans covering relatively shorter periods because of the rate at which technological changes take place and any changes necessary could be accommodated without straining the companies.

Through ICT, countless suppliers, vendors and partners are concerned to organizations' systems, some on the periphery, some so tightly integrated that they have different access to/or are part of the organizations processes giving the organization the power to think faster, share more easily and react together as one. As an on demand business, it is the organization's point of strength. On this premise, companies are expected to exploit the integration and/or linkage in carrying out its activities in dealing with their customers and/or suppliers. However, the findings of the study show contrary results with majority of the companies having no linkages and/or integration with their customers and/or suppliers. Table 4.4(e) presents the findings of the study.

**Table 4.4(e): Integration of Information Technology Systems with Customers/Suppliers**

	<b>Frequency</b>	<b>Percent</b>
Yes	5	17.9
No	23	82.1
Total	28	100.0

The results indicate that 17.9% of the companies have their IT systems linked and/or integrated with those of their customers and/or suppliers while 82.1% are not linked and/or integrated with their customers and/or suppliers.

It was the intention of the study to establish the symbiotic relationship that exists between organizational business strategy and ICT strategy because the two are

believed to be supportive of each other in the ultimate realization of organizational goal. Cross tabulated results of this relationship show that 88.5% of the companies with formally crafted business strategy also have ICT strategy. It was further established that while 40% of the companies with no ICT strategy also don't have business strategy, 60% of them have business strategy but not ICT strategy. The results are summarized in the table below.

**Table 4.4(f): Business Strategy and Information Technology Strategy Cross Tabulation**

		ICT Strategy		
Business Strategy		Yes	No	Total
	Yes	23	3	26
	No		2	2
Total		23	5	28

#### **4.5 Application of Information and Communication Technology in the Organization**

The objective of the study was to determine the extent to which information and communication technology is used by insurance companies in Kenya. To achieve this, the respondents were presented with statements describing the various strategic roles that ICT can play in their companies. They were then required to rate in a scale of 1-5 to indicate the extent to which ICT has played such roles in their companies. The findings of the study are discussed and presented in this section.

##### **4.5.1 Development of Companies Business Strategy**

The study intended to establish the extent to which information technology has facilitated the development of the company's business strategy, which focuses on building new advantages for the companies. It is increasingly through IT that consumer attraction and loyalty are accomplished while competitor initiatives are muted. Therefore, it is not surprising that business strategy is more and more

influenced, enabled, and dependent on the ICT strategy. Research findings on the role ICT plays in the development of business strategy are shown in table 4.5(a) below.

**Table 4.5(a): Business Strategy Development**

	<b>Frequency</b>	<b>Percent</b>
Very little extent	4	14.3
Moderate extent	6	21.4
Great extent	11	39.3
Very great extent	7	25
Total	28	100.0

From the findings, 14.3 % of the companies indicated that ICT plays a role in the development of their business strategy to a very little extent. The findings further show that 21.4%.39.3 and 25% of the companies indicated that ICT play a role in the development of their business strategy to a moderate, great and very great extent respectively. The results are indicative of the strategic role of ICT in the development of the companies' business strategy to a significantly great extent.

#### **4.5.2 Information and Communication Technology as an Effective Marketing Tool**

Markets continue to change more rapidly than ever, requiring enhanced flexibility within the organization. In order to remain competitive, companies must gather and utilize better information about customers in order to market to them successfully and to optimize products and services offered. The study findings on the ICT's role in marketing the companies' products are presented in the Table 4.5(b) below.



**Table 4.5(b): Marketing Companies Products**

	<b>Frequency</b>	<b>Percent</b>
Very little extent	4	14.3
Moderate extent	11	39.3
Great extent	8	28.6
Very great extent	5	17.8
Total	28	100.0

With the mean score of 4, the findings show that ICT is an effective tool to a very little extent in 14.3% of the companies, and an effective marketing tool to a moderate extent in 39.3% of the companies. The results further indicate that ICT is an effective marketing tool to great extent and a very great extent in 28.6% and 17.8% of the companies respectively. The results are confirmation to the general expectation that global markets are opening up and ICT is allowing companies to have a broader geographic reach just as customers are gaining global tastes. The result of these changes is a greater need for ICT to be more responsive to the long-range needs of business strategy and for other business functions to make better use of ICT to stay competitive.

### **4.5.3 Electronic Service Delivery by Companies**

Consumers are becoming more informed and computer literate and thus accustomed to be electronically served. Organizations that are not able to offer electronic services to their customers may be at competitive disadvantage. The study was to establish whether ICT has enabled insurance companies to serve their customers electronically. The findings show that insurance companies are offering services to their customers electronically. Specifically, the findings, as shown in table 4.5(c) below show that ICT has had some minimum role in 10.7% of the companies in electronic service delivery and to moderate extent 35.7% of the companies. The findings further indicate that ICT has led to serving customers electronically to a great extent in 39.3% and 14.3% of the companies respectively.

**Table 4.5(c): Electronic Service Delivery**

	<b>Frequency</b>	<b>Percent</b>
Very little extent	3	10.7
Moderate extent	10	35.7
Great extent	11	39.3
Very great extent	4	14.3
Total	28	100.0

The above results lead to a general conclusion that information and communication technology has changed the nature of the industries in which firms operate in terms of the products and services offered.

#### **4.5.4 Neutralization of Buyer Bargaining Power**

Like most other industries, the insurance industry is expected to experience the impact of competitive forces that shape its structure. One of such structures is the bargaining power of customer so much so that when the bargaining power is high, the industry is said to be unattractive to new entrants and very unfavorable to the players. Players in the industry more often than not strive to reduce this power by making switching cost to competitors by their customers as high as possible. Investigation into ICT's role in achieving this goal found out that the following findings as shown in table 4.5(d) below.

**Table 4.5(d): Neutralizing Buyer Bargaining Power**

	<b>Frequency</b>	<b>Percent</b>
Very little extent	17	60.7
Moderate extent	3	10.7
Great extent	6	21.5
Very great extent	2	7.1
Total	28	100.0

It was found that 60.7% of the companies, ICT has had no role in lessening the bargaining power of customers. It has had such a role to a very little extent in 10.7% of the companies, to a moderate extent in 21.5% of the companies and to a great extent in only 7.15 of the companies. The results imply that the bargaining power of customers in the insurance industry is a strong force and insurance companies have not been able to realize significant strategic role of ICT in trying to neutralize the force and remain competitive.

#### **4.5.5 Deterring Customers from Buying Substitute Products**

Substitute products are one of the competitive forces that shape an industry structure. Players in the insurance industry like any other industry will make competitive moves to deter their customers from buying substitute products. The study set to establish whether the use of ICT gives insurance companies a strategic edge in deterring customers from buying substitute products by, for instance, lowering the cost of their services/products or by improving their perceived value. Research findings on this issue are presented in Table 4.5(e) below.

**Table 4.5(e): Deterring Customers from Buying Substitute Products**

	<b>Frequency</b>	<b>Percent</b>
Not at all	5	17.9
Very little extent	7	25
Moderate extent	8	28.6
Great extent	6	21.4
Very great extent	2	7.1
Total	28	100.0

The findings of the study show an almost fairly uniform distribution of the responses with regard to the extent to which ICT's role is deterring customers from buying substitute products. The results indicate a mean score of 3 with ICT having no role at all in 17.9% of the companies and to a little extent in 25% of the

companies. It plays such a role in 28.6% of the companies to a moderate extent and to a great extent and very great extent in 21.4% and 7.1% of the companies respectively. The fairly uniform distribution of the responses implies that the threat of substitute products among the players in the insurance industry is not such strong.

#### **4.5.6 Erection of Entry Barriers to New Entrants**

An industry may prove to be very attractive to an extent that the number of new entrants increases from time to time. Players in such an industry would automatically feel threatened because the new entrants are likely to make competition very stiff and even threaten the existence of some old players. Of particular interest to this study was to establish the role of ICT in the erection of entry barriers by the players to new entrants into the insurance industry. Insurance companies could create barriers by constructing on-line telecommunications networks linking sales agents to main office databases with information about policies and claims. Table 4.5(f) shows the research findings.

**Table 4.5(f): Erecting Entry Barriers to New Entrants**

	<b>Frequency</b>	<b>Percent</b>
Not at all	9	32.1
Very little extent	12	42.9
Moderate extent	4	14.3
Great extent	3	10.7
Total	28	100.0

Of the 28 companies that participated in the study, the findings indicate that 14.3% and 10.7% of the companies use ICT to erect entry barriers to a great extent and very great extent respectively. However, ICT has no role at all in 32.1% of the companies and 42.9% of the companies utilize it to a very little extent to erect entry barriers. They indicate that in general, very few insurance companies have found ICT useful in barring new entrants into the industry. The

results also indicate that insurance companies could be erecting entry barriers through other means other than the use of ICT.

#### **4.5.7 Provision of Better Product Information to Customers**

Companies capturing and applying information at each point of contact with customers will be better off than those that do so only at one or a few points. Customers are increasingly interested to be informed on the variety of insurance products that insurance companies are offering and provision of adequate and accurate information regarding the various products on offer for them to make informed decisions during their purchase decision making processes. The study intended to establish the extent of ICT’s role in the provision of better product information to customers and the findings are shown in Table 4.5(g) below.

**Table 4.5(g): Provision of Better Product Information to Customers**

	<b>Frequency</b>	<b>Percent</b>
Moderate extent	9	32.1
Great extent	12	42.9
Very great extent	7	25
Total	28	100.0

ICT to provide better product information to the customers to a great and very great extent respectively. 32.1% of the companies have utilized ICT for the purpose to a moderate extent. These results vindicate the importance of providing adequate and better product information to customers using the most appropriate media and ICT’s role becomes central in this respect.

#### **4.5.8 Information Technology and Business Opportunities**

As information technology becomes more widespread, opportunities to take advantage of a new competitive scope will only increase. The benefits of scope (and the achievement of linkages), however can accrue only when information technology spread throughout the organization can communicate. Table 4.5(h)

below shows the study findings on the extent to which insurance companies consider ICT to have fostered new business opportunities that they have either exploited or intend to exploit.

**Table 4.5(h): Fostering New Business Opportunities Using Information Technology**

	<b>Frequency</b>	<b>Percent</b>
Not at all	7	25
Very little extent	5	17.9
Moderate extent	5	17.9
Great extent	6	21.3
Very great extent	5	17.9
Total	28	100.0

Findings show that ICT has fostered new business opportunities to a fairly great extent. However a significant number of companies indicated that ICT has either not fostered new business opportunities or has done so to a very little extent. The results show that the percentage of companies where ICT has fostered new business opportunities to a very great extent was 17.9 %, in 21.3% of them to a great extent, and 17.9% to a moderate extent. ICT has not fostered new opportunities at all in 25% of the companies and has done so to a very little extent in 17.9 Of the companies.

The results in general are indicative of the move toward the fulfillment of Schultheis and Sumner (1995)’s observation that new information technology is fostering new business opportunities. Videoconferencing, a technology that makes it possible to hold electronic meetings, could present enormous avenues for insurance firms to access new business opportunities which they might consider exploiting.

## **CHAPTER FIVE: SUMMARY AND CONCLUSIONS**

### **5.1 Introduction**

In an increasingly competitive world, ICT is critical to the development of more effective operational and management processes. The objective of the study was to determine the extent of use of ICT among insurance companies in Kenya. The study looked at the aspect of strategic planning in which it sought to establish the existence of business and IT strategies among the studied companies. The laid ground for the study of the extent to which ICT is used as a strategic tool among insurance companies. In this chapter the findings of the study are summarized and discussed in relation to the objective of the study. Also included in this chapter are the conclusions of the study and recommendations for further research.

### **5.2 Summary of Findings**

To achieve the study objective and answer the study question adequately, it was considered necessary for the study to look at general aspects of strategic planning in order to form the basis of seeking information to achieve the study objective and answer the stud question. Aspects of strategic planning that were considered include business and ICT strategies. The strategic planning aspects then set precedent for the study to lay focus on determining the extent to which ICT is used as a strategic tool among insurance companies in Kenya, hence the answer to the study question.

From the findings of the study, it was evident that most of the companies operating in the industry were locally owned and their adoption and use of information and communication technology would be for reasons other than intercompany networking with other subsidiaries and head offices as would be for reasons other than intercompany networking with other subsidiaries and head offices as would be for companies which are subsidiaries of multinational companies.

With respect to the study objective, it was established that in general, information and communication technology has had a strategic role among insurance companies in most of the areas. It was established that ICT plays a significant role in the development of most insurance companies' business strategy. Other areas in which ICT was found to have far-reaching impact are the transformation of the value chain; provision of better product/service information to the customers and creating linkages with suppliers and customers through ICT. Other areas where ICT was found to play a strategic role include restructuring of the companies, marketing of the companies' products, and offering of services electronically, market research, tracking labour efficiency, and support to the companies' competitiveness among others.

However, the study noted that insurance companies have not utilized ICT to attain full strategic potential in most of the areas. Specifically, the companies lowly rated areas such as lessening buyer bargaining powers by introducing switching costs, and creation entry barriers to new entrants as areas in which they have not strategically positioned themselves in terms of ICT. Even in the other areas mentioned above where the companies have utilized ICT, the study noted that not all companies have strategically benefited from ICT. The study findings showed that significant number of companies is yet to realize ICT's strategic potential.

### **5.3 Conclusion**

The findings of this research have unearthed a number of issues regarding the extent to which ICT has been applied as a strategic tool among insurance companies in Kenya. The overall results show that insurance companies practice formal strategic planning to a great extent and ICT strategy development has also taken centre stage. The findings indicate that insurance companies recognize the strategic role of ICT in their businesses and most of them have embraced it and are making it the cornerstone for achieving and sustaining competitive advantage. Although most insurance companies indicated high dependence on ICT in doing



business, it should be noted the companies have not utilized ICT to the full strategic potential.

It is evident from the study that insurance companies are moving towards taking full advantage of ICT capability while at the same time the ICT capability and ensuring that ICT supports the business strategy. It is also apparent that developments in ICT are transforming most aspects of the organization including organizational structure and design, the value chain and the nature of products/services offered and the markets served among others. ICT is also redefining the relations between the companies and its customers and suppliers and changing the whole industry structure.

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

The findings of this study should be interpreted with the following limitations in mind.

First, it was not possible to get 100% response rate due to the busy schedule for some of the respondents who never found time to fill and mail back the questionnaires.

Secondly, there is limitation of the authenticity of the data received. It was not easy to establish whether or not the targeted respondents are the ones who participated in offering the data that was analyzed. Given that the questionnaires were mailed to the respective companies, it was not possible to be present to ensure that the right respondents participated in the study.

Thirdly, the study was limited to insurance companies and may not apply to the entire service industry organizations given that insurance companies offer unique services in which case ICT requirements and extent of use would be different.

#### **5.5 Recommendations for Further Research**

In connection with further research, the researcher recommends the following: first since this study adopted a census research design yet it was not possible for all insurance companies to participate in the research, a case by case study would

help bring out some of the unique findings about specific companies because such studies are in-depth and hence very detailed. This will also increase the chances of getting qualitative data which was not captured during this study.

It is also recommended that the studies on other dimensions of ICT be carried out among insurance companies. For instance one may be interested in investigating the challenges of implementing the ICT strategy among insurance companies.

## REFERENCES

Ansoff, I. H (1995); Corporate Strategy, Penguin Publishers.

Aosa, E (1992), 'An Empirical Investigation of Aspects of Strategy Formulation and Implementation within Large, Private Manufacturing Companies in Kenya', Unpublished PhD Thesis, University of Strathclyde, Glasgow: Scotland.

Boar, B. H (1998); Information and Communication Technology Strategy as Commitment, University of California at Berkeley, USA.

Bashir, H. 'The Benefits of Insurance in Economic Development', Insurance Link, November – December, 2001.

Collis, D. J and Montgomery, C.A (1995); 'Competing on Resources' Published Paper, Harvard Business Review, July – August, 1995.

Davenport, T (1998); 'Putting the Enterprise into the Enterprise System' Harvard Business Review, July – August, 1998.

Haeckel, S and Nolan, R (1993); 'Managing by Wire' Harvard Business Review, September – October, 1993.

Hammer, M. and Stanton S, 'How Process Enterprises Really Work', Harvard Business Review, July – August, 1985.

Handy, C (1995); Beyond Uncertainty, Hutchinson, London.

Hogbin, G and David, T (1994); Investing in Information Technology: Managing the Decision – Making Process, McGraw- Hill, London.

Hope, J and Hope, T (1997); Competing in the Third Wave; 1<sup>st</sup> Edn. Harvard Business School Press.

Jarillo, J. C (1993); Strategic Networks: Creating Borderless Organization, 1<sup>st</sup> Edn. Heinemann, Butterworth.

Johnson, G. and Scholes, K (2003) Exploring Corporate Strategy, 6<sup>th</sup> Edn. Practise – Hall Europe, London.

Kahigu, T. M (2003); Enabling Role of ICT in Business Process Reengineering, Unpublished MBA Thesis, University of Nairobi.

Lacity, M. et al. (1995); 'IT Outsourcing' Harvard Business Review, May – June 1995.

Luftman, J.N (1996); Competing in the Information Age: Strategic Alignment in Practice, Oxford University Press, New York.

Makau, J (1997); 'How Safe is the Web?' PC World East Africa, June 1997.

Malone, T. and Laubacher, R (1998); 'The Dawn of E-Lance Economy' Harvard Business Review, September – October 1998.

Martin, B. et al (1995); 'The End of Delegation' Harvard Business Review, September – October, 1995.

Mintzberg, H (1978); 'Patterns of Strategy Formulation' Management Science 24(9):934 – 948.

Neumann, S (1994); Strategic Information Systems: Competition Through Information Technologies, McMillan, New York.

Pearce, J. A and Robinson R. B (2000); Strategic Management: Formulation, Implementation, and Control, McGraw – Hill Book Companies Inc.USA.

Porter, M.E (1998); Competitive Advantage: Creating and Sustaining Superior Performance,The Free Press, USA.

Reynold,W. G (1995); Information Systems for Managers, 3<sup>rd</sup> Edn.West Publishing Company, USA.

Robson,W(1997); Strategic Management and Information Systems, 2<sup>nd</sup> Edn. Financial Times Prentice Hill.

Schultheis, R and Summer, M (1995); Management Information Systems, The Managers View, 3<sup>rd</sup> Edn. Richard D. Irwin, Inc. London.

Thompson,A.A and Strickland, A. J(2003);Strategic Management: Concepts and Cases,11<sup>th</sup> Edn. Richard D.Irwin Inc.USA.

Waruingi, J. K (2003); A Survey of the Extent of Alignment of ICT Strategy to Business Strategy: A Case of Companies Quoted at the Nairobi Stock Exchange, Unpublished MBA Thesis, and University of Nairobi.

## APPENDICES

### Appendix 1: Questionnaire

#### Section One: Company Profile

1. Name of the Company.....
2. .... Year ..... of incorporation.....
3. Ownership structure (Tick)
  - Wholly locally owned with public shareholding
  - Subsidiary of multinational with public shareholding
4. Number of employees (Tick)
  - Below 500
  - 500 - 1000
  - Over 1000
5. Geographical coverage of the company's operations (Tick)
  - Local (within Kenya)
  - International (World wide)

#### Section Two: Business Strategy

6. What kind of strategic planning does your organization follow?
  - Highly formal
  - Formal (Structured process)
  - 
  - Semi-formal (low degree of formality, high degree of informality)
  - 
  - No process, no planning
7. Is your business developed in-house? (Tick)
  - Yes
  - No
8. If No in 10 above, which external parties are involved in developing the organizations business strategy? (Specify).....
9. How often does your organization review its business strategy? (Tick)
  - Once a year



ICT Management

Others (Specify).....

18. Who takes responsibility for the effective and efficient implementation of the ICT strategy?

CEO

Senior Management

ICT Management

Others (Specify).....

19. What is the organizations ICT strategy planning period? (Tick)

1 Yr

3 Yrs

5 Yrs

Over 5 Yrs

20. Is any of your organization ICT system integrated or linked with your customers or suppliers? (Tick)

Yes

No

#### **Section Four: Application of Information and Communication Technology in the Organization**

The following describe the extent to which ICT is used in the organization. Indicate the extent to which your organization was ICT in each of the following areas Use the scale below

1 – Not at all

2 – Very little extent

3 – Moderate extent

4 – Great extent

5 – Very great extent

21. ICT is very involved in the development of business strategy.

1  2  3  4  5

22. ICT has been used as an effective tool in marketing insurance plans.

1  2  3  4  5

23. ICT has enabled the organization to offer electronic services to customers.

1  2  3  4  5

24. The organization has used it to lessen the power buyers (policy holders) have by switching costs. 1  2  3  4  5

25. The organization has used ICT to deter customers from buying substitutes by lowering the cost of your products/services or by improving their perceived value.

1  2  3  4  5



26. The organization has utilized ICT provide customers with reliable service, quick response to their question and additional product features.

1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( )

27. ICT has fostered new business opportunities that the organization has exploited or intends to exploit. 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( )

28. ICT has greatly transformed the organizations value chain leading to efficiency in service delivery. 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( )

29. Any other application of ICT in your organization (Specify).....

## **Appendix 2: List of Insurance Companies in Kenya**

1. Africa Merchant Assurance Limited
2. CFC Life Assurance Limited
3. AIG Kenya Insurance Company Limited
4. APA Insurance Company Limited
5. Apollo Life Insurance Limited
6. Blue Shield Insurance Company Limited
7. British American Insurance Company Limited
8. Cannon Assurance(K) Limited
9. Concord Insurance Company Limited
10. Co-operative Insurance Company Limited
11. Corporate Insurance Company Limited
12. Directline Assurance Company
13. Fidelity Shield Insurance Company Limited
14. First Assurance Company Limited
15. Gateway Insurance Company Limited
16. Geminia Insurance Company Limited
17. General Accident Insurance Company Limited
18. Heritage Insurance Company Limited
19. Insurance Company of East Africa Limited
20. Intra Africa Assurance Company Limited
21. Metropolitan Life Assurance Company Limited
22. Jubilee Insurance Company Limited
23. Kenindia Assurance Company Limited
24. Lion of Kenya Insurance Company Limited
25. Kenya Orient Insurance Company Limited
26. Kenya Alliance Insurance Company Limited
27. Madison Insurance Company Limited
28. Mayfair Insurance Company Limited
29. Mercantile Insurance Company Limited
30. Mornach insurance Company Limited

31. Occidental Insurance Company Limited
32. Old Mutual Life Assurance Company Limited
33. Pacis Insurance Company Limited
34. Pan Africa Life Assurance Company Limited
35. Phoenix of E.A Assurance Company Limited
36. Pioneer Life Assurance Company Limited
37. REAL Insurance Company Limited
38. Tausi Assurance Company Limited
39. Trident Assurance Company Limited
40. UAP Provincial Insurance Limited
41. Trinity Life Assurance Company Limited
42. Royal Insurance Company of E.A. Limited