PROJECT RISK MANAGEMENT STRATEGIES AND PROJECT PERFORMANCE AT THE NATIONAL HOSPITAL INSURANCE FUND IN KENYA

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ABSTRACT

Social health plans contributions are based on members' ability to pay but access to services depends on individuals' health care needs, hence a socialized concept, with emphasis on community spirit of solidarity. However, these goals have not been achieved yet according to a report by NHIF the report delineates that access to medical care has only been increased amongst the middle class. The lower-class individuals find it difficult to get quality healthcare leading to proliferation of quack doctors who are pocket-friendly to this category. Projects by the NHIF have improved the medical services in the country but the risk exposures have limited these project's scope and efficiency. The purpose of the study was to establish the effect of project risk management techniques on project performance at National Hospital Insurance Fund (NHIF) in Kenya. The objective of the study was to establish the effect of project risk prevention, risk transfer, risk control and risk acceptance management techniques on project performance at National Hospital Insurance Fund (NHIF) in Kenya. This study was hinged on the resource-based view theory, transaction cost economic theory, contingency theory, agency theory and uncertainty theory. The study adopted a descriptive research design. The target population for this study will be 651 management staff who were drawn from the following departments: finance, Health insurance and legal affairs, Public procurement, human resources, Pharmaceuticals and logistics since all their functions are centralized. A sample population of 241 was picked using stratified proportionate random sampling technique. Primary data was obtained using self-administered questionnaires. After data cleaning which entailed checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation was estimated for all the quantitative variables and information presented inform of tables and graphs. Inferential data analysis was done using Pearson correlation coefficient and regression analysis (multiple regression analysis) to establish the relations between the independent and dependent variables. The study concluded that risk preventions have the greatest effect on NHIF project performance followed by risk control then risk acceptance while risk transfer having the least effect on NHIF project performance. The study recommends that more research should be dedicated to the field of risk management in order to unearth even some more methods of risk management that can be influential in terms of helping project managers meet the deliverables that are desired within the set time and budget limits and that the management of NHIF should put in place cost-effective measures for timely risk identification and effective risk mitigation.

Key Words: *project risk management strategies, project performance, National Hospital Insurance Fund, Kenya*

INTRODUCTION

Projects come in range of magnitudes and nature that require adequate attention and planning. Risks and in uncertainties are common in projects and require the undertakers to lay plans to

cushion for such risks. A risk in projects is defined as an event that leads to delays and shortcomings that hinder successful completion of a project. Both small and large projects encounter risks that make them either to fail or unable to meet their intended objective. Risks management is vital as it enables the project manager to oversee and evade dangers or hazards that hinder the success of a project. Several approaches to mitigate these risks are employed depending on the perceived risk and its nature (Crawford, 2013).

For a country to have economic prosperity, its citizens have to be in good health. There are many definitions of good health by various individuals, institutions and organizations but the commonly accepted definition across the globe is the definition by the World Health Organisation. WHO (1948) defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The MDG's are the most broadly supported comprehensive and specific development goals the world has ever agreed upon (United Nations Development Programme, 2010). Among the eight MDG's, three of them focus on health. These are goal number four to reduce child mortality rate, goal number five to improve maternal health and goal number six to combat HIV/AIDS, malaria and other diseases.

As of late, the significant start for advancement help has been that assets alone can have little effect on neediness mitigation and it is just with outer guide that creating nations can gain the coveted ground towards the Millennium Development Goals. As per the United Nations Development Program's (UNDP's) Human Development Report (2014), official advancement help (ODA) has expanded by 35% since 2004. Notwithstanding this colossal volume of advancement help, the writing on contributor subsidized improvement ventures and projects keep on citing a few difficulties debilitating accomplishment of proposed objectives. A portion of the difficulties of improvement ventures are that they are neither viable nor productive and they don't advance beneficiary nations' responsibility for forms.

The fundamental targets of hazard administration in venture incorporate finishing the task inside the predefined cost and time and inside the required quality, security, and ecological breaking points. Henceforth, restricted assets must be focused on the significant dangers to accomplish most extreme impacts. Howard and Serpell (2015) uncovered that, for a perfect hazard administration, a prioritization procedure ought to be completed whereby the dangers with most prominent misfortune and the best likelihood of happening are dealt with first and dangers with bring down likelihood of event and lower misfortune are taken care of later.

Thomas (2009) found that in to amplify the productivity of hazard administration, the RMP ought to be persistently created amid the whole venture. He was portraying a venture in England. He kept on saying that along these lines, dangers will be found and oversaw all through every one of the stages (Smith et al. 2009). The advantages from RM are held for the task itself, as well as for the on-screen characters included. Another advantage of working with hazard administration is expanded level of control over the entire venture and more productive critical thinking forms which can be bolstered on a more bona fide premise. It comes about because of an examination of task conditions as of now in the start of the

undertaking. The hazard administration additionally gives a technique which can lessen conceivable and sudden shocks (Cooper et al., 2011).

According to WHO World Health Statistics (2010), low and middle-income countries bear 93% of worlds disease burden yet account for only 11% global health spending. In developing countries, the low economic growth, limited capacity to collect tax revenues and competing priorities limit the tax revenue available for the health sector. Poor health prevails in many developing countries. World Bank (2009) attributed this state of affairs to underfunding of health, poor management of public health services and the inability of public primary care services to match the demands of the growing populations. In the year 2000, the global community committed to eradicate extreme poverty and improve the health and welfare of the world's poorest countries through eight time-bound goals known as the Millennium Development Goals (MDGs), with health at the heart of the MDGs due to the recognition of its role in reducing poverty and also as a measure of human well-being

In Rwanda there is the Rwanda Social Security Board (RSSF). It serves in an indistinguishable limit from the National Social Security Fund in Kenya. Both of these associations work inside comparative parameters as NHIF. Along these lines, the RSSF can be surveyed with a comparative measure as NHIF. To adapt better to the solid rising urban request, Rwanda Social Security Board (RSSB) lined up with the Rwanda Housing Authority to encourage the usage of the Vision 2020 objectives and Economic Development and Poverty Reduction Strategy (EDPRS) focuses of building up the lodging segment, land advancement and development of open structures (Rwihatu, 2015).

The destinations of the such activities are to give high caliber, institutionalized working space for RSSB locale branch staff and some other intrigued tenants, to stretch out RSSB benefits closer to its customers, to enhance the RSSB's scope proportion across the country, to get a decent and sizable profit for put supports in this Real Estate wander and to wrap things up to add to the monetary improvement in all areas the nation over. Such undertakings are influenced by dangers as it were. In such manner, the RSSB uses a few hazard administration systems in its tasks to make them genuinely effective contrasted with ventures in Kenya (GoK, 2015).

According to Wang et al (2012) African countries have spent scarce time, money and effort on health insurance initiatives but most of the schemes cover only a small proportion of the population mainly working in the formal sector. Extending health insurance to the informal sector in many developing countries has been a challenge partly due to poverty and difficulty in collecting premiums from the informal sector workers, most of who are geographically dispersed but a few African countries have however been successful in increasing access to healthcare through health 3 insurance. According to the World Health Report (2010), Rwandan government has supported creation of over 1000 mutual health insurance schemes and by 2007, 74% of the population had some form of health insurance cover. Under the insurance scheme, premiums are collected by community health workers and transferred to a district level fund and then used to pay for health services.

Kenya has had the National hospital insurance fund, since its establishment in 1966 through an Act of Parliament, Cap 255 laws of Kenya, which has been revised to NHIF Act No. 9 of 1998.It was designed to offer inpatient insurance cover to formal sector workers only. However, changes in regulations over the years have allowed informal sector contributors to enroll into the scheme, with their contributions set at Ksh 160 per month or Ksh 1920 per year. The members are able to access in-patient insurance cover though the network of more than 400 NHIF accredited facilities distributed in all 47 counties in the country. Attempts to promote universal health coverage in Kenya through the proposed National social health insurance fund have faced challenges, including resistance from trade unions and other stakeholders in the health sector. The bill which was to introduce social health insurance failed to go through all the approval stages following resistance from many fronts. The low penetration of health insurance in Kenya has meant that many poor people in rural and urban areas are denied access to quality healthcare due to their inability to meet the high out-of pocket payments that characterize the healthcare financing system (GoK, 2015).

In Kenya, just as other developing countries, majority of Kenya do not have healthcare insurance. To meet this gap, National Hospital Insurance Fund (NHIF) has been mandated as the primary provider of health insurance in Kenya to enable all Kenyans to access quality and affordable health services. NHIF has undergone several changes over the years to include more benefits, with an ultimate aim of providing universal healthcare (Muiya & Kamau, 2013). This requires comprehensive strategic positioning of NHIF in meeting healthcare financing challenges.

Medical insurance can be defined as life-threatening protection for families in Kenya particularly now that medical expenses have spiralled out of control. There are now many informed cases of lifestyle diseases and generally the necessity to have a medical insurance cover is greater now than before. Though, interesting it is noted that there is still a lot of uninsured people. There was a reported high loss ratio in the insurance industry in the year 2012 by Medical insurance class. Health Maintenance Organisations (HMO) also have stopped provision of medical insurance completely with many starting to offer general insurance covers after acquisition of new licences from the IRA. The former HMO's are now general insurance companies. Developing and increasing medical insurance uptake, there is a need to initially comprehend the influence of project risk management practices on project performance at the National Health Insurance Fund (GoK, 2015).

Project Performance

The current global economy has led to competitiveness in the business ecosystem, both in the local and global arena. With the increased competition, companies have been forced to change their strategies to remain competitive so as to retain their market share. To deliver business value, projects must be managed well (Bergeron, 2015) against the three major project constraints: scope, budget and time. A project is said to have been delivered successfully if it has been delivered as per the clients' scope, in good time and finally, within the specified budget. To achieve successful project delivery, project management requires certain tools, which include social media tools (Kraushaar & Akumu, 2013)

Project portfolio management is important in evaluating, prioritizing, and identifying projects in line with strategy. To measure project performance in this study within the stipulated context, the following will be the indicators; full insurance coverage for members countrywide, number of projects completed on time, risk identification efficiency, risk categorization efficiency and membership turnover rate.

Project Risk Management Strategies

Customarily performance of project extends are seen as effective when they meet time, spending plan and execution objectives. Undertaking Management Institute alludes to extend achievement being measured as far as time, cost, degree, and quality and consumer loyalty. As indicated by Hilson (2015), Cost, time, and execution are the commonplace measures of undertaking achievement (Kloppenborg & Opfer, 2013).

For the completely unsatisfactory dangers, chance shirking is the most pertinent reaction activity and the most ideal route is to decline to acknowledge those dangers (Flanagan and Norman, 2013). To totally maintain a strategic distance from dangers, hazard shirking requires the deserting of the entire undertaking. By and by, it isn't important to dismiss the entire task; chance evasion can be performed by changing the venture design or technique to keep away from inadmissible dangers (Al-Bahar & Crandall, 2014). Undertaking destinations can be separated from the negative hazard impacts by changing the venture targets, for instance broadening the timetable, diminishing the task scope or changing the venture procedure, and so forth to ensure project performance (PMI, 2015).

Hazard exchange does not take out the dangers, but rather essentially hand over the obligation regarding hazard administration and risk for chance introduction to different gatherings. A few or the majority of the negative effects of the antagonistic occasions, alongside responsibility for hazard reaction, are exchanged to different gatherings in the undertaking by some exchanging devices. Moving instruments utilized as a part of hazard exchange are very differing, for instance, protection, bonds, ensures, and so forth., be that as it may, chance exchange dependably includes installment of hazard premium to the gathering assuming control over the dangers and hence this affects performance of projects negatively (Crawford, 2013).

The most normally utilized hazard reaction methodology is the hazard control which balances out undertaking dangers and openings without exchanging the dangers to different gatherings. Hazard control requires certain underlying speculation and measures to lessen the likelihood of antagonistic occasions, consequently diminishing the undesired consequences for the venture. If these risks are not controlled they lead to project failure or a project is not completed. In any case, this venture ought to be littler than the costs requested by the event of that antagonistic occasion (Kululanga & Kuotcha, 2010).

National Hospital Insurance Fund

The NHIF is the vehicle through which the Kenya's administration gives the Kenyans an a medical coverage. It was built up by an Parliament Act in 1966 as an office in the Health

Ministry, which administered its operations, however it depended on the administration Treasury to solve monetary issues. This Fund was introduced "for accommodation of national contributory healing facility protection plot for every occupants in Kenya." The Act setting up the National Hospital Insurance Fund accommodated enrolment to the National Hospital Insurance Fund for every citizen in Kenya aged between 18 years and 65 years and commands bosses to deduct premium from wages and pay rates. The level of commitment is graduated by salary, running from Ksh 30 to Ksh 320 every month. Commitments and enrollment are mandatory for every single salaried worker gaining a net pay of Ksh 1000/month or more. To enroll with NHIF as a part, fill in the Members Form. To enlist as a business or sorted out gathering, fill in the Employers Form Besides acting naturally funding and oneself-overseeing, this fund screens its own particular accumulations and disperses advantages to suppliers (Ministry of Health, 2014).

The NHIF Act likewise accommodates the Fund to make credits from its stores to healing facilities for benefit change. As per the revised NHIF Act, recipients are both in-patients and outpatients (segment 22 of NHIF Act, 1998), the plan started out-quiet administrations in July 2015. NHIF Management Board pays advantages to pronounce healing facilities for costs acquired in the clinics by any supporter; his/her named life partner, kid or other named dependant. As per the NHIF Act, the advantages payable from the Fund are constrained to costs brought about in regard of medications, research center tests and demonstrative administrations, surgical, dental, or therapeutic techniques or gear, physiotherapy care and specialists' expenses, sustenance and boarding costs (Republic of Kenya, 2010).

As of not long ago, the NHIF was very concentrated in Nairobi, where all cases were prepared. Wellbeing offices in whatever is left of the nation were required to make month to month excursions to Nairobi to seek after cases. The exchange costs were hence high and troublesome to its individuals and medicinal services suppliers. NHIF has now decentralized cases preparing to range workplaces to encourage a shorter and more powerful framework that will permit expedient repayment of restorative cases. The Fund has so far opened 28 branches over all territories, and in both rustic and urban regions. It has likewise presented rearranged methods for preparing claims and set up an individuals' database. The way toward making claims has additionally been mechanized. This has made it less demanding for the individuals and around 400 licensed wellbeing suppliers to make claims at a generally minimal effort (Ministry of Health, 2014).

At introduce, the NHIF experiences an assortment of issues, which impede its part as an effective hazard sharing plan. Among these issues are repayment strategies, which have energized developing lengths of remain at the healing facilities (particularly private clinics), expanded estimation of cases, and extension of the private-revenue driven area. What's more, the general quick and uncontrolled development of endorsed offices for repayment purposes has prompted fast extension of cases, both proper and deceitful, from these offices (GoK, 2015).

The activities that have been started by NHIF incorporate portable installment. To encourage opportune settlement of part commitments and support of up- to- date installment data for

singular records, NHIF has banded together with Safaricom Limited, a main media communications organization in Kenya, to give an adaptable and helpful stage for settlement of month to month protection premium commitments from casual division populaces. NHIF never again executes in real money for premium accumulations and has furthermore banded together with banks to empower coordinate money and check stores from individuals. Additionally the firm has set an aspiring focus of enlisting an aggregate of 10M Kenyans with 33% or around 3M including the casual part, before the finish of 2014. A media battle concentrated on making consciousness of the wellbeing scope get ready for the casual area. These are the fundamental leader ventures from the firm (GoK, 2015).

STATEMENT OF THE PROBLEM

The health sector reforms that have hitherto taken place (including introduction of National Health Insurance Fund, free health services, cost-sharing, exemptions and waivers) have all aimed largely at addressing affordability and access to health care services. There are now many cases of lifestyle diseases reported which triggers off the necessity for medical insurance cover greater now than before. There are now many informed cases of lifestyle diseases and generally the necessity to have a medical insurance cover is greater now than before. Though, interesting it is noted that there is still a lot of uninsured people. There was a reported high loss ratio in the insurance industry in the year 2012 by Medical insurance class. Health Maintenance Organisations (HMO) also have stopped provision of medical insurance completely with many starting to offer general insurance covers after acquisition of new licences from the IRA. The former HMO's are now general insurance companies. However, these goals have not been achieved yet according to a report by NHIF the report delineates that access to medical care has only been increased amongst the middle class. The lower-class individuals find it difficult to get quality healthcare leading to proliferation of quack doctors who are pocket-friendly to this category. Projects by the NHIF have improved the medical services in the country but the risk exposures have limited these project's scope and efficiency. Various studies were conducted on several aspects of project risk management strategies and project performance. Ikiao (2015) study on the effect of technology on risk management practices by fund managers in Kenya. Gitau, (2015) did a study on the effects of risk management at project planning phase on performance of construction projects in Rwanda. Wabomba (2015) did a study on influence of risk management strategies on project performance: a survey of selected international development organizations based in Nairobi city, Kenya. Mburu, Kinyua and Ogollah, (2015) did a study on the effect of risk management strategies on project performance of small and medium information communication technology enterprises in Nairobi, Kenya. These are the main challenges facing the organization due to few project implementation successes the agency has had. Therefore, this give the basis of this study which sought to establish the effect of project risk management strategies on project performance at National Hospital Insurance Fund (NHIF) in Kenya.

GENERAL OBJECTIVE

The purpose of this study was to establish the effect of project risk management strategies on project performance at National Hospital Insurance Fund (NHIF) in Kenya.

SPECIFIC OBJECTIVES

1. To determine the effects of risk prevention on the performance of NHIF projects in Kenya.
2. To analyze the effect of risk transfer on the project performance at NHIF projects in Kenya.
3. To assess the effect of risk control on the project performance at NHIF projects in Kenya.
4. To establish the effect of risk acceptance on the project performance at NHIF projects in Kenya.

THEORETICAL REVIEW

Resource Based View

It was Penrose who established the foundations of the resource-based view as a theory (Roos & Roos, 1997). Resource Based View theory refers to the firm's internal value creation through its resources and capabilities. Value can be created from communication/knowledge sharing management through learning mechanisms, routines and experience. RBV applies the aspects of external and internal social relations, power distribution and the level of dependency on external counterparts. It aims at the optimization of the continuity of the business and the autonomy of a firm. RBV are important to the study of supplier management, as superior performance achieved in supply chain activities relative to competitors, would explain how these activities can be supported by suppliers and how supplier selection/evaluation/development can contribute to the supply chain core competences (Wamalwa, 2014).

Project performance is determined by the contribution of its resources and capabilities to firms' performance. RBV gives an insight on the relations among internal resources, capabilities and performance. The theory explains that the achievement of competitive edge depends on its heterogeneous resources, which are inimitable, valuable and non-substitutable. These resources are classified as cooperative and strategic, and competitive and financial. Organizations perform based on available resources hence availability of resources determine performance of projects (Apiyo & Mburu, 2014).

Transaction Cost Economic Theory

The Transaction Cost Economic Theory receives contributions from Williamson (1994). TCE can be defined as an explanation of how the costs of engaging in an action by an organization affect the behaviour of that organization. According to Williamson (1985), transaction costs are the costs of negotiating, establishing, safeguarding and enforcing contractual agreements.

The transaction costs can include costs incurred in personnel management and procuring other resources and capital items required to produce outputs. Potts (2015) expounds that the theory is based on two assumptions; bounded rationality and opportunism.

The bounded rationality concept assumes that the decision-making process is determined by a number of things key among them the amount of information possessed by the decision maker, their ability to reason and the timeframe involved in making the decision. Opportunism on the other hand, is the idea of taking advantage of opportunities, irrespective of consequences to others. In addition to these two assumptions, transaction infrequency, transactions of high value as well as uncertainty often characterize the transaction costs (Hecker, 2012). Traditionally, this has been applied on profit making organizations where management decisions are aimed at maximizing profit for the organization, in recent years, its applicability to the development sector has become indispensable.

This theory therefore informs this study since project risk management is highly informed by the organization's transaction exposure, accounting exposure and economic exposure. To mitigate the project risk exposure, NHIF must implement appropriate strategies to hedge against such potential losses. A successfully implemented project risk management strategies will ensure organization achieves its goals and objectives. This theory thus helps in understanding risk prevention strategy and its effects on project performance.

Contingency Theory

The word possibility shows how the earth (outer wellspring of hazard) relates with the framework and decides the exercises and development of a hierarchical framework (Longenecker & Pringle, 2013). Panthi et al. (2009) have called attention to that ventures are unpredictable and extraordinary, and in light of the fact that it is hard to assess the level of dangers in ventures, it is in this manner likewise difficult to apply venture chance administration exercises suitably. One of the unavoidable results of a task is variety that may prompt unfavorable effects on time, cost and quality. Thus, using possibility hypothesis in ventures is helpful for relieving these varieties that emerge later, through authoritative realizing which utilizes past encounters and applies them to current circumstances where conceivable.

Liu and low (2009) considered adaptability as an significant answer for the cutting edge dangers and along these lines have underscored on the capacity of possibility hypothesis for exhibiting a clarification relying upon the conditions and realities of every particular case. As Figueiredo and Kitson (2009) have introduced possibility is a cost component of a gauge to cover the likelihood of unforeseeable occasions to happen and that in the event that they happen, they will probably bring about extra expenses inside the characterized venture scope. A few expenses in the activities can't be promptly decided or they are huge in the total yet too little to be evaluated independently; so keeping in mind the end goal to represent these costs it is helpful to incorporate possibility in any cost gauge, for example, cost estimation for development ventures (Tummala and Schoenherr, 2011). It ought to be noticed that possibility is unique in relation to remittances in the activities. The occasions which are relied

upon to happen and are inside the extent of the venture drive the remittances and therefore the stipends are not hazard based or subordinate (Noor & Tichacek, 2009).

The concentration of this proposition is overseeing danger of ventures and attesting that because of erratic nature of the tasks there is nobody most ideal approach to oversee them. As said above, possibility hypothesis perceives that there are a scope of relevant dangers each impacting the venture that the hypothesis will be connected to. Consequently, picking possibility hypothesis can be considered as a suitable hypothetical structure for this postulation on the grounds that the fundamental idea of this hypothesis is in the same manner as the concentration of this proposal; the hypothesis rejects there is one most ideal route for overseeing. Possibility is for the most part produced for evacuating or diminishing the negative results of unanticipated occasions. Since the possibility hypothesis is chance based, it can be adequate to deal with the acknowledgment of dangers and accordingly has been picked as the hypothetical structure of this proposition which is concentrating on the dangers related with venture administration in NHIF (Wabomba, 2015).

Contingency theory recognizes that there are a range of contextual variables (risks), each influencing the project that the theory is going to be applied to. Improvement in organizational effectiveness is what contingency theory aims at in order to respond to uncertainty in project performance. Contingency is mainly generated for removing or decreasing the negative outcomes of unforeseen events. So, contingency theory is used in this study in order to describe an approach in managing risk of on projects that best suit the NHIF current situation. Thus, contingency theory helps in understanding risk control strategy and its effect on project performance.

Agency Theory

Organization hypothesis is coordinated at the pervasive office relationship as indicated by Floricel and Lampel (1998), in which one gathering delegates work to the operator, who plays out that work. In building ventures this relationship characterized by the customers and the contractual worker. Organization hypothesis is worried about settling two issues that happen in office connections. The first is the organization issue that emerges when (a) the wants or objectives of the essential and specialist strife and (b) it is the troublesome or costly for the foremost to check what the operator is really doing. The issue here is that the key can't confirm that the specialist has carried on fittingly prompting deficient yield. The second is the issue of the risk distribution that arises when the central and operator have distinctive states of mind towards chance. The question here is the key and the operator may incline toward various activities as a result of the diverse risk predispositions. Thus, perfect chief – operator connections ought to reflect effective association of data and the hazard – bearing expenses to best maintain a strategic distance from these issues.

As indicated by Tummala and Schoenherr (2011), in venture, administrator office sorts of contentions might be maintained a strategic distance from by all around developed contracts which determine the legally binding connections between the undertaking proprietor and the essential contractual workers. Conduct – based contract and result based contracts are two

non-specific sorts of legally binding connections which have been created to relieve the issues which emerge from the irreconcilable circumstance amongst important and operator.

This theory therefore informs this study since project risk management is highly informed by the organization's transaction exposure, accounting exposure and economic exposure. To mitigate the project risk exposure, NHIF must implement appropriate strategies to hedge against such potential losses. A successfully implemented project risk management strategies will ensure organization achieves its goals and objectives. This theory thus helps in understanding risk transfer strategy and its effect on project performance.

Uncertain theory

Uncertain theory was introduced by Liu (2010) due to generalization of domain of uncertainty. Uncertainty theory was also applied to uncertain logic by Li and Liu (2010) in which the truth value is defined as the uncertain measure that the proposition is true. Furthermore, uncertain entailment was proposed by Liu that is a methodology for calculating the truth value of an uncertain formula when the truth values of other uncertain formulas are given. Uncertainty is, of course, not a neglected concept in project management. Early development of activity network techniques in the 1950s, such as PERT (Program Evaluation and Review Technique), recognized the possibility of variation in task durations. These techniques were extended in the 1960s to incorporate probabilistic branching for instance Graphical Evaluation and Review Technique. Qualitative approaches, such as the Synergistic Contingency Evaluation and Review Technique, and Analysis of Potential Problems, were developed to guide project managers to prepare for uncertainty with risk prevention and contingency planning (Henriksen & Uhlenfeldt, 2006).

This extensive literature on project planning has developed our understanding of scheduling tasks in complex and uncertain projects, describing such well -known techniques as the critical path method (CPM). There is also extensive knowledge on how to handle the relationships with the stakeholders, utilizing such tools as contract formalization and enforcement, responsibility charts, force field analysis, and conflict 16 management. Foreseen uncertainties are identified, but uncertain, influences in a project management. Uncertainty risk also affects how project management should approach stakeholder management. The project team in one of our samples liked to utilize the phrase ―proactively occupy the white spaces in the contract. This meant that, through anticipating uncertainties, they could proactively write in the contingencies reflecting these uncertainties, possibly staking out a claim before other stakeholders had thought of it.

Thus, foreseen uncertainty requires disciplined risk management, the identification of potential risk that could affect the project followed by the planning of preventive measures to block adverse events and multiple contingent courses of action that are then triggered by the events. Progress tracking demands monitoring not only which activities have been completed, but also to the uncompleted project activities. The project manager must not only be able to trouble shoot, but also function as a reactive consolidator of what has been achieved up to a certain stage in the project. All risks the incidents in the environment, or certain outcomes of

the project work) must be constantly monitored and communicated to project stakeholders. Hence this theory thus helps in explaining risk acceptance strategy and its effect on project performance.

EMPIRICAL REVIEW

Risk Prevention and Project Performance

Kululanga and Kuotcha, (2010) did a study on measuring project risk management process for construction contractors with statement indicators linked to numerical scores. To ascertain the degree to which project risk management processes were used, a questionnaire survey was employed. The study found out that the application of project risk management processes was significantly influenced by the various categories of size and experience of the surveyed construction contractors at $p<0.01$. Furthermore, contingence planning within the series of steps of project risk management process featured highly among the surveyed construction contractors. The majority of the variables under the series of steps of project risk management process were positively and significantly linked to progression in size and experience of construction contractors at $p<0.01$.

Byoun, Kim and Yoo (2013) did a study on risk management with leverage: evidence from project finance. The study built up a model for stage astute venture planning and booking under vulnerability. On the other hand, ventures which include culturally diverse groups cooperating from remote areas regularly require a general arrangement and spending which is executed through entwining of stage shrewd arranging and planning and about the significance of Contingency designs that constitutes a genuine danger to the effective finishing of a product improvement venture. Further the study propose that Contingency designs help venture groups to manage vulnerabilities, for example, taking care of new item advancement, upholding creative activities, increment design adaptability.

Taroun, (2014) did a study towards a better modelling and assessment of construction risk. The study used descriptive research design. The study found out that the hazard is termed assigning negative outcomes to the entire undertaking; it is of importance to audit the venture's point. To totally maintain a strategic distance from dangers, hazard shirking requires the deserting of the entire undertaking. By and by, it isn't important to dismiss the entire task; chance evasion can be performed by changing the venture design or technique to keep away from inadmissible dangers. Undertaking destinations can be separated from the negative hazard impacts by changing the venture targets, for instance broadening the timetable, diminishing the task scope or changing the venture procedure, and so forth. Hazard exchange does not take out the dangers, but rather essentially hand over the obligation regarding hazard administration and risk for chance introduction to different gatherings. A few or the majority of the negative effects of the antagonistic occasions, alongside responsibility for hazard reaction, are exchanged to different gatherings in the undertaking by some exchanging devices.

Wabomba (2015) did a study on influence of risk management strategies on project performance: a survey of selected international development organizations based in Nairobi

city, Kenya. The investigation adopted a quantitative due to utilization of numerical data and also correlational/predictive design because of the nature of the research questions with an aim to explaining the relationship between the research variables identified, the dependent. Risk avoidance also exhibited positive correlation with project performance. On the other hand utilization of the technique of risk transference as well showed a statistically significant relationship on project performance and when the correlation analysis was done it also showed a statistically significant correlation.

Kangari (2015) did a study on risk management perceptions and trends of U.S. construction. To establish the degree to which project risk management processes were used, a questionnaire survey was employed. The study noted that communication between venture head and administration is urgent to the fruitful execution of task. This is for the most part affected by the principal– specialist connection between the gatherings and the agreement sort picked. The investigation found that the models of instrumental and transformative interest and the way they impact stream and correspondence between venture administrator and different partners. Learning exchange, correspondence, and shared comprehension between venture partners are vital necessities to ventures. The capacity of the venture director to encourage correspondence among partners, make the coveted duty level and decrease vulnerability can help maintaining a strategic distance from the danger of task disappointment.

Ghahramanzadeh (2015) did a study on managing risk of construction projects a case study of iran. The study used descriptive research design. The study contemplated on overseeing danger of development extends in Iran. A poll was outlined and twenty-five dangers were distinguished and ordered in five principle classes as takes after. For each of these dangers, applicable alleviation procedures were likewise proposed. Criticality of dangers alongside viability of alleviation systems were assessed by means of 100 surveys which were appropriated to the three key classifications of on-screen characters related with development extends to be specific customers, contractual workers, and experts. Out of 76 substantial reactions got, interviews were directed with 24 of the members kept in mind that the objective to separate the information and see how these gatherings deal with the distinguished dangers. Discoveries of the examination uncovered that Economic and Financial dangers have the best impact on development extends in Iran.

Risk Transfer and Project Performance

Figueiredo and Kitson, (2009) did a study on defining risk and contingency for pipeline Projects. The study adopted survey research design. The study found that to totally maintain a strategic distance from dangers, hazard shirking requires the deserting of the entire undertaking. By and by, it isn't important to dismiss the entire task; chance evasion can be performed by changing the venture design or technique to keep away from inadmissible dangers. Undertaking destinations can be separated from the negative hazard impacts by changing the venture targets, for instance broadening the timetable, diminishing the task scope or changing the venture procedure, and so forth. (PMI, 2015). Hazard exchange does not take out the dangers, but rather essentially hand over the obligation regarding hazard

administration and risk for chance introduction to different gatherings. A few or the majority of the negative effects of the antagonistic occasions, alongside responsibility for hazard reaction, are exchanged to different gatherings in the undertaking by some exchanging devices.

Gitau, (2015) did a study on the effects of risk management at project planning phase on performance of construction projects in Rwanda. The study used descriptive research design. The research project found out that the consulting engineers and architects were often selected before the design phase of a project. This meant that many projects did not benefit from professional input at planning stage. The most used method of selection used for consultants was the quality and cost-based selection method. 45.2% of the projects surveyed had poor time performance while 35.7 % of the projects had poor cost performance. The project site selection and needs identification happened during planning stage in majority of the projects surveyed and often without the involvement of construction professionals. The vi site works contribution variations was found to be over 10% of the estimated cost in 45% of the projects surveyed.

Wabomba (2015) did a study on influence of risk management strategies on project performance: a survey of selected international development organizations based in Nairobi city, Kenya. The investigation adopted a quantitative due to utilization of numerical data and also correlational/predictive design because of the nature of the research questions with an aim to explaining the relationship between the research variables identified, the dependent. The study found that utilization of the technique of risk transference as well showed a statistically significant relationship on project performance and when the correlation analysis was done it also showed a statistically significant correlation. Risk transference also showed positive correlation with project performance and was also found to have an influence on project performance upon carrying out test of significance for the various techniques of risk transference including use of outsourcing, use of insurance premium and signing of binding contractual agreements.

Mburu, Kinyua and Ogollah, (2015) did a study on the effect of risk management strategies on project performance of small and medium information communication technology enterprises in Nairobi, Kenya. A descriptive research design was adopted. Target population was 48 ICT SMEs in Nairobi, Kenya. The study adopted random sampling technique to select sample size of the project staff in the target population. The study established that there existed a positive relationship between risk management strategies affecting project performance and ICT project performance for SMEs in Kenya and were statistically significant at 0.05 level. Task chance transference is the way toward exchanging any misfortunes caused to an outsider, for example, using protection strategies, outsourcing to a gathering or even legally binding understandings to exchange hazard to outsider.

Risk Control and Project Performance

Ogal (2015) looked at Influence of risk management in building projects in Kenya: A case of building projects in Westlands Sub – County. The study employed a descriptive survey

design. The study's target population included clients, contractors and consultant in building projects within Westlands Sub - County in Nairobi. A sample size of 32 out of 107 respondents was sampled using stratified random sampling technique. Validity and reliability of the research instrument was measured using Cronbach's alpha and split- half method respectively. Cross tabulation was used to establish the relationship between independent and dependent variables. Chi-squire was used to establish the significance of the differences observed. Confidence level was set at 5%. Binary logistic regression was used to model the relationships established. The results were as follows: building projects in Westland County are procured via two contract type: design-bid-build (68%) and design build contracts (32%). The choice of contract options are determined by project duration/time, financial costs, legal issues and project actors. All the companies surveyed were exposed to a range of risks including risks associated with owners, contractors, political risks, financial risks and other risks. Projects procured via design-build contracts had a higher level of risks associated with designers. The various risks identified are under-mitigated while political risks are not mitigated. Effect of licensing procedures, laws and regulations and influence of policies on arbitrage was not significant for both design-build and design-bid-build. The local contractors and designers should be sensitized on risks mitigation strategies to improve the level of risks mitigation in the county.

As indicated by Hillson (2015) who did a study on effective opportunity management for projects: Exploiting positive risk. It was established that this is a venture of assets to reduce the risk on an undertaking. On universal tasks, establishments will frequently buy the guarantee of a cash rate to decrease the risk associated with variations in the currency exchange scale. A task director may enlist a specialist to survey the particular plans or the cost device on an undertaking to enlarge the trust in that procedure and diminish the venture chance. Allocating exceptionally gifted venture staff to deal with the high-chance exercises is another hazard decrease technique. Alleviation systems can incorporate possibility arranging, quality affirmation, detachment or movement of exercises and assets, Contract terms and conditions, Crisis administration and calamity recuperation designs. Those venture dangers which ought to be decreased can likewise be imparted to parties that have more proper assets and information about the outcomes.

Wabomba (2015) studied on influence of risk management strategies on project performance's survey of selected Nairobi, Kenya based international development organizations. The study was to establish the correlation level that exists between independent variables (various risk response strategies) and the dependent variables (project duration) additionally the investigation seeks to establish the most utilized and also most effective risk response strategy. The methodology applied was based on documentary study review and analysis of the concepts used by the literature. Relevant data for the investigation was collected by way of printed and online structured questionnaires that was tested for validity and reliability with questions that were administered to project/programme managers involved in management of international development projects and the research design that was adopted was Correlational/Predictive so as to examine the association amongst the dependent and independent variables. The investigation used Cronbach's alpha (□) of

0.65and above to test for internal reliability or internal consistency of five-point Likert scale online questionnaires. The study found that lessening the hazard so as to make it more satisfactory to the venture or association, by diminishing its effect can be named as relief of hazard. To distinguish a few alleviation procedures as hazard reaction arrangements. As a moderation procedure the creators propose heightening danger issues to top administration get signoff on responsibilities and stop the undertaking and examine with support and administration on additionally steps. On the off chance that there is absence of responsibility from the administration or the client, the creators likewise propose working with them to comprehend the purposes behind lack of concern.

Gitau (2015) conducted a study on the effects of risk management at project planning phase on performance of construction projects in Rwanda. The study targeted architects, engineers, project managers, quantity surveyors, contractors, and, regulatory authorities in operation in Rwanda and key clients with major investments in the construction industry. The study used both qualitative and quantitative methods of data collection. Literature review, physical and email delivered questionnaires and structured interviews was used to collect data. The research project indicated that most projects in Rwanda had some input from a qualified engineer and architect.

Risk Acceptance and Project Performance

Kargi, (2011) did a study on credit risk and the performance of Nigerian banks. Descriptive, correlation and regression techniques were used in the analysis. The findings revealed that credit risk management has a significant impact on the profitability of Nigeria banks. To examine the significance of a money saving advantage examination on existing dangers in the undertaking recommending utilization of a delicate investigation to distinguish hazard parameters that may affect amid venture improvement and operational period and may prompt disappointment and changed focuses in the task life cycle. Subsidizing assumes a pivotal part to lead chance moderation exercises and empowering the framework to reestablish its typical working.

As per Goble and Bier (2013), did a study on risk assessment can be a game-changing information technology – buttoo often it isn't; risk analysis. The study found that recurrent venture chance assessment results can relieve probabilities in ventures. As per the creators' hazard appraisals are vaults of organized data and a medium for correspondence. Henceforth, the prudent utilization of task hazard evaluation devices with satisfactory correspondence can moderate dangers, all things considered. The obligation regarding venture hazard decrease lies with the administration. Dangers must be controlled and observed once the administration group and board have outlined an administration design and the undertaking is in progress. The arrangement can in this way be altered as more reasons for chance are recognized.

Wabomba (2015) did a study on influence of risk management strategies on project performance: a survey of selected international development organizations based in Nairobi city, Kenya. The investigation adopted a quantitative due to utilization of numerical data and

also correlational/predictive design because of the nature of the research questions with an aim to explaining the relationship between the research variables identified, the dependent. The study found that the strategy of risk acceptance was found to be statistically significant in terms of statistical dependence and even correlation for the techniques of taking no action on perceived risks and even establishment of contingency plans.

Kangari (2015) did a study on risk management perceptions and trends of U.S. construction. The study adopted survey research design. The study shows that in recent years, contractors have been more willing to assume risks that accompany contractual and legal problems in the form of risk sharing with the owner. Risks of this type include change-order negotiations, third-party delays, contract delay resolutions, and indemnification and hold harmless. The survey also found that contractors currently assume the risk associated with actual quantities of work, a notable difference from the findings of the ASCE survey. Hazard that can't be exchanged or maintained a strategic distance from, the best prearrangement is to acknowledge the hazard. For this condition the hazard must be controlled, keeping in mind the end goal to limit the event's effect. Perceiving that lingering will exist and reacting either effectively by allotting fitting possibility or inactively doing nothing aside from observing the status of the hazard can be named as hazard acknowledgment. Hazard acknowledgment would likewise imply that making no move on chance was a precisely thought-after choice.

Amemba (2015) did a study on the effect of implementing risk management strategies on supply chain performance: a case of Kenya medical supplies agency. This study employed a descriptive research design using a case study. The research established that the level of implementation of risk management strategies in the KEMSA supply chain was medium and that risk identification, risk analysis and evaluation and risk control and monitoring strategies that were implemented in the KEMSA supply affected the performance to a great extent. The level of undertaking hazard considered worthy in each task might be founded on government or corporate rules. Measures representing a possibly more serious hazard ought to be hailed and exclusively assessed to set up why they are more dangerous. Dangers that are considered to bring pick up as opposed to hurt are probably going to be acknowledged. Ayyub and

Musyoka (2012) took a gander at the undertaking hazard administration practices and achievement of capital tasks in Kenya. Essential information was gathered with the end goal of this investigation. It was gathered utilizing meetings and self-directed organized surveys. Enlightening measurements were utilized to examine the information by way rates, implies, difference, standard deviation, connection investigation and numerous relapse examination. Discoveries from the examination uncovered that, hazard administration hones have been generally connected in ventures which were thought to be mind boggling as these activities pulled in a great deal of open consideration as a result of generous effects on groups, economy, condition, and spending plans. While there are a lot of hazard administration practices, apparatuses and methods accessible, many tasks execution groups did not regularly utilize them. From the investigation of the information gathered, it was demonstrated that hazard administration has a positive relationship with venture achievement. At the point when utilized reliably, hazard administration hones expanded the odds of task achievement.

RESEARCH METHODOLOGY

Research Design

Orodho (2008) defined a research design as the scheme, plan or strategy that was used to create answers to research problems. The study adopted a descriptive research design aimed at determining project risk management techniques and project performance at the National Hospital Insurance Fund. Babbie and Mouton (2010) observes that many descriptive studies are cross-sectional in nature. In addition, the cross-sectional survey was preferred because it enables assessing relationships between variables and it provides opportunity to identify moderators between variables (Tabachnick & Fidell, 2013). Singleton (2009) describes a descriptive cross-sectional survey as a comprehensive design that enables large and diverse amounts of data to be collected within a short time frame and analyzed quantitatively, giving a credible presentation of results. Thus, this approach is suitable for this study, since the study intends to collect comprehensive information through descriptions which was helpful for identifying variables.

Target Population

As per Pole and Lampard (2010), target population is a collection of individuals from an offered gathering to which the examination is connected, while the open population is taken a gander at as far as those components in the objective populace inside the span of the investigation. The target population for this investigation was senior and centre level administration staff of National Hospital Insurance Fund. A population of 651 management staff was drawn from the following departments: finance, Health insurance and legal affairs, Public procurement, human resources, Pharmaceuticals and logistics since all their functions are centralized. This included the departmental heads and their assistants.

Sampling Frame and Technique

Sampling is a thoughtful choice of a sample of people required to give information which is used by the study to make conclusions about the total population represented by the sample (Jankowicz, 2010). The sample approximation is a subsection of the total population that is taken to represent the whole population (Onabanjo, 2010). The sample size of 241 was arrived at by calculating the target population of 651 with a 95% significance level and an error of 0.05 utilizing the formula below taken from Kothari (2004).

$$n = \frac{z^2.N.\partial_p^2}{(N-1)e^2 + z^2\partial_p^2}$$

Where: n = Size of the sample; N = Size of the population and given as 651; e = Acceptable error and given as 0.05; ∂p = The standard deviation of the population and given as 0.5 where not known; Z = Standard variance at a confidence level given as 1.96 at 95% confidence level.

$$n = \frac{(1.96^2 \times 651 \times 0.5^2)}{(651 \times 0.05^2) + (1.96^2 \times 0.5^2)}$$

$$n = 241$$

The respondents were selected using stratified proportionate random sampling technique. Stratified random sampling is reasonable exploratory technique for gathering varied population into similar subgroups at that point making a choice within the specific subset to guarantee representativeness. The objective of stratified random sampling is to accomplish the coveted portrayal from different samples in the population. In stratified arbitrary inspecting subjects are chosen such that the current sub-set in the population are pretty much spoken to in the example (Kothari, 2004). The strategy likewise includes separating the populace into a progression of pertinent strata which infers that the example is probably going to be more agents (Saunders et al., 2009).

Research Instrument

The researcher collected primary data using self-administered questionnaires. The study used open-ended questions in order to allow the respondents to give an exclusive reply without feeling being held back while the closed-ended questions enabled respondents to respond within limited choices that were given. As specified by Saunders (2009), unstructured questions license important response from the respondents while the closed or organized questions are less challenging to assess. The surveys were used in order to save time and cash as well encouraging a simpler investigation since they were in quick usable shape.

Data Collection Procedure

An introduction letter from the university was obtained by the researcher obtained which was presented to National Hospital Insurance Fund manager so as to be permitted to collect the required data from the respondents. The study used drop and pick strategy which gave respondents ample time in giving appropriate opinions. Assistant researchers were prepared on meeting abilities including generating compatibility, urging respondents to give applicable information and looking for clarifications on important points. Assistant researchers made appointments with respondents at least two days before going to administer questionnaires. The exploration aides by and by regulated the examination instruments to the respondents. This allowed the researcher to build up affinity, simplify the enthusiasm behind the investigation and the clarify things that were not be clear.

Data Analysis and Presentation

Data analysis tool that used was dependent on the type of data to be analysed depending on whether the data is qualitative or quantitative. The quantitative data in this research was analyzed by descriptive statistics using IBM Statistical Package for the Social Sciences (SPSS) version 25.0. Descriptive statistics includes mean, frequency, standard deviation and percentages to profile sample characteristics and major patterns emerging from the data. In addition to measures of central tendencies, measures of dispersion and graphical representations were used to tabulate the information. To facilitate this Likert Scale was used

to enable easier presentation and interpretation of data. Data was presented in tables, charts and graphs. Content analysis was also used in processing of this data and results presented in prose form. The analyzed data was then interpreted and presented in frequency tables, bar charts, graphs and pie charts. This study tested for normality, heteroscedasticity and autocorrelation. Normality is important in knowing the shape of the distribution and helps to predict dependent variables scores. This study also tested for multicollinearity.

Inferential statistics was done by employing several relapse examinations. Multiple regression model was used to set up the relationship amongst the independent and depended variables. Multiple regressions were employed in light of the fact that it utilizes at least two independent factors to predict a depended variable. The examination utilized various relapses investigation to dissect the gathered information to quantify the impacts of task chance administration systems on project implementation at the National Hospital Insurance Fund. Multiple regressions aim to decide if a collection of factors together predict a given depended variable. With four independent variables in this study, the multiple regression model generally assumed the following equation;

$$\boldsymbol{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

Where: Y= NHIF project performance; β_0= Constant; β_1, β_2, β_3 and β_4, = Beta coefficients; X_1= Risk prevention; X_2 = Risk transfer; X_3 = Risk control; X_4= Risk acceptance; ε = Error term

RESEARCH RESULTS

The purpose of this research project was to establish the effect of project risk management techniques on project performance at National Hospital Insurance Fund (NHIF) in Kenya. The study used primary data collected using questionaires as it foused on studying the effects of risk prevention on the performance of NHIF projects, analyzing the influence of risk transfer on the project performance at NHIF projects, assessing the influence of risk control on the project performance at NHIF projects in Kenya and also analyzing the influence of risk acceptance on the project performance at NHIF projects in Kenya.

Risk Prevention

The study sought to study the effects of risk prevention on the performance of NHIF projects in Kenya. The study found that risk prevention influence performance of NHIF projects in a great extent. The study further found that use of risk prevention by work plans, use of risk prevention by contingency and risk avoidance by alternative approaches influence performance of NHIF projects in a great extent. The study also found that risk avoidance by detailed planning influence performance of NHIF projects in a great extent. The study further found that risk prevention by safety systems and risk avoidance safety inspections moderately influence performance of NHIF projects.

Risk Transfer

The study sought to analyse the influence of risk transfer on the project performance at NHIF projects in Kenya. The study revealed that risk transfer influence performance of NHIF projects in great extent. The study also revealed that in a great extent use of outsourcing, high cost of risk premium and stakeholder involvement in risk transfer influence performance of NHIF projects. The study also found that use of insurance policy and contractual agreements to transfer risk influence performance of NHIF projects in a great extent while legal agreements so as to transfer risks to a third party lowly influence performance of NHIF projects.

Risk Control

The study sought to assess the influence of risk control on the project performance at NHIF projects in Kenya. The study further found that in a great extent, risk control influence performance of NHIF projects. It was revealed that use of signed contracts, risk control meetings and use of contingency plans influence performance of NHIF projects greatly. The study also found that and risk mitigation crisis meetings influence performance of NHIF projects greatly, that use of quality assurance influence performance of NHIF projects moderately and that safety systems available influence performance of NHIF projects moderately lowly influence performance of NHIF projects.

Risk Acceptance

The study sought to analyze the influence of risk acceptance on the project performance at NHIF projects in Kenya. The study found that risk acceptance influence performance of NHIF projects in a great extent. The study found that reserve time, proper understanding of the risk by managers and training and skills enhancement to face risk influence performance of NHIF projects in a great extent. The study further showed that allowance resources influence performance of NHIF projects in a great extent. The study also found that taking no action on perceived risk moderately influence performance of NHIF projects while alternatives in the project were indicated to lowly influence performance of NHIF projects.

CORRELATION ANALYSIS

A correlation is a number between -1 and +1 that measures the degree of relationship between two variables. A positive value for the association implies a positive correlation while a negative value for the correlation implies a negative or inverse association. The Correlation coefficients are presented in Table 1.

Table 1: Correlation Matrix

		Performance	Risk prevention	Risk transfer	Risk control	Risk acceptance
Performance	Correlation	1				
	Sig. (2-tailed)	.				
Risk prevention	Correlation	0.836	1			
	Sig. (2-tailed)	0.02	.			
Risk transfer	Correlation	0.607	0.223	1		
	Sig. (2-tailed)	0.027	0.006	.		
Risk control	Correlation	0.731	0.243	0.497	1	
	Sig. (2-tailed)	0.005	0.002	0	.	
Risk acceptance	Correlation	0.701	0.333	0.42	0.531	1
	Sig. (2-tailed)	0.017	0.031	0.018	0.0	.

The analysis of correlation results between the Risk prevention and NHIF project performance demonstrate a positive coefficient of 0.836, with p-value of 0.020. The implies a significant result at α =5% and that if the Risk prevention increases it will have a positive influence on the NHIF project performance. The correlation results between Risk transfer and NHIF project performance also specifies the similar kind of outcome where the association coefficient is 0.607 and a p-value is 0.027 which significant at α = 5%. The outcomes also display that there is a positive correlation between Risk control and NHIF project performance with a correlation coefficient of 0.731, with a p-value of 0.005. Also, the findings reveal that there is an association between Risk acceptance and NHIF project performance with a correlation coefficient of 0.701 and a p-value of 0.017 was positive. Nevertheless, the positive relationship indicates that when the practice of the afore-mentioned factors is in place, the levels of NHIF project performance increase. This is in line with Potts (2015) who examine the significance of a money saving advantage examination on existing dangers in the undertaking recommending utilization of a delicate investigation to distinguish hazard parameters that may affect amid venture improvement and operational period and may prompt disappointment and changed focuses in the task life cycle.

MULTIPLE REGRESSION ANALYSIS

In addition, the researcher conducted a multiple regression analysis so as to test relationship among variables (independent) on NHIF projects performance. The researcher applied the statistical package for social sciences (SPSS V 17.0) to code, enter and compute the measurements of the multiple regressions for the study. The model summary gives data on the regression line's ability for justification of the total variation in the dependent variable (NHIF projects performance). The table below demonstrates how observed y-values are highly dispersed around the regression line.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.834	0.696	0.690	0.825

The adjusted R2 was found to be 0.690 inferring that variations on NHIF project performance which are explained by risk prevention, risk transfer, risk control and risk acceptance were 69% which implies that the other remaining 31% was explained by other uncovered factors in this study that affect NHIF project performance.

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and form a basis for tests of significance.

Table 3: ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	302.34	4	75.585	109.270	.000
	Residual	132.12	191	0.692		
	Total	434.46	195			

In predicting the effects of risk prevention, risk transfer, risk control and risk acceptance on NHIF project performance, the regression model test was found to be significant since p-value was less than 0.005 and the calculated F (109.270) was larger than the critical value of F=2.3719. This implies that the regression model was significant.

Another output from the multiple regression analysis was the table of regression coefficient which is a important output of regression analysis. This can be interpreted as the proportion of the variance in the dependent variable that is predictable from the independent variable. Table 4 shows the results.

Table 4: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.916	0.123		7.447	.000
Risk prevention	0.864	0.302	0.606	2.861	.007
Risk transfer	0.566	0.116	0.445	4.879	.000
Risk control	0.716	0.317	0.543	2.259	.029
Risk acceptance	0.654	0.236	0.531	2.771	.008

From Table 4, the regression model obtained was:

$$Y= 0.916+0.864X_1 + 0.566X_2 + 0.716X_3 + 0.654X_4$$

The results reveal that NHIF project performance will be 0.916 if all other factors are held constant. The study results also show that an increase in risk prevention will lead to a 0.864 increase in NHIF project performance if all other factors are held constant. This agrees with Thomas (2009) who notes that communication between venture head and administration is urgent to the fruitful execution of task.

Again, as shown by r=0.566, the study reveals that increase in risk transfer would lead to an increase in the NHIF project performance if all other factors are held constant. This is similar to Hillson (2015) who indicated that outsourcing to a gathering or even legally binding understandings to exchange hazard to outsider is a risk lessening method that moves the risk from the venture to another gathering

Further the study showed that if there was a unit change in risk control, a 0.716 increase in the NHIF project performance would be realized if all other factors are held constant. This is in line with Hillson (2015) who note that this is a venture of assets to decrease the risk on an undertaking. On universal tasks, establishments will frequently buy the assurance of a cash rate to decrease the risk related with variations in the currency exchange rate.

Also, a unit change in risk acceptance would lead to 0.654 increases in the NHIF project performance if other factors were constant. As indicated by Tummala and Schoenherr (2011), alleviation systems can incorporate possibility arranging, quality affirmation, detachment or movement of exercises and assets, Contract terms and conditions, Crisis administration and calamity recuperation designs.

Finally, the study showed that all variables were significant since p-values were less than 0.005 with risk prevention having the greatest effect on NHIF project performance followed by risk control then risk acceptance while risk transfer having the least effect on NHIF project performance. This concurs with Ayyub and Haldar (2007) who connected a strategy to figure levels of hazard acknowledgment. Hazard can be gathered by the result classes. Consistency including the cost and the size of hazard cutting back can be accomplished by figuring the hazard acknowledgment.

REGRESSION DIAGNOSTIC TESTS

The study conducted multicollinearity test, heteroscedasticity Test and autocorrelation Test. The findings for these tests were as presented below.

Further to the reliability tests a multicollinearity test was done at the pilot stage to ensure that the accepted independent variables did not exhibit collinearity amongst themselves. A situation in which there is a high degree of association between independent variables is said to be a problem of multi-collinearity which results into large standard errors of the coefficients associated with the affected variables. According to Mugenda and Mugenda (2012), multi-collinearity can occur in multiple regression models in which some of the independent variables are significantly correlated among themselves. In a regression model that best fits the data, independent variables correlate highly with dependent variables but correlate, at most, minimally with each other. This problem was solved by ensuring that there

was a large enough sample as multicollinearity is not known to exist in large samples. Multi-collinearity can also be solved by deleting one of the highly correlated variables and re-computing the regression equation.

Table 5: Multicollinearity

	Collinearity Statistics	
	Tolerance	**VIF**
Risk prevention	0.343	2.915
Risk transfer	0.781	1.280
Risk control	0.612	1.634
Risk acceptance	0.623	1.605

From table 5, the tolerances are all above 0.2. If a variable has collinearity tolerance below 0.2, it implies that 80% of its variance is shared with some other independent variables. The variance inflation factors (VIFs) are also all below 5. The VIF is generally the inverse of the tolerance. Multicollinearity is associated with VIF above 5 and tolerance below 0.2. The accepted variables were therefore determined not to exhibit multicollinearity. Since the accepted variables did not exhibit multi collinearity, they were fit to be used for analysis.

In the classical linear regression model, one of the basic assumptions is Homoskedasticity assumption that states as the probability distribution of the disturbance term remains same for all observations. That is the variance of each ui is the same for all values of the explanatory variable. However, if the disturbance terms do not have the same variance, this condition of nonconstant variance or non-homogeneity of variance is known as heteroscedasticity (Bedru & Seid, 2005). Accordingly, in order to detect the heteroscedasticity problems, Breusch-Pagan or Cook- Weisberg test was utilized in this study.

Table 6: Heteroscedasticity Test Results

Breusch-Pagan / Cook-Weisberg test	0.238

This test states that if the Breusch-Pagan value is less than 0.05, the data has heteroscedasticity problem and when the Breusch-Pagan value is greater than 0.05, the data has no heteroscedasticity problem. Thus, as shown in Table 6, there is no heteroscedasticity problem for this study since Breusch-Pagan value (0.238) is greater than 0.05.

The researcher tested the autocorrelation assumptions that imply zero covariance of error terms over time which means errors associated with one observation are uncorrelated with the errors of any other observation. Independence of error terms, which implies that observations are independent, was assessed through the Durbin-Watson test. Durbin Watson (DW) test check that the residuals of the models were not autocorrelated since independence of the residuals is one of the basic assumption of regression analysis. DW statistic ranges from zero to four where scores between 1.5 and 2.5 indicate independent observations (Garson, 2012). These results are shown in Table 7.

Table 7: Autocorrelation Test Results

Variables	Durbin Watson	Comment
Risk prevention	1.987	No autocorrelation
Risk transfer	2.084	No autocorrelation
Risk control	2.231	No autocorrelation
Risk acceptance	2.412	No autocorrelation

Table 7 shows that DW statistics ranged between 1.987 for project initiation processes and 2.412 for Compliance with legal framework. This confirms that all the research variables yielded DW values that were close to the recommended value of 2.0 (Garson, 2012) and thus the residuals of the empirical model are not autocorrelated.

CONCLUSIONS

The study concluded that risk prevention affects performance of NHIF projects in Kenya greatly and significantly. It was clear that risk prevention and performance of NHIF projects were significantly and positively related. There was a use of risk prevention by work plans, risk prevention by contingency and risk avoidance by alternative approaches which influenced performance of NHIF projects in a great extent. It was also found that risk avoidance by detailed planning had a great influence performance of NHIF projects.

The study concluded that risk transfer influence the project performance at NHIF projects in Kenya positively and greatly. Use of outsourcing, high cost of risk premium and stakeholder involvement in risk transfer were found to have greatly affected to performance of NHIF projects. Also use of insurance policy influenced performance NHIF projects in a great extent.

The study concluded that risk control influences performance at NHIF projects in Kenya significantly. The study deduced that use of signed contracts, risk control meetings and use of contingency plans influence performance of NHIF projects greatly. It was further established that risk mitigation crisis meetings influence performance of NHIF projects greatly with use of quality assurance having a moderate influence on the performance of NHIF projects moderately.

The study concluded that risk acceptance on the project performance at NHIF projects in Kenya positively and significantly. Proper understanding of the risk by managers and training and skills enhancement to face risk greatly influenced performance of NHIF projects. The study also found that taking no action on perceived risk moderately influence while alternatives in the project were indicated to lowly influence performance of NHIF projects.

Overall the study concluded that all the variable was significant where risk prevention had the greatest effect on NHIF project performance followed by risk control then risk acceptance while risk transfer had the least effect on NHIF project performance.

RECOMMENDATIONS

The current study strongly recommends that more research should be dedicated to the field of risk management in order to unearth even some more methods of risk management that can be influential in terms of helping project managers meet the deliverables that are desired within the set time and budget limits. Methodological approaches also need to be improved for example the sample size which needs to be scaled up in order to increase accuracy when making estimates and generalizations. The study recommends that the administration of NHIF should set up profitable procedures for opportune hazard identification and operative risk justification so as to guarantee that their financial performance is not impacted negatively. The study further suggests that the NHIF administration should endlessly assess their risk administration practices to see if they are still practical in the face of an uninterruptedly changing operating environment.

The study also recommends a need by management to control information technology in risk administration by connecting information systems that can perform risk valuation & measurement more precisely and for monitoring their risk administration programs for efficiency. This should be approved by training of workers on risk administration strategies of NHIF, with undoubtedly definite roles and responsibilities for risk administration. The study also suggests a need for NHIF to address commercial governance matters in their risk administration programs. Risk management programs that are supported by senior company officials are more likely to succeed. Lastly, the study acclaims that the administration of NHIF should put in place risk administration backgrounds such as ERM that fit to international best practice. This will guarantee that NHIF attain international standards and, therefore, become internationally competitive.

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