OPERATIONS DECISION MAKING EFFICIENCY IN INSURANCE COMPANIES IN KENYA

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DECLARATION

This Research Project Report is my original work and has not been submitted for the award of a Degree in any University.

Signed……. Date……

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D61/72524/2014

APPROVAL

This Research Project Report has been submitted for examination with my approval as the supervisor.

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I thank the Almighty God for granting me the Grace to go through my MBA course that culminated in me submitting this Project Report.

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DEDICATION

This Research Project Report is dedicated to my dear wife, Sylvia Mukami Waititu and my children Sharon, Malcolm, Patience and Grace.

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ABBREVIATIONS AND ACRONYMS

AKI	Association of Kenya Insurers
GDP	Gross Domestic Product
IRA	Insurance Regulatory Authority
RBV	Resource-based View theory
ROE	Relative Operational Efficiency

ABSTRACT

This study aimed to establish the operations decision making efficiency in insurance companies in Kenya. Specifically, the study aimed at establishing the key factors that influence insurers in making operational decisions, the business decision models used by insurers in making significant operational decisions and determining the efficiency of operations decision making in the Kenyan insurance industry. The study was guided by resource-based view theory, behavioral decision theory and industry organization theory. The research was conducted using a descriptive study. For the purpose of this study, the researcher used primary data. Data was collected through an experience survey using a questionnaire. The respondents were the operational managers in each of the 52 direct insurance companies in Kenya. The study established that there are significant factors that influence insurers in making operational decisions. These factors include leadership style adopted by top organizational leaders, desire for operational efficiency, cost of running the organizational structure, necessity of third party reports in decision making, customer focus in decision making, appreciation of ideas and abilities of management and support staff, delegation of power and responsibility to management and support staff, frequent changes in organizational design and amount of money involved etc. The study recommends that in order to ensure efficiency of operations decision making in the Kenyan insurance industry, there should be deliberate efforts to be put in place to enhance the skills of the companies' leadership. This focus brings about a shift in time allocations among insurance companies to identified priorities and indeed changes in traditional plans and programs. To deal with this alteration in operating environment, new models need to be considered.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Organizations' operations decision making is the core responsibility of top echelons of those organizations. Operations decision making provide a framework within which organizational activities are executed (Lucia & Karina, 2015). The decisions have a wide impact on the performance of the organization because they impact on organization strategic plan and its competitiveness (Dutton, 2014). Top management, in making operations decisions, consider environmental factors contextual to the business to elicit the opportunities and threats. Internal factors are also considered in operations decision making to determine organizational capabilities. The Insurance sector has applied operations decisions making in defining corporate business diversification strategies, technology adoption, geographic expansion or branch network expansion and industrial positioning.

Resource-based view theory, Industry organization theory and Behavioral theory were applied in this study. The resource-based view theory explains the competitive advantages internal to the firm while the Industry Organization theory explains the influence of competitive forces on the industry and how profitability is determined by them. Behavioral theory holds the view that top managers are subjective when making decisions. There is therefore an assumption of fostering for interests, politics, and house trading (Robinson & Peerce, 2013) with Behavioral theory. The theories serve to give deep insight to operations decision making.

Organizations' long-term success is determined by the operation strategies conceptualized. Operations strategy development aims at looking at better and innovative methods of providing superior value to the customers. Value may have several interpretations. Managers should align the operations strategies with all the other strategies in the organization. Globalization, coupled with the fast changing technology has fashioned a hyper-competitive business environment that require company heads to continuously seek the latest and ground-breaking ways to beat the competition. To effectively execute these strategies, managers have to undoubtedly appreciate the core competencies of their organizations and distribute the company's resources so as to continuously improve and maintain these competencies. Prosperous companies nowadays are those that build up strategies that bundle up goods and services in one offering or combine benefits. Johnson, Auh and Bolton (2004) state that this bundle tend to meet and solve consumer problems instead of the company just promoting its goods.

The Kenya Insurance Regulatory Authority (IRA) publishes Claims settlement statistics on a quarterly basis, IRA (2018). These statistics communicate the percentage to which each of the insurance companies in Kenya has been able to settle claims held by the company during the quarter. This Research Project was aimed at extending the knowledge available in the areas of operational decision making processes, decision making models as well as decision making efficiency levels among insurance companies in Kenya.

1.1.1 Operations decision making

Operations decision making are key roles of the directors, top managers and middle level managers who provide strategic direction to an organization. Operations decisions have previously been described as those that are concerned with strategic issues of the organization (Dutton, 2014). Strategic issues and operations decisions have characteristics of being; broad, impact on the whole organization, are ambiguous in nature, complex, long-term, future oriented and involve a lot of capital outlay (Kucukvar, Noori, Egilmez, & Tatari, 2014). Factors affecting operations decision making are contextualization to; the decision being made, internal factors within the organization, external environmental factors and management characteristics. Decision contextualized ideas include decision familiarity, decision magnitude, decision risk and decisions complexity.

According to Ford and Richardson (2013), a decision making process involves selection of an alternative from amongst others. It then follows that from an organization perspective, a choice will be taken that will facilitate the achievement of the organization goals and objectives. Operations decisions are the day to day, routine decisions that are made to ultimately support the organization strategy. These decisions impact on managing processes to produce and distribute products and services. They touch on all operations of the organization. These include processes, inventory management, logistics and quality control among others. Some decision making models have been advanced by a number of researchers. This research project explored the extent of the application of

the various models suggested by Ford and Richardson (2013). These models are the rational, administrative and intuition models.

1.1.2 Operational efficiency

Operational efficiency may be looked at as the measure of the output generated by some entity vis-a-vis the efforts sacrificed to get those outputs. According to Mwangeti (2012), some of the factors that come into play in measuring operational efficiency are the technological advancement, procurement practices, skills and experience of workers as well as supply chain management in the company or industry under study.

Operational efficiency may also be described as the capability of a firm to reduce the potential effects of adverse events. This is in addition to up scaling capabilities of resources in the firms in order to deliver quality products and services to customers (Kalluru & Bhat, 2015). In the corporate world, the term "efficiency" is commonly used as a product of factors specific to a firm. These factors may include innovation, management skills, cost control and market share as determinants of a firm's stability and performance. Whereas productivity of a firm is measured by evaluating the performance of the labor variable, efficiency is more extensive and it defines the joint performance of all variables in production. In the context of banking for example, while productivity is often used as an evaluation of employees outputs, efficiency is often used as an indicator of the combined variables such as staff performance, capital and management (De Young & Hunter, 2015).

According to Kalluru & Bhat (2015), the operational efficiency of a firm is based on certain factors like skilled and competent personnel, effective adoption and implementation of technology, well-defined procurement policies among many other factors. An understanding and analysis of banks' non-interest costs relative to the non-interest income, for example, is necessary in order to effectively evaluate the operational efficiency (Daniel, Longbrake & Murphy, 2014).

According to Wanjiku (2015), the age of a firm may have an impact on the firm's efficiency depending on the management tactics employed. While an older firm may suffer from inertia, the ability to selectively consider and implement well thought out processes may lead to sustainable efficiency. The researcher also made an observation that ownership structure is a key factor that impacts on corporate governance in firms.

Efficiency scores can be used to formulate operational strategies to enable a firm to meet its business objectives by enhancing allocation of available resources in a way that maximizes outputs of the firm. According to Berger (2016), statistical based "efficient cost frontier" tactics may result in a more accurate measurement of efficiency. Firms that operate efficiently might have expectations of increased productivity and hence generate good profits.

1.1.3 Insurance industry in Kenya

Insurance entails creation of a pool of funds from policyholders. This pooling is aimed at indemnifying the policyholders from the unforeseen risks. It works on the principal that the losses of the few are paid by many. Its main intention is to mitigate the policyholder against financial loss that might arise due to unforeseen risks. Life insurance is also a way

of creating an immediate estate for one's dependents. Insurance companies are financial institutions that function in the economy as part of the financial service industry (IRA, 2018). The financial services industry is made up of insurers, building societies, insurance brokers, pension funds, fund management companies, stock brokers, real estate companies, savings and credit societies etc. The industry contributed approximately 11% of the Gross Domestic Product (GDP) in 2016. Insurance on its own contributed 3% of the GDP in 2016 (IRA, 2016).

The Insurance Act, Chapter 487 section 23 subsection 4 provides that every insurance company incorporated in Kenya should have at least a third of ownership being held by citizens of the East African Community partner states. According to Wachira (2013), up to 95% of the insurance companies in Kenya are locally owned and they have been in the industry for more than 10 years.

AKI statistics (2016) indicate that the Kenyan insurance industry has 52 direct insurance companies. 26 of the companies solely deal with short term insurance, 15 deal with long term insurance only and 11 are composite insurance companies dealing with both short term and long term insurance. The same statistics indicate that although the overall Kenya's insurance penetration to GDP is 2.75%, the world average insurance penetration is 6%. In 2016, the Kenyan insurance industry grew at a higher rate (13.4%) as compared to the comparative country's economic growth of 5.8%. These statistics indicate how enormous the growth potential for insurance industry in Kenya is.

While the short term insurance business had a contribution of 62% of the Gross written premiums in 2016, the long term business contributed 38%. The 3 largest long term insurance companies control up to 50% of the Gross written premiums in that line of business. In addition, 7 of the largest short term insurance companies control up to 50% of the Gross written premiums in that line of business. About 46% of the Kshs195 billion insurance premiums in 2016 were procured through agents, 38% was procured through brokers and 16% was brought in by direct customers.

The Insurance Regulatory Authority (IRA) licenses and supervises the Insurance companies in Kenya. Other Insurance players regulated by IRA include the insurance brokers, insurance agents, loss adjustors, loss assessors, risk managers, claims settling agents, investigators and risk surveyors. IRA has been pushing the industry players to develop and implement the 'Treat Customer Fairly' policies. This requirement came into force in 2014. The main points of interest in ensuring customers are treated fairly are during pricing, underwriting and claims processing. According to IRA guidelines on Treating Customer Fairly, there are 6 areas that management behavior can influence a firm's culture of customer treatment, IRA (2013). These are leadership; strategy; decision making; performance; reward; and governance and controls.

Section 203 of the Insurance Act, CAP 487 require that where the claimant has submitted all the relevant claim documents, the insurer should admit liability or deny liability; determine the amount due; establish the identity of the claimant; and pay the claim. In 2016, the Insurance Regulatory Authority received 1,080 complaints against registered insurance companies. This was a big jump from the 620 complaints that had been reported in 2015 (IRA, 2016). Most of the complaints were to do with delayed settlement

of claims, underpayment of claims, declined claims and misselling of insurance products. Out of the 1,080 complaints lodged, 60% were against General insurance companies while 40% were against Life insurance companies. In the same year, 70% of the complaints were resolved.

Wachira (2013) identifies the key success factors for Kenyan insurance companies as efficient claims processing, quality and convenient customer service, aggressive sales force and superior brand image. Innovation also drives the insurance industry in Kenya. Maina (2016), on her interrogation of the impact of strategies that are geared towards innovation on performance of insurance firms in Kenya concluded that there is a strong relationship between insurance innovation strategies and the performance of insurance companies in Kenya.

1.2 Research Problem

One of the most significant challenges in a typical insurance company is that of acquisition and retention of customers (Ngelese, 2016). Ordinarily, in business it is cheaper to retain a customer than it is to acquire a new one. The extent to which an insurance client develops loyalty with an underwriter is dependent to a large extent on the experience he or she gets when the service is required most. This may be during the initial underwriting and pricing stages all the way to the time when a loss arises.

The desire to get high Gross written premiums (and hence market share) has brought about ruthless competition in the insurance industry in Kenya. The fact that products in the market are highly generic makes competition fiercer. The insurance customers often target to insure with companies that charge the lowest premiums for their products (IRA,

2015). A typical insurance company seeks to determine whether the potential client is within the risk appetite that is defined as per the company policy and that the cover requested is among the bouquet of products offered by the company. One of the core functions of an insurer is to compensate the insured at the time of loss. A loss instance is always a period of discomfort to the affected person. It therefore follows that decisions made by the insurer at the time of a claim are time sensitive decisions. Such decisions are to do with admission or rejection of claims, loss assessment and adjustments as well as claim settlements.

Several studies have been done on the insurance industry in Kenya. One study has touched on the Claims management. Kiana (2010) studied the challenges affecting the Claims departments of General Insurance companies in Kenya. She identified some challenges affecting claims departments. These challenges are to do with weak underwriting standards, fraud exposures, ineffective Information Technology and claims documentation. According to Mwangeti (2012), although economics dictate that larger firms should ideally be more efficient than smaller firms due to economies of scale, the operational efficiency in the Kenyan Insurance industry is not dependent on the company size. Wei Huang (2007) also studied the efficiency of China Insurance industry and concluded that cost and profit efficiencies in insurance companies vary largely from one insurance company to the other.

The questions that this study sought to answer were: what are the factors that are taken into consideration by the Kenyan insurance companies when making core operational decisions, what decision making models do they use and what are the relative decision making efficiencies that can be deduced from the models used?

1.3 Research Objectives

The main objective of this study was to determine the operations decision making efficiencies in insurance companies in Kenya as per (iii) below. The specific objectives (i) and (ii) were aimed at supporting the main objective.

The specific objectives were;

(i) To determine the business decision models used by insurance companies in Kenya while making operational decisions

(ii) To determine the key factors that influence insurance companies in Kenya while making operational decisions

(iii) To determine the efficiency of operations decision making in the Kenyan insurance industry

1.4 Value of the Study

The study was aimed at benefitting the stakeholders in the Kenyan insurance industry by facilitating and / or improving their understanding of the various factors used in making operations decisions. From the insights generated, the leaders in these insurance companies should then be able to develop policies that will lead to improved performance in their companies.

Academicians and researchers should get valuable insights from this study with regard to operations decision making as a body of knowledge. They can seek to apply contextual findings from Kenyan insurance companies in other industries in an attempt to develop universal application. Researchers may undertake further research to interrogate the findings and develop more insights that may be relevant to operational efficiency in decision making.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section discusses the theoretical reviews relevant to the study. It also explores the significant operational decision making processes. Further, the decision making models are discussed. In addition, the researcher reviewed the available literature on operational efficiency.

2.2 Theoretical Reviews

This section reviewed the theories on effectiveness of operations decision making. The theories included Resource-based view theory, Behavioral Decision theory and Industry Organization theory.

2.2.1 Resource Based View theory

This theory is based on the resources internally available within the organization. The utilization of resources that the organization operates with is maximized within minimal costs to maximize profitability (Feurer & Chaharbaghi, 1995). The theory originates from major-founder mental principle of management which states that organization productivity is subject to the quality of available resources within the organization, (Wernerfelt, 1984). Accordingly, resources are often grouped into physical, human development and financial capital. The physical resources are the touchable assets that have monetary value. Human resources include the staff who provide services in the organization for exchange of salaries and wages. Capital resources include all financial

backup that an organization relies on and can either be long term or short term (Hitt, Bierman, Uhlenbruck & Shimizu, 2005).

The Resource Based View (RBV) theory lays emphasis on internal resources. It considers that the contribution of an organization's human resources is to promote competitive advantage through development of 'human capital' rather than just aligning human resources to the firm's strategic goals. This study highlights the rationale for organizations to invest in human and other resources that will enhance efficient operations decision making.

2.2.2 Industry Organization Theory

The industry organization theory is supported by the five forces model that give an organization a competitive edge within the market (Porters, 1985). The industry model allows the organizations to compete in the production of goods and supply of services. According to Hitt, Bierman, Uhlenbruck & Shimizu, (2005), firm's managers have the responsibility to make sound strategies that will make the organization competitive at all times. The organization line management report direct to the departmental managers who then report to the directors.

Effective use of the five forces gives the organization bargaining power with its suppliers, buyers and high level competitive strategies among the market participants. The model provides an avenue for firms to get higher returns relative to others that may not be comparatively focused. The five forces are implemented within the market and the competitor's environment (Hitt, Bierman, Uhlenbruck & Shimizu, 2005).

This theory is relevant to this study because an insurance company's decision making model may have several assumptions about the external market environment and this may also bring about a lot of pressures and constraints. Organizations within the same market niche are exposed to similar external environment in developing and implementing the strategic and operational decisions.

2.2.3 Behavioral Decision Theory

This theory was advanced by Nutt (1976). It is based on the decision making procedures within an organization in which formation of strategic committees in strategic departments give the organization a competitive advantage. This model gives a full presentation of the vision and objectives of the organization.

The theory can be used by public relation departments to market the organization through company values and win the beliefs of the potential investors. Cultural values that do not promote the company's vision and goals are discouraged by the theory (Wildavsky, 1966). The theory encourages organizations to give customers options in choosing services in which they will make final decision based on those options (Nutt, 1976).

This theory is relevant to this study since it will assist top management in utilizing cognitive divergence, cognitive risk and consensus in strategic decision making processes.

2.3 Operational decision making processes

Decision making as a process brings together the people, processes and data to consider a problem at hand, assess various alternative solutions and settle on the optimal alternative

given the circumstances. According to Makibia (1974), decision making theorists are in agreement that in decision making there are targeted goals as well as the means of achieving them. The theorists however have divergent views on how the means are manipulated. She recommends three decision making stages i.e. the research stage, the alternative selection stage and the justification stage. The research stage entails determination of two important elements i.e. the problem targeted to be solved and the goal being pursued. From there the decision maker moves to the next stage of considering the various alternatives or strategies that will help achieve the desired goals. Finally, the third and final stage involves the justification by the decision maker of the course of action that is taken.

According to Rono (2010), decision making processes as currently practiced by corporates are no longer a matter of intuition. Many firms are now using advanced decision making tools that involve automating the actual decision making steps that a person would use in order to make a reasonable decision. Further, firms are also employing decision support systems to create efficiencies and effectiveness in their decision making processes. This however may not entirely remove intuition, rationality and political considerations that are profoundly important in decision making processes.

Some of the key requirements for effective decision making processes are precision of data used, agility, consistency, speed and cost effectiveness of the process. These are discussed below;

Precise data – For operational decisions to lead to the correct action, Taylor and Raden (2007) suggest that the data used should be quickly and effectively used. The right

reports should be analyzed by the right and knowledgeable persons. For example, morbidity data from a developed country may not necessarily be relevant to a developing country for pricing purposes.

Agility –Due to the changes in opportunities and threats, Taylor and Raden (2007) also suggested that operations decisions should be flexible enough otherwise they will be of little value. With agility, operations decisions remain aligned to the changes in the organization's strategy. An insurance company that sells medical insurance should be able to customize the medical covers according to the client's needs. There are some clients who may prefer accident cover only, medical outpatient cover only, medical inpatient cover only or a combination of benefits.

Consistency – Taylor and Raden (2007) also suggested that in making operational decisions, organizations should ensure that decisions are consistent across the various channels used in making decisions. In insurance these channels may include websites, physical branches, mobile devices or other intermediaries.

Speed –With the ever increasing competition, the same authors highlighted above proposed that the ability to make faster decisions is a plus for any organization. A decision maker must decide and act fast for the organization to remain competitive. An insurance company that takes too long to develop and release a product to the market might find that the solution they are seeking to provide has already been released by a competitor or worse still it has become obsolete.

Cost-effectiveness –In addition to the above, the two authors also suggested that good operational decisions must be made at an optimal cost. They should be made in the

context of avoiding other unnecessary related costs e.g. repeat work, frauds and fines. While it could be safer to have every insurance claim go through an investigation or adjustment, this may not be cost effective for small claims.

2.4 Decision making models

Decision making may borrow from rational, intuition or administrative models (Ford and Richardson, 2013). A rational model assumes that data and / or information required to make decisions is readily available. On the other hand, an intuitive decision model assumes that information or data is not readily available to facilitate making of an optimal decision. An administrative or satisficing model is applied where decision maker's rationality is constrained within a boundary and decision makers are willing to consider only a few criteria items and alternatives before making decisions. The administrative model helps organizations settle on the first 'good enough' solution.

Vroom and Jago (1988) originated the Vroom-Jago decision model. They argued that decision making requires consideration of decision quality expected, team commitment and time constraints. They summarized decision making into five processes i.e. Autocratic A1; Autocratic A2; Consultative C1; Consultative C2 and finally Group G2.

De Bono (1985) proposed the six thinking hats. These are the white, red, black, yellow, green and blue. This is a tool used for group discussions and individual thinking.

Heath and Heath (2013) introduced the WRAP decision model that focusses on four key activities. These are widening the options, reality checks on assumptions, attaining some distance and preparing to be wrong or accepting that one can be wrong in the choices made.

There are many other decision making models that have been developed by various researchers. This research project sought to ascertain the extent of the adoption of the rationality, administrative and intuition models.

2.5 Operational efficiency in Insurance companies

Operational efficiency of an insurance company is the measure of the output generated by an insurance company against the inputs or efforts sacrificed to get those outputs. According to Mwangeti (2012), several factors come into play when one is thinking about an organizational operational efficiency. These factors may be appropriateness of technological advancement, procurement practices, skills and experience of workers, supply chain management among others. He also observed that the size of an insurance company does not necessarily determine its relative operational efficiency. This observation contradicts what has been observed in the Swiss insurance industry, one of the benchmarking country in matters insurance (Biener, Eling & Wilfs, 2015). In the Swiss study, it was observed that increasing the size of operations has a positive impact on insurer efficiency. Rejda and McNamera (2008) suggested that a typical insurance company will be departmentalized in some core departments. These departments may include Rate making, Underwriting, Production, Claims settlement, Reinsurance, Investments etc.

Operational efficiency may also be referred to as the capability of the entity to deliver services and products cost effectively without compromising on the quality. Efficiency is also described as a ratio of outputs against inputs of a given activity (Wong & Naim, 2014). There are two important approaches that are often applied in measuring operations

efficiency. These are the relative operations efficiency and best-observed throughput. Relative Operational Efficiency (ROE) is used to calculate the relativity of an entity's efficiency against another. ROE is the ratio of throughput in comparison to the best observed throughput. For the measurement of efficiency, relative benchmarks are regularly applied especially where related comparable machines, processes, among others, can be identified easily. The estimation of ROE is done by the identification of the best-observed performance in a set of data when the same task is being performed by multiple operations. For this study the efficiency in decision making was measured as time taken to make key decisions during quotations approvals, claims settlements and reinsurance programs approvals. The time was used as a proxy for the measurement of operational efficiency.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a discussion of the research methodology that was used in the study. It focuses on the research design, data collection methods and comes to a conclusion with the data analysis and data presentation methods that were used in this study.

3.2 Research Design

The research was undertaken using a descriptive study. This type of study is appropriate where the researcher is seeking to discover or describe relationships between variables. Of specific interest was the identification and description of the relationship that exists between some predefined variables and decisions made in insurance companies in Kenya. In addition, the researcher sought to describe the decision making models in use as well as the decision making efficiencies obtaining in insurance companies in Kenya.

3.3 Population and Sampling

The population of the study was the 52 direct insurance companies in Kenya and the study targeted all of them. There were 25 general insurance companies, 16 life insurance companies and 11 composite insurance companies. The study adopted census since the population was small and all the companies were reachable.

3.4 Data Collection

Primary data was used in this study. Data was collected through an experience survey. The respondents were the operational managers in each of the 52 direct insurance companies in Kenya i.e. in General, Life and Composite insurance companies. A structured questionnaire (Appendix 2) was administered to the respondents. Section 1 of the questionnaire collected demographic or personal data from the respondents. Section 2 collected data for objectives 1 and 2 i.e. about the factors that affect decision making in an insurance company as well as the model(s) used in decision making. While all the responses for Section 2, question 3(c') were used for objective 2, only responses for 3(c)(10) through to 3(c)(16) were used for objective 1. The respondents ranked the extent to which various predefined factors affect decision making in their organizations. The characteristics of decision making models frequently used were incorporated among the factors for ranking. Section 3 collected data for objective 3 i.e. on operational efficiency of decision making in insurance companies. Data on objective 3 was on amount of time it takes to make some significant operational decisions. The questionnaires were delivered to the potential respondents. They were then picked from them after they were completed. In the meantime, and in order to enhance response rate, follow up over the phone was done.

3.5 Data Analysis and Reporting

The data collected for the three objectives was analyzed as follows;

(a) Objective 1 – Business decision making models used by Kenyan insurance companies in making significant operational decisions.

The quantitative data on operational decision making models was aggregated and tabulated. Frequencies of responses pertaining to the predefined characteristics for each of the 3 different models were calculated. They were then used to identify the predominant model that best fits the company under study.

(b) Objective 2– Factors influencing Kenyan insurance companies in making operational decisions.

The quantitative data was tabulated, coded and processed. It was then analyzed using factor analysis. This resulted in an evaluated list of the significant factors that were derived from the initial list of 40 factors that the researcher considered during the research.

(c) Objective 3 – Efficiency of operations decision making in the Kenyan insurance industry

The quantitative data on operational efficiency was analyzed using percentages. Data obtained was clustered into four groups each indicating duration taken to make significant operational decisions. The percentage of respondents who selected each of the clusters was calculated. This helped determine the percentages of operational managers in the insurance companies in Kenya who use the specified duration when making each of the significant operational decision under consideration.

The results of the analysis were reported using graphs and tables.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter provides the analysis and findings of the study. The data was collected from the operational managers in each of the 52 direct insurance companies in Kenya.

4.2 Response Rate

The population was made up of operational managers in each of the 52 direct insurance companies in Kenya. Out of the 52 target companies, 41 operational managers responded to the questionnaires. This led to a response rate of 78.8%. According to Mugenda and Mugenda (1999), a response rate of 50% is sufficient for analysis and reporting. This is consistent with the conclusion made by Kothari (2004) that a survey response rate of 50% is sufficient, while a response rate greater than 70% is very good. This means that the response rate for this study was adequate and therefore sufficient for data analysis and interpretation.

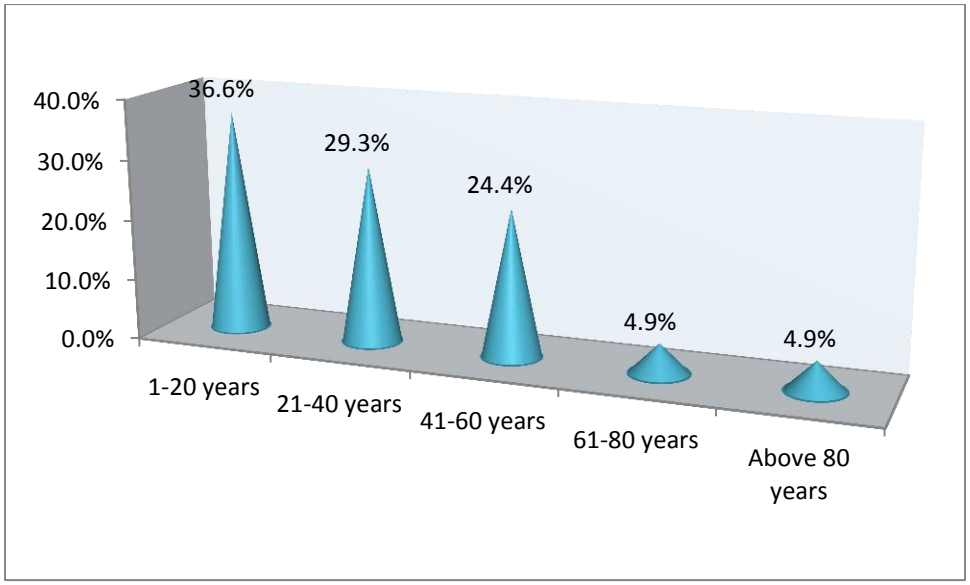
4.3 Demographic Information

This section discusses the demographic characteristics of the respondents in the study. These include distribution of respondents by the age of their companies, number of employees, company ownership and the respondents' length of service in their current position. Background information is essential so as to check out the extent of suitability of the respondents in answering the questions.

4.3.1 Age of the firm

The study sought to establish the ages of the firms the respondents worked for. The study findings are as presented in Figure 4.1 below;

Figure 4.1: Age of the firm

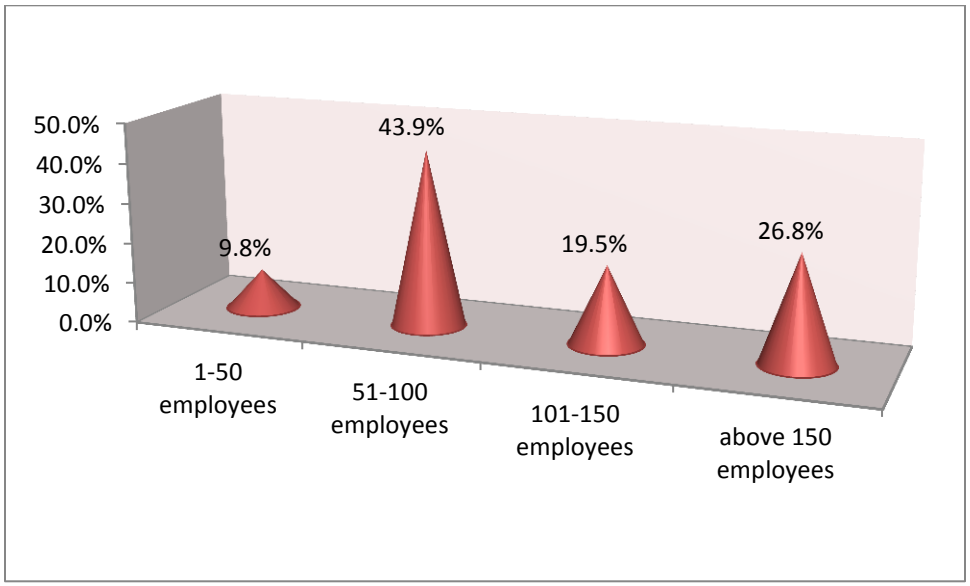


The above graph shows that there is a wide range of firms' ages for the insurance companies in Kenya. While about a third of the insurance companies in Kenya are up to 20 years old, two thirds of them are above 20 years. The age of a firm is a contributing factor to the efficiency levels of a firm depending on the management tactics employed (Wanjiku, 2015). The observation is also in agreement with the conclusions by Wachira (2013) who concluded that more than 50% of the insurance companies in Kenya are more than 10 years old. This shows that the insurance industry in Kenya is past the introduction stage in its life cycle.

4.3.2 Number of employees

The study sought to establish the number of employees working in the respondents' employing companies. The study findings are as presented in Figure 4.2 below;

Figure 4.2: Number of employees

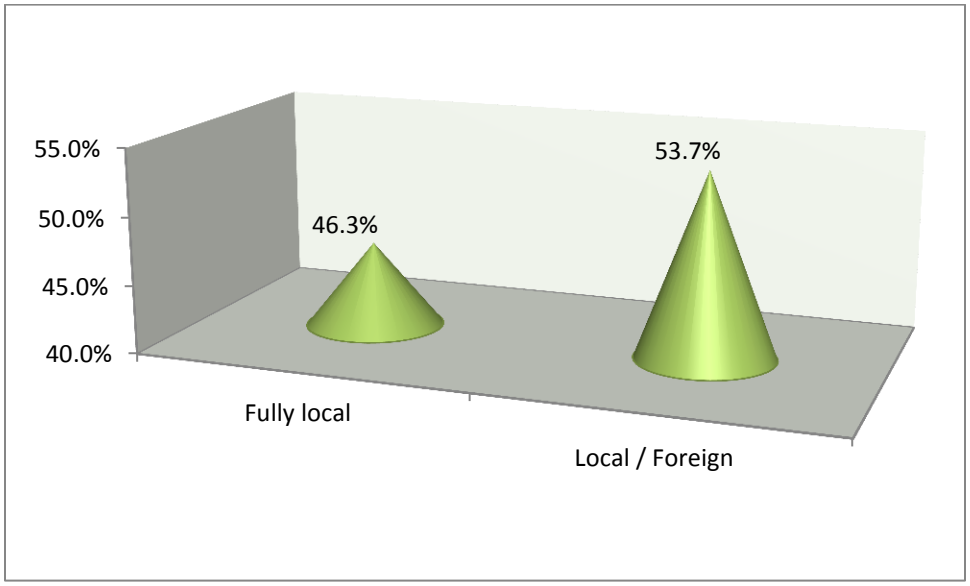


Majority of the companies (90.2%) have more than 51 employees. This is in line with the concept of departmentalization of insurance companies as advanced by Rejda and McNamara (2008). The two authors suggested that an insurance company may be departmentalized into Risk Rating, Underwriting, Production, Claims settlement, Reinsurance, Investments etc. All these departments require staff.

4.3.3 Company Ownership

In this section, the researcher sought to establish the Company Ownership of the companies that employed the respondents. The responses are shown in Figure 4.3.

Figure 4.3: Company Ownership



The results show that 53.7% of the companies were local / foreign owned while 46.3% were fully locally owned. The observation shows a big change from the position that was there in 2013 where Wachira (2013) concluded that 95% of the insurance companies were locally owned. This is due to the fact that Kenyan insurance companies have recently been attracting a lot of foreign investors e.g. Heritage, UAP among others. According to Ndura, (2015), many insurance firms in Kenya have turned to mergers and acquisitions as a key strategy towards growth and profitability. Several reasons have been advanced as to why the insurance industry is experiencing mergers and acquisitions. These reasons include; desire and push to meet the increased levels of capital requirements, desire to tap on new and unique distribution networks and market share and desire to benefit from best global practices.

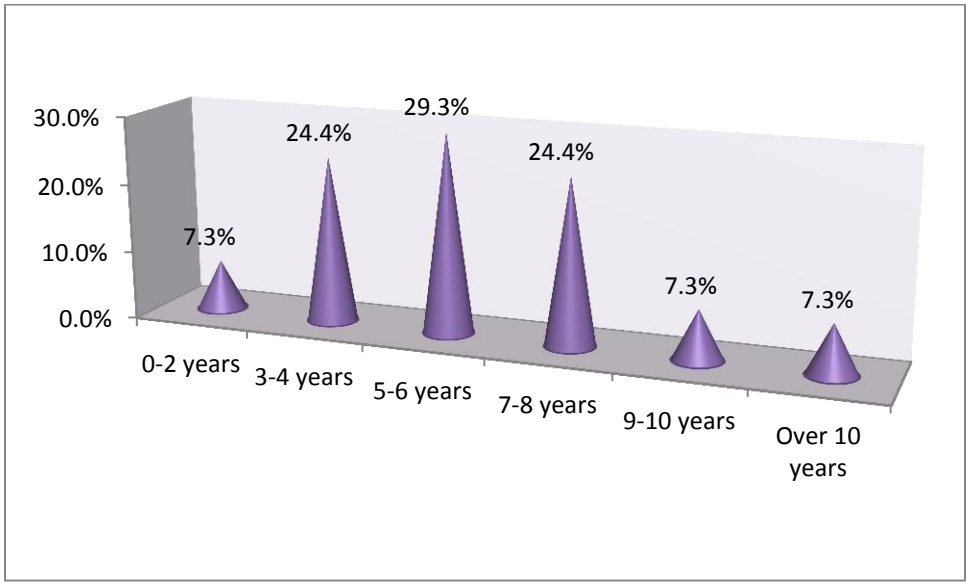
The firms' ownership phenomenon may present a good topic of study in future research projects so as to understand the causes and implications of the shift. This is however in

line with the allowance given by the Kenya Insurance Act where for an insurance company to be registered in Kenya, the ownership is set at a minimum of a third being owned by the East African Community citizens.

4.3.4 Respondent's length of service in the current position

The study sought to establish the respondents' length of service in their current positions. The study findings are as indicated in figure 4.4 below:

Figure 4.4: Respondent's length of service in the current position



It was the interest of this study to establish the respondent's length of service in their current positions. Most of the respondents (29.3%) had served in their current position for a period of between 5 and 6 years. Indeed 72.7% had served for more than 2 years. This revelation is important as it communicates that the respondents were well versed with the operations in their companies and departments.

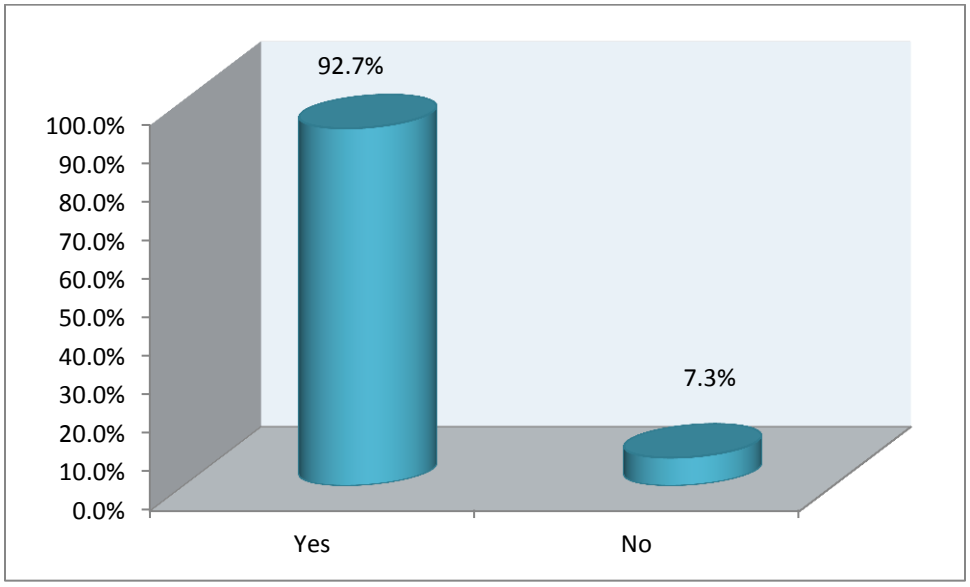
4.4 The business decision models used by insurers in making significant operational decisions

The study sought to determine the business decision making models used by insurers in making significant operational decisions. The study findings are as shown in subsequent subheadings.

4.4.1 Authority matrix in firms

Respondents were requested to indicate whether there is an authority matrix to support operations decision making in their firms. Authority Matrix refers to the summary of the authority and responsibilities ascribed to the Management, the Board and the Company's shareholders. The study findings are as indicated in the Figure 4.5below;

Figure 4.5: Authority matrix in firms



As indicated above, 92.7% of the respondents indicated that there existed an authority matrix in their firms while 7.3% of the respondents indicated there was no authority matrix in their firms. This implies that most of the direct insurance companies in Kenya have an authority matrix for operations decision making. Similar to the study findings, Rono (2010) observed that many organizations employ the use of authority matrix for decision making, a process that involves automation of actual decision steps that a participant in decision making process would take in order to make a reasonable decision. Many companies are now using authority matrix decision support systems to create efficiencies and effectiveness of their decision making processes. The authority matrix decision support systems are used as tools for empowerment as well as role clarification. A documented authority matrix is a significant supplement, if not a replacement, of the traditional organizational charts and job descriptions. One key advantage arising from its use is that it focuses on decision-making stages rather than static activities.

4.4.2 Approvers of operational decisions in insurance firms

Respondents were asked to indicate various officers who are involved in approving the relevant operations decisions. The responses were ranked on a 7 likert scale where 1 means a level lower than a Manager level, 2 means Manager, 3 means Head of department, 4 means Managing Director, 5 means a management committee, 6 means a Director, while 7 means Others. Table 4.1 presents the study findings;

Table 4.1: Main approvers of relevant operational decisions

	Main approver	Mean	Std. Deviation
Quotation approvals	HOD	2.7073	1.64687
Product price approvals	HOD	3.5854	1.28405
Approval of normal claims payments	HOD	3.3171	1.45669
Approval of ex-gratia claims payments	MD	4.2439	.91598
Approval of Reinsurance program	MD	4.5854	.94804

It was the aim of the study to establish the members of staff who are involved in approving the relevant operations decisions. The above table communicates that Managing Directors and Heads of departments are the ones who are mostly involved in approving non-routine decisions of reinsurance programs and ex-gratia claims payments in insurance companies in Kenya. Hambrick and Mason (1984) argue that the strategic choices that are made by top management are outcomes of their cognitive and behavioral characteristics. They opine that the values and cognitive orientations of senior managers influence the perceptual processes behind strategic decision making by limiting and filtering available information. This reflects an application of traditional way of decision making.

4.4.3 Business Decision making Models

One of the objectives of this study was to determine the business decision models used by insurers in making significant operational decisions. In this regard, the respondents were asked to indicate the characteristic factors used by insurers in making various decisions. The mean and standard deviation were used to analyze the table. Table 4.2 indicates the study findings.

Table 4.2: Business Decision making Models Used by Insurers

	Mean	Std. Deviation	Decision Making Models
Decisions are made strictly using pre-defined logical steps that maximizes value to the business	4.3171	0.60988	Rational
Decisions are subjectively made as per the managers preferences	3.9024	0.91665	Intuition
Decisions are made based on some few information elements considered as most crucial and / or relevant	4.1463	0.90997	Administrative
There are no rules applied in decision making	4.0000	0.67082	Intuition
There is a necessity of third party reports to enhance decision making processes internally e.g. assessors reports	4.1951	0.90054	Administrative
Strict compliance with documented authority matrix	4.0488	0.8352	Administrative
There is strict compliance to regulatory requirements	4.4878	0.71141	Administrative

The above table indicate that in most of the direct insurance companies in Kenya there is desire to strictly comply with regulatory requirements. The table also shows that decisions are made strictly using pre-defined logical steps that maximizes value to the business. In addition there is necessity of third party reports to enhance decision making processes internally e.g. assessors reports and that decisions are made based on some few information elements considered as most crucial and / or relevant. It is also worth noting that the factor analysis as depicted in Table 4.3 confirmed that all the characteristic factors used in assessing the decision making models were found to be important as they had an extraction value of more than 0.700.

The observations also revealed that most of the direct insurance companies in Kenya use rational decision making model as indicated by a mean of 4.3171, followed by the administrative decision making model with a mean of 4.2195 and the least used model is

intuition model with a mean of 3.9512. In tandem with the study findings, Ford and Richardson, (2013) noted that decision making may borrow from rational, intuition or administrative decision making models. A rational model assumes that data and / or information required to make decisions is readily available. On the other hand, an intuitive decision model assumes that information or data is not readily available to facilitate the making of an optimal decision. An administrative or satisficing model is applied where decision maker's rationality is restricted. The decision makers who use satisficing model are willing to consider only a limited number of criteria and alternatives before making decisions. As such a satisficing model settles for the first 'good enough' solution.

From the table above, it is apparent that rational decision making model is more preferred than the other models of decision making. According to Russ, McNeilly and Comer (1996) this model is logical, deliberate and analytical. Rational decision makers assess the long-term effects of their decisions and they also apply a strong fact-based task orientation while making decisions.

4.5 Key factors that influence insurers in making operational decisions

One of the study objectives was to find out the key factors that influence insurers in making operational decisions. In order to measure this objective, the researcher used factor analysis to reduce the dimensions being considered. This was important because the researcher was able to identify the factors that were significant in making operational decisions.

Table 4.3: Communalities

	Initial	Extraction
Amount of money involved	1.000	.892
In-house support of technical assessment capabilities	1.000	.888
Court judgments	1.000	.848
Senior Executive's influence	1.000	.850
Level of expertise of the decision maker	1.000	.722
Extent of automation of decision support system	1.000	.853
Month of the year decision is being made	1.000	.770
Directors and shareholder's interventions / influence	1.000	.739
External / Third party service providers performance in terms of integrity, accuracy and timeliness	1.000	.667
Decisions are made strictly using pre-defined logical steps that maximizes value to the business	1.000	.740
Decisions subjectively made as per the managers preferences	1.000	.743
Decisions made based on some few information elements considered as most crucial and / or relevant	1.000	.787
There are no rules applied in decision making	1.000	.817
Necessity of third party reports to enhance decision making processes internally e.g. assessors reports	1.000	.915
Strict compliance with documented authority matrix	1.000	.878
Strict compliance with regulatory requirements	1.000	.837
Agents integrity	1.000	.873
Desire for efficiency of operations	1.000	.917
Appreciation of ideas and abilities of management and support staff	1.000	.909
Consultations in decision making	1.000	.869
Delegation power of responsibility to management and support staff	1.000	.907
Cost of running the multilayered organizational structure	1.000	.916
Process focus in decision making	1.000	.857
Customer focus in decision making	1.000	.915
Adequacy of definitions of tasks and responsibilities	1.000	.865

Frequent changes in organizational design	1.000	.903
Obstacles and difficulties not acknowledged, recognized or acted upon	1.000	.804
Ignoring the day-to-day business imperatives	1.000	.804
Age of the decision maker	1.000	.820
The dominant norms, beliefs and	1.000	.880
Conscious and unconscious symbolic acts depicted by leaders	1.000	.835
Top management backing / support	1.000	.865
Existence and implementation of a performance management practice or system	1.000	.852
Communication media e.g. emails, telephone, physical letters	1.000	.869
Source of decision request e.g. corporate, retail, government, staff, manager etc	1.000	.865
Time of the day decision request is received in the business e.g. morning, afternoon, evening	1.000	.856
Level at which decision is made e.g. supervisor, manager, Chief executive etc	1.000	.821
Amount of kickbacks involved	1.000	.786
Simplicity or complexity of the organizational structures	1.000	.879
Leadership style of the top leaders e.g. autocratic, democratic, transformational etc	1.000	.936

Extraction Method: Principal Component Analysis.

The study sought to establish the key factors that influence insurers in making operational decisions. It was revealed that all the factors had an extraction greater than 0.700 proportion of variance and hence have an impact on the operations decisions made in insurance companies in Kenya. These factors range from the one with the highest extraction i.e. leadership style of the top leadership with 0.936, to the one with the least extraction i.e. level of expertise of the decision maker that had an extraction of 0.722.

Table 4.4: Contribution of extracted variables

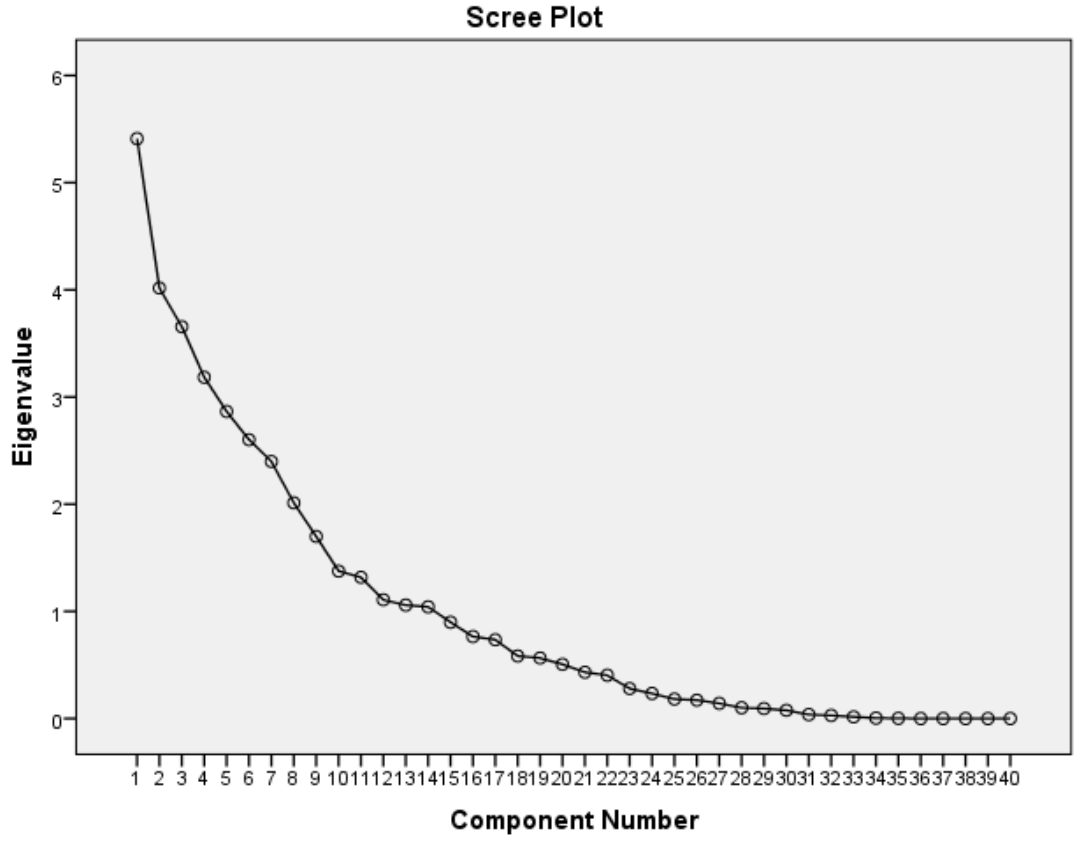
Component	Initial Eigen-values			Extraction Sums of Squared Loadings		
	Total	% Variance	ofCumulative %	Total	% Variance	ofCumulative %
1	5.411	13.527	13.527	5.411	13.527	13.527
2	4.017	10.042	23.568	4.017	10.042	23.568
3	3.656	9.140	32.708	3.656	9.140	32.708
4	3.185	7.961	40.670	3.185	7.961	40.670
5	2.865	7.164	47.834	2.865	7.164	47.834
6	2.602	6.505	54.339	2.602	6.505	54.339
7	2.398	5.996	60.335	2.398	5.996	60.335
8	2.013	5.032	65.367	2.013	5.032	65.367
9	1.699	4.247	69.613	1.699	4.247	69.613
10	1.376	3.439	73.052	1.376	3.439	73.052
11	1.317	3.293	76.346	1.317	3.293	76.346
12	1.108	2.770	79.116	1.108	2.770	79.116
13	1.058	2.645	81.761	1.058	2.645	81.761
14	1.042	2.605	84.366	1.042	2.605	84.366
15	.898	2.246	86.612			
16	.765	1.912	88.524			
17	.735	1.837	90.361			
18	.584	1.460	91.821			
19	.565	1.412	93.233			
20	.506	1.264	94.497			
21	.432	1.080	95.577			
22	.404	1.010	96.586			
23	.280	.699	97.285			
24	.233	.584	97.869			
25	.181	.453	98.322			
26	.172	.429	98.751			
27	.141	.354	99.104			
28	.101	.251	99.356			
29	.093	.233	99.589			
30	.077	.192	99.780			
31	.037	.092	99.873			
32	.029	.073	99.945			
33	.016	.039	99.984			
34	.004	.010	99.995			
35	.002	.005	100.000			
36	2.978E-016	7.445E-016	100.000			
37	1.811E-016	4.527E-016	100.000			
38	2.842E-017	7.105E-017	100.000			
39	-1.757E-016	-4.392E-016	100.000			
40	-6.089E-016	-1.522E-015	100.000			

Extraction Method: Principal Component Analysis.

Table 4.4 shows the importance of each of the components. The components with an Eigen value of over 1.00 are the first 14 components and together they explain 84.366% of the total variability of the data. The 14 components are probably adequate for making significant operational decisions in the Kenyan insurance industry. The components are the factors with the highest extraction value which include: top leadership style e.g. autocratic, democratic, transformational etc, desire for efficiency of operations, cost of running the multilayered organizational structure, necessity of third party reports to enhance decision making processes internally e.g. assessors reports, customer focus in decision making, appreciation of ideas and abilities of management and support staff, delegation power of and responsibility to management and support staff, frequent changes in organizational design, amount of money involved, in-house support of technical assessment capabilities, the dominant values and beliefs, the norms, simplicity or complexity of the organizational structures, strict compliance with documented authority matrix, and agents integrity.

In consistent with the study findings, Grunig, Grunig, and Dozier (2002) opined that organizations' excellence is influenced by the extent of the application of the participative culture, ability to be innovative and organic, and having leaders who inspire and not dictators. They suggested that when leaders are formulating and implementing strategic plans, they should establish a socially responsible environment, place emphasis on quality in all processes and establish a work environment that is collaborative in nature.

Figure 4.6: Scree plot



The scree plot shows that the fourteen components had an Eigen value greater than 1.00. These factors are specific to the insurance industry in Kenya.

4.6 Efficiency of Operations Decision Making in the Kenyan Insurance Industry

As indicated at section 1.1.2, Operational efficiency is the measure of the output generated by some entity vis-a-vis the efforts sacrificed to get those outputs. In order to determine the efficiency of operations decision making in the Kenyan insurance industry, respondents were asked questions with regard to the time taken in making significant operational decisions. The study findings are as provided in the subsequent subheadings.

4.6.1 Quotations Approval

Respondents were requested to indicate the time taken in making quotations approval decisions. Responses are as shown in Table 4.5 below;

Table 4.5: Quotations Approval

	One day	**One day to One week**	**8 days to One Month**	**Over one month**
Approve quotation of below Kshs 1m premiums	51.2%	46.3%	2.4%	-%
Approve quotation of between Kshs 1m to Kshs 10m premiums	4.9%	53.7%	36.6%	4.9%
Approve quotation of between Kshs10m and Kshs 100m premiums	-	22.0%	58.5%	19.5%
Approve quotation of more than Kshs 100m	-	2.4%	56.1%	41.5%

From the table above, it is evident that the higher the value of the quotation the higher the likelihood that the quotation will take longer to approve. It is also clearly evident that quotations above Kshs 10m of value often take more than a week to approve. This may be reflective of the fact that 92.7% of the respondents also confirmed that there exists an authority matrix in their organizations (Figure 4.5) which may then mean there are several approval levels that higher values of quotations will have to go through before the ultimate approver gives the final verdict. This observation was anticipated since generally quotations of higher values ordinarily would expose the firm to higher performance and reputation risks as compared to lower value quotations.

4.6.2 Claims settlement Approval

Respondents were requested to indicate the time taken in making claims settlement approval decisions. Responses are as shown in Table 4.6.

Table 4.6: Claims settlement Approval

	One day	**One day to One week**	**8 days to One Month**	**Over one month**
Approve settlement below Kshs 1m of a normal claims invoice	26.8%	63.4%	4.9%	4.9%
Approve settlement of Kshs 1m to Kshs 10m of a normal claims invoice	-	43.9%	46.3%	9.8%
Approve settlement between Kshs 10m and Kshs100m of a normal claims invoice	-	17.1%	53.7%	29.3%
Approve settlement of more than Kshs 100m of a normal claim invoice	-	-	53.7%	46.3%
Approve ex-gratia claims	-	-	34.1%	65.9%

In order to establish the efficiency of approving claims payments in the Kenyan insurance industry, respondents were asked to indicate the time taken in making claims settlement approval decisions.

While 90.2% of claims of up to Kshs 1m are approved within a week, all claims above Kshs 100m and those for ex gratia were noted to take more than a week to approve. It is evident from the table that the higher the claim value the higher the likelihood that the claim will take longer to approve. Similarly, James, Lyn & Rowe (2009) observed that where liability is not in dispute, and both the insurer and the insured are in agreement on quantum, settlement follows immediately. They also observed that in situations where either quantum or liability is in dispute, the claim is delayed. In some cases, especially for

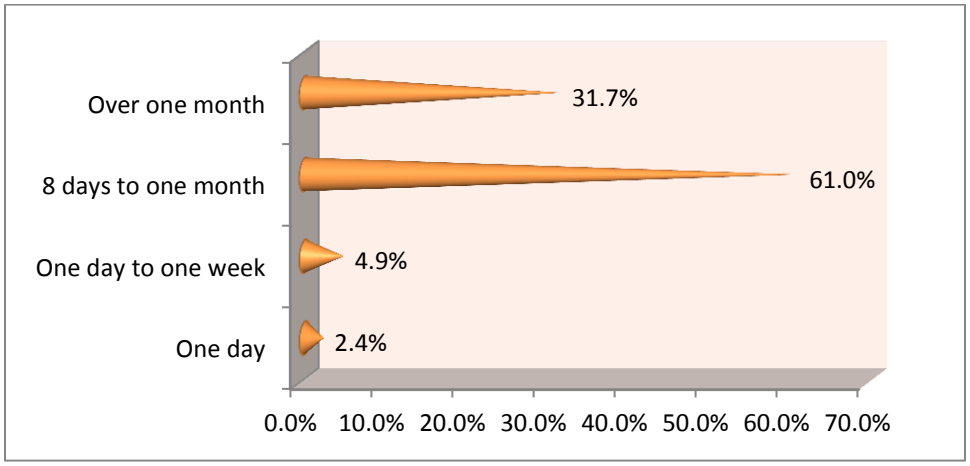
the liability claims, they are determined in court. Section 203 (1) of Insurance Act Cap 487 provides that once the insured reports a claim and provides all the required documentation, the insurer should admit liability or deny liability, determine amount payable and identity of the claimant, and pay the claim within ninety days after the claim is reported. If liability is determined by court, the insurer must settle the claim within ninety days after the court determination.

The time usage observations are in agreement with Roff (2014) who opined that most policies require that the insured should immediately notify the insurer in case of a claim. The initial notifications report may be verbal, but the insured is required to give further information by completing the claim form. For liability claims, the insured is required to forward to the insurer all the correspondences from the claimants or their advocates. It is the responsibility of the insured to prove that he or she has suffered a loss, and the loss was caused by a peril which is covered by the policy. He or she must also prove the amount of loss and such proof is done by way of providing purchase receipts, repair accounts, valuation reports etc.

4.6.3 Reinsurance program Approval

Respondents were asked to indicate the time taken for reinsurance programs approval decisions to be made. Responses are as shown in Figure 4.7 below.

Figure 4.7: Reinsurance program Approvals



In order to establish the efficiency of approval of the reinsurance programs in the Kenyan insurance industry, respondents were asked to indicate the time taken in making reinsurance programs approval decisions. It was evident that most of the decisions take between 8 days and one month. The decision on reinsurance program usually run for a year or even longer and hence would require more time for analysis than the day to day operational decisions.

4.7 Discussion of Findings

The study revealed that most of the direct insurance companies in Kenya have an authority matrix to support operations decisions making. Further, it was established that Managing Directors and Heads of departments are the ones who are involved in approving the significant operations decisions among direct insurance companies in Kenya. Similar to the study findings, Lucia and Karina (2015) were of the opinion that organizations' operations decision making is the core responsibility of top echelons of the organizations. Operations decision making provide a framework within which organizational activities are to be executed. The decisions have a wide impact on the

performance of the organization because they impact on organization strategic plan and its competitiveness, (Dutton, 2014).

It was also clearly observed that the insurance companies in Kenya prefer rational decision making models. This is especially relevant because they are regulated entities operating under the Insurance Regulatory Authority.

The study also established that the key factors that influence insurers in Kenya when making operational decisions include top leadership styles, desire for efficiency of operations, cost of running the multilayered organizational structure, necessity of third party reports to enhance decision making processes internally e.g. assessors reports, customer focus in decision making, appreciation of ideas and abilities of management and support staff, delegation power of responsibility to management and support staff, frequent changes in organizational design, amount of money involved, in-house support of technical assessment capabilities, the dominant values and beliefs, the norms, simplicity or complexity of the organizational structures, strict compliance with documented authority matrix, and agents integrity.

The top-most important factor was the leadership style employed by the top leaders. This observation was in agreement with the study findings by Grunig, Grunig, and Dozier (2002). The three authors observed that excellent organizations have strong participative cultures, are innovative and organic, and have leaders who inspire and not dictators. They also argued that leaders should use strategic planning, establish a socially responsible environment, place emphasis on quality in all processes and establish a work environment that is collaborative. When management is committed to building strong

teams, establishing systems and processes that are conducive to productivity and team-building, and empowers employees to take control of their jobs, they establish a culture that drives employees to go above and beyond the normal performance so as to make the organization successful.

In addition, the study also revealed that the lead time in making operational decisions vary according to the monetary value of the decisions being made. The higher the values considered in decision making the higher the likelihood that the approval decision will take longer. The observation with respect to involvement of the Managing Directors in approving the Reinsurance program was found to be quite outstanding. It is apparent that Managing Directors get involved in approving programs that run for longer periods as compared to daily transactions and activities.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter provides the summary of the findings from chapter four, and it also gives the conclusions and recommendations of the study based on the objectives of the study.

5.2 Summary of the Findings

The overall objective of this study was to establish the operations decision making efficiency in insurance companies in Kenya. Specifically, the study sought to determine the business decision models used by insurers in making significant operational decisions. It also sought to establish the key factors that influence insurers in making operational decisions, and to determine the efficiency of operations decision making in the Kenyan insurance industry.

The first specific objective of this study sought to determine the business decision models used by insurance firms in making significant operational decisions. In line with the objective, the study revealed that most of the direct insurance companies in Kenya have an authority matrix to support operations decisions making. The study also established that in most of the direct insurance companies in Kenya there is desire to strictly comply with regulatory requirements, decisions are made strictly using pre-defined logical steps that maximizes value to the business, there is necessity of third party reports to enhance decision making processes internally e.g. assessors reports and that decisions are made based on some few information elements considered as most crucial and / or relevant.

The second specific objective of the study sought to determine the key factors that influence insurance firms in making significant operational decisions. With regard to this objective, the study established the key factors that influence insurers in making operational decisions to include top leadership style, desire for efficiency of operations, cost of running the multilayered organizational structure, necessity of third party reports to enhance decision making processes internally e.g. assessors reports, customer focus in decision making, appreciation of ideas and abilities of management and support staff, delegation power of responsibility to management and support staff, frequent changes in organizational design, amount of money involved, in-house support of technical assessment capabilities, the dominant values and beliefs, the norms, simplicity or complexity of the organizational structures, strict compliance with documented authority matrix, and agents integrity.

Finally, it was the interest of the researcher to determine the efficiency of operations decision making among the insurance companies in Kenya. The study established that most of the direct insurance companies in Kenya approve quotations of below Kshs 1m premiums within one day while large quotations of above Kshs 100m often take more than a month to approve. However it is also apparent that relatively inefficient companies also take 8 days to one month to approve quotations of up to Kshs 1m. In addition, very high quotation values of more than Kshs 100m take over one month to approve.

Most of the normal (technically admissible) claims approvals for amounts below Kshs 1m were noted to be done between one day and one week. The more efficient companies approve normal claims below Kshs 1m at less than a week. However large normal claims

of above Kshs 100m are mostly approved between 8 days and one month but the more inefficient companies take more than one month to approve them.

The ex gratia claims are those that are not technically admissible but are only considered due to other business considerations. These claims ordinarily take more than one month to approve in most of the companies. In some instances though, few more efficient companies take 8 days to one month to have the ex gratia claims approve.

The Reinsurance programs were noted to be approved mostly between 8 days and one month. There are however few relatively more efficient companies that take less than 8 days to approve the programs. The more relatively inefficient firms were noted to take over a month to approve the programs.

The observations above could help explain why foreign investors are spotting opportunities in the insurance industry in Kenya. These investors have increased their participation in the industry to the extent that 53.7% of the insurance companies in Kenya are co-owned by the local and foreign investors as indicated at figure 4.3.

5.3 Conclusions

The study concluded that insurance companies in Kenya use various decision making models. However, the rational decision making model is preferred to the administrative model. The intuition model is the least preferred amongst the three models tested.

The study also concluded that there are multiplicity of factors that affect the speed of making operational decisions in the insurance companies in Kenya and hence the decision making efficiencies. The main factors identified are; top leadership style, desire

for efficiency of operations, cost of running the multilayered organizational structure, necessity of third party reports to enhance decision making processes internally e.g. assessors reports, customer focus in decision making, appreciation of ideas and abilities of management and support staff, delegation power of responsibility to management and support staff, frequent changes in organizational design, amount of money involved, in-house support of technical assessment capabilities, the dominant values and beliefs, the norms, simplicity or complexity of the organizational structures, strict compliance with documented authority matrix, and agents integrity.

Finally, the study concluded that the insurance companies in Kenya have varied efficiency levels. These efficiency levels were noted to be primarily a consequence of the combination of the 14 significant factors that were considered in this study. In addition, the study also concluded that routine decisions take shorter lead times while non-routine decisions take longer lead times.

5.4 Policy recommendations

The study recommends that in order to ensure efficiency of operations in decision making in the Kenyan insurance industry, top leadership skills need to be enhanced. Decisive leadership makes decision-making more effective but only if the proper inputs are considered.

The study also recommends that insurance companies in Kenya should come up with multilayered organizational structure models. This can help them have a better understanding of the structures being dynamically built and dissolved inside the organization according to varying contexts and focus of attention. It can also help them to

specify in a more coherent way their needs of support technologies at the various levels of the model.

The study also recommends that policy makers should come up with effective decision making models that will enhance participatory decision making and thus fostering the firms' efficiency and performance.

The study should also be a contribution to behavioral theory since it will assist top management in utilizing cognitive divergence, cognitive risk and consensus in strategic decision making processes.

5.5 Limitations of the study

Confidentiality of information was one of the constraints as some respondents appeared to withhold crucial information pertinent to the achievement of the study objectives. The researcher managed this constraint by explaining to the respondents that the study was only meant for education purposes. The researcher also presented the introductory letter (Appendix 1) from the University to the respondents to prove to them that the researcher did not have a negative motive for the research as it was focused on meeting an academic objective.

Another limitation arose from the fact that the researcher was an insider in the industry since he was working in one of the insurance companies in Kenya. This limitation was however overcome by ensuring that the questionnaires were discussed with some industry colleagues during the testing phase to remove bias. Care was also exercised to ensure all the data collected was correctly transferred to the analytical tool for analysis.

Time constraint was experienced as the amount of time available to collect data was limited. In order to manage this limitation, a drop and pick approach was used for the questionnaires administered. The researcher also followed up the respondents over the phone so as to fast track the data collection process.

5.6 Suggestions for further studies

Arising from the findings and the gaps in the study, a replica study is recommended using other factors that may influence the operations decision making among insurance companies in Kenya. Future studies could also focus on a comparative study among various sectors.

In addition, future studies could also apply different research instruments like interviews and engage respondents through probing and discussions. This may generate detailed information which would help improve operation decision making processes among insurance companies.

Further, research can also use case studies of individual insurance companies in an effort to determine the relationship between operations decision making efficiencies and operations performance in order to validate the findings of this study.

The study also recommends that academicians should consider undertaking a comparative study with regard to rational decision making model, administrative decision making model and intuition decision making model so as to give insights on the best decision model an organization may adopt for it to enhance its performance.

The study focused on insurance companies which are under financial sector. Therefore, this study recommends further study to be conducted on a similar topic but focusing on firms that operate on the non-financial sectors.

REFERENCES

Akanlagm, J. A. (2011).Promoting Customer satisfaction in the Insurance Industry in Ghana: A case study of selected insurance companies in the Tamale Metropolis. Ghana: Kwame Nkhrumah University of Science and Technology.

Association of Kenya Insurers. (2016). *Insurance Industry Annual Report.*

Berger, A. N. (2016). The economic effects of technological progress: Evidence from the banking industry. *Journal of Money, Credit and Banking, 35(2),* 141-76.

Bewick, K. (1989). *Principles and Practice of Insurance.* Cambridge, United Kingdom: The Burlingham Press (Cambridge) Ltd.

Biener, C., Eling M., & Wilfs J. W. (2015). *The Determinants of Efficiency and Productivity in the Swiss Insurance Industry.* Switzerland: Institute of Insurance Economics, University of St Gallen.

Daniel, D. L., Longbrake, W. A., & Murphy, N. B. (2014). The effect of technology on bank economies of scale for demand deposits. *Journal of Finance, 28(1),* 131–146.

De, B. E. (1985). *Six Thinking Hats, Little, Brown and Company*. New York, United States of America: Little Brown and Company.

De, Y. R., & Hunter, W. (2015). Deregulation, the internet and the competitive viability of large banks and community banks (*Working paper No. 2001– 11), Federal Reserve Bank of Chicago.*

Debreu, G. (1951). The coefficient of resource utilization. Ohio, United States of America: The Econometrics Society.

Dutton, J. (2014). The Influence of Strategic planning process on strategic change. *Strategic Management Journal,* Vol. 8 No.2, 103-116.

Farrell, M. (1957). The Measurement of Productive Efficiency. *Journal of the Royal Statistical Society.* United States of America: Science and Education Publishing.

Feurer, R., & Chaharbaghi, K. (1995). Strategy development: past, present and future. *Management decision*, *33*(6), 11-21.

Ford, R. C., & Richardson, W. D. (2013). Ethical decision making: A review of the empirical literature. *Journal of Business Ethics*, (pp. 19-44). Springer, Dordrecht.

Grunig, L. A., Grunig, J. E., & Dozier, D. M. (2002). Excellent Public Relationships and Effective Organizations: *A study of Commission Management in Three Countries.* United Kingdom: Taylor and Francis.

Hambrick, D. C., & Mason, P.A. (1984). *The Academy of Management Review*. Academy of Management.

Heath, C., & Heath, D. (2013). Decisive: How to Make Better Choices in Life and Work. New York, United States of America: Crown Business Press.

Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. (2005). The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly. *Academy of Management Journal*, *49*(6), 1137-1157.

Insurance Act (2012) (Kenya).

Insurance Regulatory Authority. (2013). *The Consumer Protection in the Insurance Sector*, Nairobi.

Insurance Regulatory Authority. (2018). *Claims Settlement Statistics for Quarter 2 2018,* Nairobi.

Insurance Regulatory Authority. (2016). *Annual Insurance Industry Report,* Nairobi.

James, S., Lyn, B., & Rowe, P. (2009). Claims Practice. Great Britain: The Chartered Institute.

James, T., & Neil, R. (2007); Smart (Enough) Systems (June 2007 Edition). United States of America: Prentice Hall.

Johnson, M. D., Auh, S., & Bolton, R. N. (2004). Compatibility effects in evaluations of satisfaction and loyalty. *Journal of Economic psychology*, 26, 35-57.

Kalluru, S., & Bhat, K. (2015). Determinants of Cost Efficiency of Commercial banks in India. *ICFAI Journal of Bank Management,* 8(2), 32-50.

Kiana, M. (2010). Challenges affecting the Claims departments of General Insurance companies in Kenya, Unpublished MBA project, University of Nairobi.

Koopmans, T.C. (1951). Activity Analysis of production and allocation. New York, United States of America: Wiley.

Kothari, C. R. (2004). *Research Methodology: Methods and Techniques* (2nd Ed.). New Age International Publishers.

Kucukvar, M., Noori, M., Egilmez, G., & Tatari, O. (2014). Stochastic decision modeling for sustainable pavement designs. *The International Journal of Life Cycle Assessment*, *19*(6), 1185-1199.

Lucia, H. M., & Karina, D. D. (2015). Enhancing the Strategic Decision Making Process; Unintended Consequences as a Source of Learning. *Latin American Business Review*, 16:11-22.

Maina, M. (2016). Effects of Innovation strategies on the performance of insurance firms in Kenya, Unpublished MBA project, University of Nairobi.

Makibia, I. W. (1974); Decision making in the City Council of Nairobi, Unpublished MBA project, University of Nairobi.

Mugenda, O., & Mugenda, A. (1999). Research Methods. *Quantitive and Qualitative Approaches.* Nairobi: ACTs Press.

Mwangeti, N. T. (2012). Measuring operational efficiency of the insurance industry in Kenya using data development analysis, Unpublished MBA project, University of Nairobi.

Ndura, K. M. (2015). Effects of mergers on financial performance of insurance companies in Kenya. Unpublished Dissertation, School of Business, University of Nairobi.

Ngelese, K. E. (2016). Operation strategies and customer retention in the insurance industry in Kenya, Unpublished MBA project, University of Nairobi.

Nutt, P. C. (1976). Models for decision making in organizations and some contextual variables which stipulate optimal use. *Academy of management Review*, *1*(2), 84-98.

Porters, P. (1985). Profit: The Economics of Long-Distance Exchange in Mesoamerica. Mesoamerica. *American Anthropologist*, 891-893.

Rejda, G. E., & McNamara, M. J. (2008). *Principles of Risk Management and Insurance* (10th Ed.). United States of America: Pearson Addison Wesley.

Robinson, R. B., & Peerce, J. A. (2013). Planned Pattern of Strategic Behavior and their relationship to business unit performance. *Strategic Management Journal*. 14:27-41.

Rono, F. M. (2010). Challenges facing the implementation of decision support systems in loan allocation among Commercial Banks in Kenya, Unpublished MBA project, University of Nairobi.

Russ, F. A., McNeilly, K. M. & Comer, J. M. (1996). Leadership, decision making and performance of Sales Managers: A multi-level approach. *Journal of Personal Selling & Sales Management, 16(3), 1-15.*

Simon, H. A. (1976). Administrative Behavior. A study of Decision-Making Processes in Administrative Organization (3rd Ed.). London, United Kingdom: The Free Press, Collier Macmillan Publishers.

Taylor J., & Raden N. (2007). *The need for Smart Enough Systems:* Allen and Unwin Publishers.

Vaughan, E., & Vaughan, T. (2007). Fundamentals of Risk and Insurance 11th Edition. United States of America: John Wiley & Sons.

Vroom, V. H., & Jago, A. G. (1988). The New Leadership: *Managing participation In Organizations.* (1st Ed.). New York, United States of America.

Wachira, C. M. (2013). Key success factors affecting Kenya's insurance industry, Unpublished MBA project, University of Nairobi.

Wanjiku, P. K. (2015). The Effect of Ownership structure on the Financial Performance of firms listed at the Nairobi Securities Exchange, Unpublished MBA project, University of Nairobi.

Wei, H. (2007). Efficiency in the China Insurance Industry, Wuhan University.

Wernerfelt, B. (1984). A resource- based view of the firm. *Strategic Management Journal, 5*(2), 171-180.

Wildavsky, A. (1966). The political economy of efficiency: cost-benefit analysis, systems analysis, and program budgeting. *Public Administration Review*, 292-310.

Wong, M., & Naim, L. (2014). The Toyota Product Development System: integrating people, Jack Process and technology, *Journal of Information Systems, 6*(1), 256-458. Seminal paper.

APPENDICES

Appendix 1: Introduction letter

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 19 April 2018

TO WHOM IT MAY CONCERN

The bearer of this letter ....GERISHON WAMITU MWANGI

Registration No....D61/72524/2014

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

PROF. JAMES M. NJIHIA
DEAN, SCHOOL OF BUSINESS

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
20 JUL 2018
P.O. Box 30197 – 00100, NAIROBI

Appendix 2: Questionnaire

Section 1: Personal information

1. Company details

Firm name (optional) ----------

Age of the firm ----------

Number of employees ----------

Company Ownership: Fully local ( ) Local / Foreign ( )

2. Respondent's length of service in the current position

0-2 years ( )

3-4 years ( )

5-6 years ( )

7-8 years ( )

9-10 years ( )

Over 10 years ( )

Section 2: Factors and decision models impacting on operational decision making

3 (a) Is there an authority matrix in your organization for operations decisions?

Yes ( )

No ( )

(b) The table below shows various operational decisions made in an insurance company. Mark in the appropriate box the various officers in your organization who are involved in approving the relevant decisions

Key:

1 means a level lower than a Manager level

2 means Manager

3 means Head of department

4 means Managing Director

5 means a management committee

6 means a Director

7 means Others

Activity	1	2	3	4	5	6	7
Quotation approvals	1	2	3	4	5	6	7
Product price approvals	1	2	3	4	5	6	7
Approval of normal claims payments	1	2	3	4	5	6	7
Approval of ex-gratia claims payments	1	2	3	4	5	6	7
Approval of Reinsurance program	1	2	3	4	5	6	7

(c) To what extent do you agree that the factors listed frequently influence how long it takes to make day to day decisions in your organization?

1 strongly disagree

2 disagree

3 neutral

4 agree

5 strongly agree

Factor	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
1. Amount of money involved					
2. In-house support of technical assessment capabilities					
3. Court judgments					
4. Senior Executive's influence					
5. Level of expertise of the decision maker					
6. Extent of automation of decision support system					
7. Month of the year decision is being made					
8. Directors and shareholder's interventions / influence					
9. External / Third party service providers performance in terms of					

integrity, accuracy and timeliness					
10. Decisions are made strictly using pre-defined logical steps that maximizes value to the business					
11. Decisions are subjectively made as per the managers preferences					
12. Decisions made based on some few information elements considered as most crucial and / or relevant					
13. There are no rules applied in decision making					
14. Necessity of third party reports to enhance decision making processes internally e.g. assessors reports					
15. Strict compliance with documented authority matrix					
16. Strict compliance with regulatory requirements					
17. Agents integrity					

18. Desire for efficiency of operations					
19. Appreciation of ideas and abilities of management and support staff					
20. Consultations in decision making					
21. Delegation power of responsibility to management and support staff					
22. Cost of running the multilayered organizational structure					
23. Process focus in decision making					
24. Customer focus in decision making					
25. Adequacy of definitions of tasks and responsibilities					
26. Frequent changes in organizational design					
27. Difficulties and obstacles not acknowledged, recognized or acted upon					
28. Ignoring the day-to-day business imperatives					
29. Age of the decision maker					

30. The dominant values and beliefs, the norms					
31. Conscious and unconscious symbolic acts taken by leaders					
32. Top management backing / support					
33. Existence and implementation of a performance management practice or system					
34. Communication media e.g. emails, telephone, physical letters					
35. Source of decision request e.g. corporates, retail, government, staff, manager etc					
36. Time of the day decision request is received in the business e.g. morning, afternoon, evening					
37. Level at which decision is made e.g. supervisor, manager, Chief executive etc					
38. Amount of kickbacks involved					

39. Simplicity or complexity of the organizational structures					
40. Leadership style of the top leaders e.g. autocratic, democratic, transformational etc					

Section 3: Time taken in making operational decisions

4. How long does it take to make the following decisions?

(i) Quotations approval

	One day	One day to One week	8 days to One Month	Over one month
Approve quotation of below Kshs 1m premiums				
Approve quotation of between Kshs 1m to Kshs 10m premiums				
Approve quotation of between Kshs10m and Kshs 100m premiums				
Approve quotation of more than Kshs 100m				

(ii) Claims settlement

	One day	One day to One week	8 days to One Month	Over one month
Approve settlement below Kshs 1m of a normal claims invoice				
Approve settlement of Kshs 1m to Kshs 10m of a normal claims invoice				
Approve settlement between Kshs 10m and Kshs100m of a normal claims invoice				
Approve settlement of more than Kshs 100m of a normal claim invoice				
Approve ex-gratia claims				

(iii) Reinsurance program

	One day	One day to One week	8 days to One Month	Over one month
Approve annual Reinsurance program				

THANK YOU