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Assessment of the Influence of Quadruple Constraint Management on Home Insurance Performance in Nairobi County, Kenya

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ABSTRACT

The purpose of the study was to establish the extent to which quadruple constraint management affects home insurance performance in Nairobi County, Kenya. The study was guided by the following research objectives: to establish the extent to which scope management, time management, cost management and quality management affect home insurance performance in Nairobi County, Kenya. Two theories of quadruple constraint management and performance were advanced. The study had four independent variables (scope management, time management, cost management and quality management), one intervening variable (gross domestic product growth rate) and one dependent variable (home insurance performance). Research methodology adopted was mixed methods. The study embraced an explanatory sequential research design. Target population comprised 185 respondents. Stratified random sampling method yielded a sample size of 135 respondents. A personally administered questionnaire and a structured interview were employed as research instruments. Data collected was analyzed using Statistical Package for the Social Sciences (SPSS) version 29. Research instruments were valid because the researcher sought advice from research experts including the supervisor. Research instruments were reliable because all test-retest reliability coefficients were greater than 0.7. Correlation analysis showed that scope management, time management, cost management and quality management were positively correlated with home insurance performance. The study concluded that the four project management competencies improved home insurance performance. Quadruple constraint management is paramount to the monitoring and evaluation process of home insurance performance. The study recommends that insurers, insureds, intermediaries and other industry players adopt quadruple constraint management in their activities to boost industry performance.

Keywords— Quadruple Constraint Management, Scope Management, Time Management, Cost Management, Quality Management, Home Insurance Performance

INTRODUCTION

Background to the Study

Many home insurance companies (home insurers) in Kenya have had poor performance. This is attributable to a small range of products, delayed payment of commissions to agents, loss of control over incurred claims and little understanding of insurance by the public. The insurers offer inadequate products, make insufficient realization of agents' contribution to the sector, do little analysis on incurred claims and conduct biased marketing. These attributes adversely affect profit. The companies become unable to raise adequate capital for supporting business growth. Insolvencies, imprudent underwriting, increased agent complaints and unsatisfactory customer service creep in and worsen the situation. These challenges discourage the sustainability of insurers [19].

The poor performance of the Kenyan home insurance industry has made insurers not to promptly pay valid claims and make small profits or losses. This ultimately has led to poor customer and shareholder satisfaction. Customer base has stagnated due to insurers not meeting their primary obligation of settling claims. Profit has not been reinvested due to insurers not meeting their secondary obligation of making profits. The industry has not focused on repackaging the products and improving claim settlement. Insurers have taken too long in settling valid claims, not settled valid claims, made small profits or suffered losses [18].

Projects are carried out to enhance the performance of organizations and to make the organizations meet business needs. Project management makes organizations plan, organize, coordinate and oversee resources to achieve the project objective. Several constraints limit the efficacious achievement of the objective: scope, time, cost, quality, human resource, risk, contract, communication and integration. Quadruple constraint is the interrelationship and trade-off involvement of four project constraints: scope, time, cost and quality [11].

Effective management of the quadruple constraint is crucial to the completion of an undertaking [33]. Scope, time, cost and quality are the most frequently employed project metrics. These four metrics are the major determinants of project success. Each project is limited by customer requirements (scope management), amount of time (time management), amount of money (cost management) and satisfaction of project needs (quality management). Successful organizations carefully monitor the combination of these constraints.

The performance of home insurance companies in Kenya depends on the extent to which the companies deal with scope management (range of products), time management (payment of commissions), cost management (control over incurred claims) and quality management (understanding of insurance by the public). Home insurance is the undertaking by a company to safeguard against loss of or damage to residential buildings, household contents and moveable personal items, and provide for compensation upon injury or death to domestic servants and members of the public where an insured is legally liable [13].

Statement of the Problem

The home insurance industry in Kenya has been performing poorly due to narrow spectra of products (scope of insurers), late payment of agents’ commissions (timeliness of insurers), failure to curb incurred claims (cost of insurers) and low insurance awareness (quality of insurers). The industry has instead focused on corporate clients, seminars for agents, gross direct premium and thin targeting of markets. These have led to the insurance companies having either small profits or losses. IRA has incessantly urged industry players to strategize on ways of solving the problem of poor performance [15]. This research delved into this problem and sought for solutions that would be recommended to the industry players.

The quadruple constraint is pivotal to effective management of projects. A study exploring strategies project managers use to reduce information technology project failures in the insurance industry noted that 65% of projects were unsuccessful because quadruple constraint management strategies were not employed. The study utilized quadruple constraint management strategies and found out that 75% of projects became successful. The success was attributed to the project tasks being carried out according to specifications, on time, within budget and as per needs. Knowledge of customer requirements (scope management), promptness in accomplishing tasks (time management), ability to curb expenses (cost management) and capability to satisfy needs (quality management) were recognized as factors crucial to the success of a venture [35].

The quadruple constraint is essential for successful closure of projects. An investigation assessing the strategic integration between agile and traditional project management approaches for a clear view on project closure in the insurance industry observed that 43% of projects experienced challenges since quadruple constraint management approaches were partially exploited. The investigation indicated that 18%

of projects failed since quadruple constraint management approaches were not exploited. The investigation effectively applied quadruple constraint management approaches and found out that 90% of projects became successful. Involvement of stakeholders (scope management), prioritization of activities (time management), estimation of outlays (cost management) and fulfilment of wants (quality management) were acknowledged as elements essential for successful project closure [31].

The study sought to establish whether the application of quadruple constraint management on the home insurance sector would improve performance of the sector. This research tried to find if broadening insurance services, promptly paying agents' commissions, curbing incurred claims and raising insurance awareness influence profitability of the insurers. It analyzed whether effective management of the quadruple constraint is beneficial to the insurance industry. The problem statement guiding the study was the extent to which quadruple constraint management affects home insurance performance in Nairobi County, Kenya.

Research Questions

The study attempted to provide answers to the following questions:

- To which extent does scope management affect home insurance performance in Nairobi County, Kenya?
- To which extent does time management affect home insurance performance in Nairobi County, Kenya?
- To which extent does cost management affect home insurance performance in Nairobi County, Kenya?
- To which extent does quality management affect home insurance performance in Nairobi County, Kenya?

Objectives of the Study

The objectives of this study were to:

- Establish the extent to which scope management affects home insurance performance in Nairobi County, Kenya.
- Establish the extent to which time management affects home insurance performance in Nairobi County, Kenya.
- Establish the extent to which cost management affects home insurance performance in Nairobi County, Kenya.
- Establish the extent to which quality management affects home insurance performance in Nairobi County, Kenya.

E. Assumptions of the Study

- The study assumed that the respondents would volunteer and spend time responding to the questionnaire and interview sincerely and uncoerced.
- The study also assumed that all participants would comprehend the language employed in the questionnaire and interview.
- The study assumed that serious unanticipated risks would not arise during the survey.

LITERATURE REVIEW

Empirical Literature

Quadruple constraint management is at the core of decision-making on home insurance performance. Insurance companies encounter the quadruple constraint of scope, time, cost and quality in their day-to-day activities. The insurers strive to improve performance by effectively managing the quadruple constraint. To effectively manage scope, insurance companies endeavour to broaden their services. To effectively manage time, insurers undertake to promptly paying agents' commissions. To effectively manage cost, insurance companies aim at curbing incurred claims. To effectively manage quality, insurers purpose to raise insurance awareness [13]. A number of investigations of quadruple constraint management on home insurance performance have been conducted.

Scope Management on Home Insurance Performance

[5] examined the application of customization and personalization in digital solutions of the non-life insurance market. Data was from the insurance companies in Lithuania, Latvia and Estonia for the period 2017 to 2020. Customization identifies with scope management as customization broadens the range of insurance services for different classes of society. The study indicated that customization gives customers a variety of insurance products to pick from suitable to their preferences. Customization filters the specific solutions offered by an insurer from the general solutions offered by the industry. The investigation noted that customization reduces the cost incurred by a customer in purchasing an insurance product due to the modern purchasing options via website and short message service. Customization promotes setting up of insurance schemes which have discounted premium, great acceptability and decreased administration unlike single policies. The research observed that customization lowers the time taken for insureds in seeking amendments to their policies. The findings demonstrated that customization positively correlated with performance of an insurance company. The study did not show whether insurers customized products using teams of employees or individual employees. This study examines usage of teams in customization of products because generation of ideas for product features by a team is more than by an individual.

Time Management on Home Insurance Performance

[24] assessed the influence of automated control system of insurance agent motivation on performance of an insurance company. Data was from the insurance market in Russia for the year 2018. Automated control system relates to time management as automated control system ensures prompt payment of commissions to agents. The investigation noted that automated control system uses computers to pay commission, yielding an efficient payment process. Automated control system utilizes a predetermined payment date, allowing agents to follow on policies not underwritten before the set date. The research observed that automated control system gives reports on staff handling commission payment, enabling an insurer to incentivize staff for prompt payments. The results signified that automated control system directly affected the efficiency of insurance agent activities, consequently boosting performance of an insurance company. The study did not reveal whether insurers assessed resource requirements for payment of commissions. This study explores assessment of resource requirements for payment of commissions which enables efficient allocation of resources needed for commission payment.

Cost Management on Home Insurance Performance

[4] studied the measures insurers follow to curb expenditures. Data was from the insurance market in Australia for the period 2007 to 2017. Control over incurred claims was picked as a vital element in monitoring expenditures. Control over incurred claims applies to cost management as control over incurred claims curbs the outlays from an insurance company. The research observed that control over incurred claims directs an insurance company to reject an outright bad risk before onboarding. Control over incurred claims guides an insurer to fix a cost on the risk based on exposures to various perils. The study indicated that control over incurred claims leads an insurance company to integrate warrants discouraging morale hazards. Control over incurred claims directs an insurer to terminate handling of a risk mid-term upon change of material facts without insured's advice to the insurer. The investigation noted that control over incurred claims steers an insurance company to change the cost of a risk upon renewal if new issues arise. The outcomes revealed that control over incurred claims positively influenced performance of an insurance company. The study did not demonstrate whether insurers identified resources for operation.

This study scrutinizes identification of resources for operation which facilitates prudent financial planning.

Quality Management on Home Insurance Performance

[29] examined challenges and opportunities regarding India's insurance sector. Data was from the insurance industry in India for the period 2001 to 2017. Insurance penetration increase stood out as a critical solution to the challenges. Insurance penetration increase identifies with quality management as insurance penetration increase reveals that the needs of the insureds are being satisfied. The study indicated that insurance penetration increase can be accomplished by insurers expanding into rural areas as insurance penetration is chiefly concentrated in urban areas. Insurance penetration increase may be achieved through insurance companies improving access to insurance products by adopting online means. The investigation noted that insurance penetration increase can be attained via industry reducing public sector dominance and boosting private participation as personal consumption is larger than government consumption. The findings demonstrated that insurance penetration increase positively correlated with customer base, consequently boosting performance of an insurance company. The study did not show whether insurers offered insurance products for all income levels. This study examines offering of insurance products for all income levels which enables insurers to tap into each class of the economy.

Theoretical Literature

The two theories of quadruple constraint management and performance were used in this study.

The theory of quadruple constraint management is a project management theory that espouses the project management square. The square is a major component of a project plan. It is of paramount importance to the monitoring and evaluation process. The square demonstrates the interrelationship and trade-off involvement of the four constraints: scope, time, cost and quality. The trade-offs imply that one side of the square cannot be adjusted without modifying other sides [9].

Successful project management is the attainment of project objectives at the desired performance level, with effective and efficient usage of assigned resources. The quadruple constraint enables one to plan projects, assess project risks and guide an organization to meet customer expectations. The organization can then bring forth its business objectives based on its properties and capabilities. This makes the organization to decipher advantages and disadvantages it is exposed to on a planned project. In turn, the organization can assess opportunities and threats it may face while executing the project tasks [41].

Effective management of the quadruple constraint improves an organization. This is because a project is an investment which involves delivering a product within specification, schedule, budget and need [30]. An organization needs to define the constraints affecting the project, product, future business environment and future organization. Such a definition enables an organization reach its objectives. Managing the constraints is vital in helping companies come up with limits that should not be crossed.

Scope Management

Quadruple constraint management theory through the scope management competency states that a project should meet all the requirements for completion of the assigned task. The theory further stipulates that scope assumes more importance than other project constraints. Its main application area is implementation of a working model for a project deliverable. This ensures release of worthy deliverables. Effective scope management enables all tasks of a project be executed as planned [39].

Development of an insurance product has to meet four requirements: insured, insurer, reinsurer and regulatory requirements. The product must solve problems of insureds. The product needs to be commercially viable to cater for the expenses an insurer incurs and yield some profit. The product ought to satisfy reinsurer regulations for the insurer to remain solvent through claim recovery. The project should follow regulatory guidelines for it to be approved into the market [10].

The theory of quadruple constraint management describes the need for insurance companies to identify scope constraints which affect performance of the insurers and dispenses approaches on how to address scope constraints. This study bases its discussion on this theory because the theory delves into the scope restraints of company scope and product scope which determine performance of insurance companies. Company scope designs and sort the resources of an insurer for execution of the daily tasks. Product scope plans and organizes the resources of an insurer for development and management of an insurance product [6].

Time Management

The theory of quadruple constraint management in view of the time management competency puts forth that a particular project should be completed on time. Its major application area is scheduling of a project. This promotes reduction in project duration [39].

Payment of commission by insurers must be timely. Intermediaries constitute the largest insurance distribution channel. Prompt disbursement of commission motivates agents and brokers to concentrate on approaching customers not following up on commission. Intermediaries save insurers time in selling products as intermediaries have a broader and deeper reach to customers than insurers. Intermediaries offer personalized services to customers as the frequency of intermediary-customer communication is higher than that of insurer-customer communication [10].

The theory of quadruple constraint management emphasizes the need for insurance companies to identify time constraints which influence performance of the insurers and gives methods on how to handle time constraints. This study establishes its discussion on this theory since the theory examines the time restraints of mandatory and discretionary commission payments which impact performance of insurance companies. Mandatory commission payment is an obligatory disbursement of commission where an insurer pays a sum of money to an intermediary upon selling a policy with the commission being proportional to the premium of a policy. Discretionary commission payment is an optional disbursement of commission where an insurer pays a bonus to an intermediary upon reaching a sales target with the commission being proportional to the overall premium in a portfolio of policies [6].

Cost Management

Quadruple constraint management theory in light of the cost management competency states that a given project should be completed within the approved budget. Its primary application area is allocating resources that are shared by concurrent tasks. The theory stresses on estimation of costs of resources for project completion. This allows for analysis of probable resource costs [39].

Settlement of an insurance claim has to meet four requirements: premium, peril, adjuster and excess requirements. The policy under which a claim is registered must have its premium fully paid. The claim needs to have arisen from a covered peril. An adjuster ought to be appointed for assessment of damage or loss and initiation of indemnification. The claim should be above the excess which is an amount of money an insured pays towards the total cost of a claim [10].

The theory of quadruple constraint management explains the need for insurance companies to identify cost constraints which affect performance of the insurers and offers strategies on how to solve cost constraints. This study grounds its discussion on this theory as the theory explores the cost restraints of excesses which determine performance of insurance companies. An excess is an amount of money an insured bears relative to the total cost of a claim. This makes an insured to observe due care of an insured property, preventing a future loss [6].

Quality Management

The theory of quadruple constraint management with regard to the quality management competency puts forth that a particular project should satisfy its needs. Its major application areas are identifying who the customers are, doing things right the first time and monitoring quality. Developments in quality management focus on customer satisfaction [39].

An insurance company fulfils needs of insureds in three phases: customer recognition, coverage disclosure and continuous customer engagement. Customer recognition encompasses an insurer appreciating a customer for choosing them as the risk carrier. Coverage disclosure entails an insurance company revealing to a customer the policy coverage, warranties and exclusions. Continuous customer engagement involves an insurer constantly communicating with a customer to find out whether the policy should be amended [10].

The theory of quadruple constraint management highlights the need for insurance companies to identify quality constraints which influence performance of the insurers and provides techniques on how to tackle quality constraints. This study rests its discussion on this theory considering the theory scrutinizes the quality restraints of compliance and continuous improvement which impact performance of insurance companies. Compliance deploys written guidelines on quality and conducts periodic compliance checks. It is administered by managers. This aims at mass change which may not result in improved processes. Continuous improvement employs constant evaluations of quality and performs perpetual compliance checks. It is handled by all employees. This focuses on incremental enhancements which yield improved processes [6].

Theory of Performance

The theory of performance describes performance as the production of results. The results are produced by a performer. The performer can be a person or an assemblage of persons participating in a collective endeavour. The development of performance is a journey which starts from under-performance, through non-performance and performance to over-performance. The level of performance illustrates the position in the journey [36].

Achievement of performance gives rise to five categories of results: increased quality, decreased cost, increased capability and capacity, increased knowledge and skills, and increased identity and motivation. Performance increases quality as results meet or exceed customer expectations. Performance decreases cost as financial resources needed to yield a result reduce. Performance increases capability and capacity as the ability to surmount more obstacles and produce more outputs rises. Performance increases knowledge and skills as the extent of understanding and expertise grows. Performance increases identity and motivation as people and organizations nurture their character and principles respectively [7].

An organization which conducts its business well sets performance standards and achieves them [27]. It is not only sufficient for an organization to set standards, but to also achieve those standards. An organization seeking to do well must adopt a culture of high performance. Such a culture advocates for transparency in conducting business and upholding of organizational norms and values. A highly performing organization becomes competitive.

In the world of business, performance is the achievement of pre-set accounting or economic objectives. These objectives are based on parameters such as inventory, payables, expense, product penetration and profit levels. The main indicators of performance in an accounting or economic industry are profitability and market share. Profitability is the difference between the purchase of distributed products and incurred expenses from operating and component costs. Market share is the part of a sector held by a company [2].

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The theory of performance describes the need for insurance companies to identify the type of company they belong to based on the level of performance. This study bases its discussion on this theory because the theory delves into existing, surviving, successful, take-off and resource-mature companies. An existing company concentrates on devising a product wanted by customers. The business struggles and suffers loss. A surviving company emphasizes that revenue should surpass costs. The business becomes sustainable and starts making profit. A successful company focuses on getting new ways of generating more income. The business starts to prosper and experiences additional growth. A take-off company stresses that more staff should be employed. The business becomes large and grows rapidly. A resource-mature company underscores innovating existing products. The business becomes established and enjoys stability [40].

Conceptual Framework

The major concepts that revolve round the influence of quadruple constraint management on home insurance performance in Nairobi County, Kenya as studied in the theoretical literature comprise:

1. Scope management
2. Time management
3. Cost management
4. Quality management
5. Home insurance performance

The above-mentioned tenets form a model consisting of four independent variables, one intervening variable and one dependent variable as shown in the conceptual framework diagram.

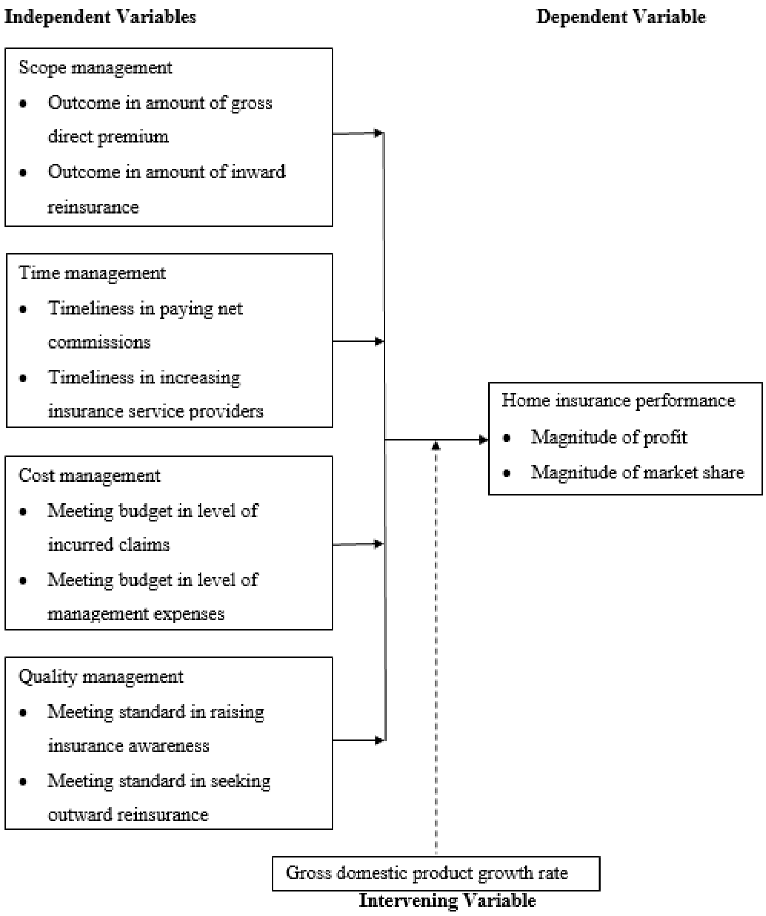

Fig. 1 Conceptual framework yielding a theoretical model of one dependent variable, four independent variables and one intervening variable.

RESEARCH METHODOLOGY

Research Methodology

The research methodology adopted by the study was mixed methods. This methodology merged quantitative and qualitative research methods in collecting, analyzing and interpreting data. The methodology was employed because it gave a superior comprehension of the research problem to a quantitative or qualitative research methodology on its own. Mixed methods was explanatory and exploratory. It enabled collection, analysis and interpretation of numeric and text data. This methodology not only explained and predicted phenomena, but also provided insight into the phenomena. The methodology offered the breadth of generalization and depth of understanding [25].

Research Design

The study embraced an explanatory sequential research design. This research design enabled collection and analysis of quantitative data first, then collection and analysis of qualitative data. The design was used as it utilized qualitative data to aid in the explanation of quantitative findings which required more exploration. The explanatory sequential research design analyzed relationships between the independent and dependent variables and predicted the dependent variable given the independent variables in an effort to answer the research questions through statistical analysis using correlation and regression. Furthermore, this design established the presence of common themes through content analysis [38].

Location of the Study

The survey was undertaken in Nairobi County, Kenya. The county is the most densely populated county, distinguished by multistory and single unit residential developments. Premium of home insurance in this county is KSH 1.4 billion, accounting for about 83.20% of Kenya’s home insurance premium. Nairobi County aims at effective scope management as the different problems of insureds have to be solved by a wide range of insurance products. The county endeavours for sound time management because the many insurance intermediaries must have their commission processed promptly. This county purposes for fruitful cost management since claims need to be curbed and unscrupulous money outflows need to be avoided. Nairobi County seeks for constructive quality management as insurers ought to make the public aware of insurance products and their benefits. The county strives for successful performance of home insurance because insurers should settle claims and make profits. These undertakings have made the home insurance sector yield a profit of KSH 142.65 million [14].

Target Population

The population elements of the study were all 37 insurers which conduct home insurance business. The target population was the corporate social responsibility, finance, marketing, reinsurance and underwriting managers from each insurer. This totalled to 185 respondents.

Sampling Procedures and Techniques

Stratified random sampling, a probability sampling method, was employed as the most suitable sampling method. This method had the target population broken down into identifiable groups (strata) of homogeneous elements and random selections made from each group. The population was first segregated into three homogenous groups: top, middle and bottom tiers based on total premium underwritten. Segregation of the population into the three strata assured that the selected sample was illustrative of the target population. Nine insurance companies were then randomly selected from each stratum. Random selection of the sample subjects greatly reduced sampling bias, offering great generalizability of the findings to the target population. Stratified random sampling was the most appropriate sampling method because it guarantees that each stratum is sufficiently represented. It is used when there is much variation in a population [20].

Sample Size

The target population was first separated into the three groups: top, middle and bottom tiers. Nine insurance companies were then randomly selected from each tier. 27 companies were sampled out. 5 managers from each sampled insurer thus constituted the sample size of 135 respondents. A sample proportion of 72.97% was used to determine sample representation from each role of management.

Twenty-seven insurance companies in Nairobi County, Kenya, were chosen as the sample subjects for the study. They were AIG, APA, Britam General, CIC General, Corporate, Fidelity Shield, GA, Geminia, ICEA Lion General, Intra-Africa Assurance, Jubilee, Kenindia, Kenya Orient, Madison General, Mayfair, Metropolitan Cannon General, Monarch, MUA, Occidental, Pacis, Pioneer General, Resolution, Saham, Sanlam, Takaful, Tausi and UAP Insurance Companies.

Construction of Research Instruments

The study used two primary data collection methods: questionnaire and interview. A personally administered questionnaire was used as a data collection technique since it made collection of all filled responses possible in a short time span. Furthermore, the technique enabled the respondents to seek on-the-spot clarifications regarding the questions. Moreover, this technique was less time-consuming and less expensive. The questionnaire was structured around closed-ended questions. The questionnaire adopted the Likert scale which enabled coding of data into a five-point range. This facilitated collection of quantitative data. The researcher administered the questionnaire to the sample subjects in person. The coding allowed analysis of collected data [32].

A structured interview was employed as an additional data collection technique as it put the questions in a similar format and sequence to each respondent. Furthermore, the technique enabled the researcher to gather detailed information. Moreover, this technique ensured that the respondents comprehend the questions due to the conversation between the interviewer and interviewees. The interview was structured around open-ended questions. This facilitated collection of qualitative data. The researcher administered the interview to the sample subjects face to face. The interview allowed analysis of content [38].

Testing for Validity and Reliability

Piloting of the research instruments for validity and reliability was conducted by forwarding the questionnaires to and conducting interviews with 15 respondents who did not participate in the actual research. One insurance company was randomly selected from each of the top, middle and bottom tiers. 3 companies were picked. 5 managers from each insurer picked thus constituted the pilot size of 15 respondents. This number of respondents was deemed to be representative for testing validity and reliability of the research instruments as it captured the information from all the three tiers of insurance companies. Validity was determined by content validity. To determine content validity, the study defined the area of interest and sought advice from research experts. Reliability was determined by the test-retest reliability. To determine test-retest reliability, the study computed the test-retest reliability coefficient.

Data Analysis Techniques and Procedures

The study generated qualitative and quantitative data. Qualitative data was analyzed from the content of the responses to the interview with the presence of common themes being established. Quantitative data was analyzed by use of inferential statistics generated from the responses to the questionnaire. The questionnaires were first collected. The questionnaires were then verified and examined to check whether they were duly filled. Data was entered into a statistical software, Statistical Package for the Social Sciences (SPSS) version 29. Numerical values were assigned to the ordinal dependent variable (home insurance performance) and four ordinal independent variables (scope management, time management, cost management and quality management). One intervening variable (gross domestic product growth rate) was used as the control variable. Data was analyzed using ordinal logistic regression. Results were interpreted in a bid to answer the research questions. Conclusions were drawn based on the findings.

Ordinal logistic regression was utilized as the statistical analysis method because it models the relationship between an ordinal dependent variable and one or more independent variables [20]. This facilitated examining the extent to which quadruple constraint management affects home insurance performance in Nairobi County, Kenya using correlation and regression.

As portrayed by the conceptual framework, the theoretical model had one dependent variable (Л), four independent variables (V, W, X, Y) and one intervening variable (Z). This yielded a multiple regression model.

The theoretical model was:

Л=f (V, W, X, Y) Z

Where Л = Home insurance performance

V = Scope management

W= Time management

X = Cost management

Y = Quality management

Z = Gross domestic product growth rate

The regression model for the study was thus:

$Л_i=b_0+b_1v_i+b_2w_i+b_3x_i+b_4y_i$

Where b_o = constant

b_1 = coefficient of v

b_2 = coefficient of w

b_3 = coefficient of x

b_4 = coefficient of y

$_i$ = cross-sectional identifier for an insurance company

This was a cross-sectional data representation of the ordinal logistic regression. The study had a dataset of 135 observations, drawn from 5 respondents from each sampled company. The 135 observations exceeded the 30-observation mark for conducting a regression [28].

Observations = 5 * 27

= 135

Ethical Considerations

The respondents were introduced to the survey by a letter from the institution where the researcher is a student. The contents of the letter were then delineated, the questionnaires given out and the interviews carried out. The participants thus had a clear understanding of the study. All participants were assured

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that the study was solely scholarly and that their responses remained confidential. All relevant authorities were informed of the study. Participation was voluntary.

RESEARCH FINDINGS AND DISCUSSIONS

Response Rate, Validity and Reliability Test Results

Response Rate for Questionnaire

A total of 135 managers from the sampled insurers were requested to fill the questionnaire. The researcher directed the personally administered questionnaire to the 135 respondents who comprised the corporate social responsibility, finance, marketing, reinsurance and underwriting managers. 130 managers responded to the questionnaires within the timelines. This resulted in a response rate of 96.30% as indicated by table 1. The response rate was achieved through follow-ups which showed the respondents that their participation was crucial. A response rate of 70% and above is adequate for analyzing data and drawing inferences [8]. The response rate of 96.30% was adequate.

Table I Response Rate for Questionnaire

Response	Frequency	Percentage
Filled questionnaires	130	96.30
Unfilled questionnaires	5	3.70
Total	135	100

Response Rate for Interview

A total of 135 managers from the sampled insurers were requested to be interviewed. The researcher directed the structured interview to the 135 respondents who comprised the corporate social responsibility, finance, marketing, reinsurance and underwriting managers. 105 managers responded to the interview guides within the timelines. This resulted in a response rate of 77.78% as indicated by table 2. The response rate was achieved through multiple attempts at interviews which showed the respondents that their participation was crucial. A response rate of 70% and above is adequate for analyzing data and drawing inferences [8]. The response rate of 77.78% was adequate.

Table II Response Rate for Interview

Response	Frequency	Percentage
Successful interviews	105	77.78
Unsuccessful interviews	30	22.22
Total	135	100

Validity and Reliability Test Results

The validity of the research instruments was guaranteed by seeking advice from research experts including the supervisor. The research instruments offered sufficient coverage of the research objectives. Content validity was thus assured.

The reliability of the research instruments was determined by the test-retest reliability. From the results, the test-retest reliability coefficient on scope management was 0.87. Time management had a test-retest reliability coefficient of 0.88. The test-retest reliability coefficient on cost management was 0.91. Quality management had a test-retest reliability coefficient of 0.86. This showed that the research instruments for assessment of the influence of quadruple constraint management on home insurance performance in Nairobi County, Kenya were reliable because all test-retest reliability coefficients were greater than 0.7 as depicted by table 3.

Table III Reliability Test Results

Variable	Test-Retest (95% Confidence Level)
Scope management	0.87 (0.85, 0.89)
Time management	0.88 (0.87, 0.89)
Cost management	0.91 (0.91, 0.91)
Quality management	0.86 (0.83, 0.89)

Discussion of Individual Objective Results

Scope Management

The study established the best strategy insurance companies adopt to broaden range of insurance services. 20.00%, 7.69%, 13.85%, 26.15% and 32.31% of the respondents affirmed that increase of products, repackaging of products, opening of branches, focus on partnerships and flexibility in operations respectively was the best strategy as depicted by table 4. This demonstrates that flexibility in operations was the best strategy. This is consistent with [26] who commented that flexibility in operations eases the purchase of insurance products, consequently broadening range of insurance services. Flexibility in operations enables the youthful populace to utilize modern purchasing options via website and short message service. Digital transformation positively correlated with performance of the insurance sector. Flexibility in operations relates to digital transformation. Adaptability of processes is a critical part of digital revolution.

Table IV Strategies to Broaden Range of Insurance Services

Strategy	Frequency	Percentage
Increase of products	26	20.00
Repackaging of products	10	7.69
Opening of branches	18	13.85
Focus on partnerships	34	26.15
Flexibility in operations	42	32.31
Total	130	100

The study ascertained the extent to which scope management affects profit in Nairobi County, Kenya. The study pointed out that 3.85%, 85.38% and 10.77% chose moderate extent, great extent and very great extent respectively as shown by table 5. This signifies that scope management affected home insurance performance to a great extent. [16] similarly stated that an increase in gross direct premium or inward reinsurance causes an increase in profitability with other factors kept constant. Scope management gauges requirements for completion of activities in insurance companies. Scope management positively correlated with development of insurance companies. Scope management relates to growth of insurance business. Scope management is an important determinant of developing insurance business.

Table V Extent to which Scope Management Affects Home Insurance Performance

Extent	Frequency	Percentage
No extent	0	0
Little extent	0	0
Moderate extent	5	3.85
Great extent	111	85.38
Very great extent	14	10.77
Total	130	100

The interviewees were asked to describe how their companies manage scope. From the findings, a great number of interviewees commented that their companies provide a wide range of insurance products. Insureds have diverse problems which touch on different segments of households: residential buildings, household contents, moveable personal items, domestic servants and liabilities to the public. Each problem has an inclination to a particular segment. These problems cannot be solved by a single product but rather an array of products.

The interviewees were asked to discuss how scope management influences home insurance performance. From the results, a large number of interviewees indicated that effective scope management enables an insurance company to reach out to many customers in need of home insurance. This increases gross direct premium. Company revenue consequently increases. This brings about a boost in home insurance performance.

Time Management

The best strategy insurance companies take up to ensure prompt payment of commissions to agents was assessed. 33.85%, 6.15%, 20.00%, 13.08% and 26.92% of the respondents asserted that computerization of payment, setting of pay dates, reward for prompt payments, increase of staff and use of diverse payment methods respectively was the best strategy as evinced by table 6. This illustrates that computerization of payment was the best strategy. This is in agreement with [17] who indicated that computerization of payment enables the operationalization of commission processing, hence motivating prompt payment of commissions. Computerization of payment enables quick disbursement of commissions. Channel distribution positively correlated with service delivery in insurance firms. Computerization of payment relates to channel delivery. Automation of payment is a critical part of channel delivery.

Table VI Strategies to Ensure Prompt Payment of Commissions

Strategy	Frequency	Percentage
Computerization of payment	44	33.85
Setting of pay dates	8	6.15
Reward for prompt payments	26	20.00
Increase of staff	17	13.08
Use of diverse payment methods	35	26.92
Total	130	100

The study established the extent to which time management affects profit in Nairobi County, Kenya. The study affirmed that 3.85%, 8.46% and 87.69% chose moderate extent, great extent and very great extent respectively as depicted by table 7. This demonstrates that time management affected home insurance performance to a very great extent. This is consistent with [34] who commented that timely paying net commissions or increasing insurance service providers causes an increase in profitability with other factors kept constant. Time management gauges timely completion of activities in insurance companies. Time management positively correlated with motivating intermediaries. Time management relates to growth of insurance business. Time management is an important determinant of incentivizing intermediaries.

Table VII Extent to which Time Management Affects Home Insurance Performance

Extent	Frequency	Percentage
No extent	0	0
Little extent	0	0
Moderate extent	5	3.85
Great extent	11	8.46
Very great extent	114	87.69
Total	130	100

The interviewees were asked to explain how their companies manage time. From the outcomes, a majority of interviewees mentioned that their companies promptly process commissions for insurance intermediaries. This is because intermediaries channel the bulk of home insurance business in comparison with direct clients. Intermediaries have a wider reach to customers than insurance companies. Moreover, intermediaries give more personalized services to customers than insurers.

The interviewees were asked to illustrate how time management influences home insurance performance. From the findings, most interviewees remarked that successful time management makes an insurer to swiftly deal with advice and requests from insurance investigators, insurance surveyors, loss adjusters, claims settling agents and risk managers. Their advice and requests are vital in speedy claim handling and risk mitigation with regard to home insurance. Fast claim stewardship attracts many customers, hence increasing the market share. This causes an improvement in home insurance performance.

Cost Management

The study examined the best strategy insurance companies abide by to maintain adequate control over expenditures. From the findings, 16.15%, 25.38%, 23.08%, 16.92% and 18.46% of the respondents confirmed that acceptance or declination of a risk, charging of adequate premium, incorporation of appropriate clauses, continuation or discontinuation of a cover and adjustment of the premium respectively was the best strategy as portrayed by table 8. This reveals that charging of adequate premium was the best strategy. This is in line with [1] who mentioned that charging of adequate premium encourages the prudence of underwriting, thereby prompting adequate control over expenditures. Charging of adequate premium enables an insurer to attach insurance costs proportional to risk exposures. Prudent underwriting positively correlated with profitability of the insurance sector. Charging of adequate premium relates to prudent underwriting. Pricing of commensurate premium is a critical part of discreet risk assessment.

Table VIII Strategies to Maintain Adequate Control over Expenditures

Strategy	Frequency	Percentage
Acceptance or declination of a risk	21	16.15
Charging of adequate premium	33	25.38
Incorporation of appropriate clauses	30	23.08
Continuation or discontinuation of a cover	22	16.92
Adjustment of the premium	24	18.46
Total	130	100

The extent to which cost management affects profit in Nairobi County, Kenya was assessed. The study asserted that 17.69% and 82.31% chose great extent and very great extent respectively as evinced by table 9. This illustrates that cost management affected home insurance performance to a very great extent. This is in agreement with [28] who indicated that an increase in incurred claims or management expenses causes a decrease in profitability with other factors kept constant. Cost management gauges completion of activities within the approved budget. Cost management positively correlated with profitability of insurance companies. Cost management relates to handling of insurance expenses. Cost management is an important determinant of successful insurance business.

Table IX Extent to which Cost Management Affects Home Insurance Performance

Extent	Frequency	Percentage
No extent	0	0
Little extent	0	0
Moderate extent	0	0
Great extent	23	17.69
Very great extent	107	82.31
Total	130	100

The interviewees were asked to describe how their companies manage cost. From the results, the bulk of interviewees stated that their companies aim at controlling claims. In the past, home insurance companies undercut their premiums to attract more customers. This resulted in insurers selling their assets instead of using premiums to pay claims. Currently, insurers charge adequate premium. This upholds the financial soundness of insurance companies to settle claims.

The interviewees were asked to discuss how cost management influences home insurance performance. From the outcomes, a great number of interviewees commented that sound cost management leads an insurance company to integrate excesses hindering morale hazards. Individuals may not sufficiently protect their property provided that insurance is arranged. Excesses impel insureds to properly look after insured properties. This averts future losses, thereby lowering outlays from an insurer. This culminates in an increase in home insurance performance.

Quality Management

The best strategy insurance companies employ to satisfy needs of insureds was evaluated. From the results, 25.38%, 13.08%, 35.38%, 19.23% and 6.92% of the respondents made out that broadcasting of insurance benefits, opening of rural branches, involvement in corporate social responsibility events, rewarding of customers and gathering of information about customer preferences respectively was the best strategy as represented by table 10. This shows that involvement in corporate social responsibility events was the best strategy. [21] likewise remarked that involvement in corporate social responsibility events facilitates the awareness of insurance companies, therefore spurring needs of insureds. Involvement in corporate social responsibility events enables insurers to sensitize the populace about insurance benefits. Raising public awareness positively correlated with insurance penetration rate. Involvement in corporate social responsibility events relates to raising public awareness. Participation in community activities is a critical part of increasing public perception.

Table X Strategies to Satisfy Needs of Insureds

Strategy	Frequency	Percentage
Broadcasting of insurance benefits	33	25.38
Opening of rural branches	17	13.08
Involvement in corporate social responsibility events	46	35.38

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Broadcasting of insurance benefits	33	25.38
Opening of rural branches	17	13.08
Involvement in corporate social responsibility events	46	35.38
Rewarding of customers	25	19.23
Gathering of information about customer preferences	9	6.92
Total	130	100

The study examined the extent to which quality management affects profit in Nairobi County, Kenya. From the findings, 8.46%, 90.00% and 1.54% confirmed little extent, moderate extent and great extent respectively as portrayed by table 11. This reveals that quality management affected home insurance performance to a moderate extent. This is in line with [37] who mentioned that an increase in insurance awareness or outward reinsurance causes an increase in profitability with other factors kept constant. Quality management gauges satisfaction of the needs for which a particular task was undertaken. Quality management positively correlated with insurance penetration. Quality management relates to acceptance of insurance products. Quality management is an important determinant of improving insurance perception.

Table XI Extent to which Quality Management Affects Home Insurance Performance

Extent	Frequency	Percentage
No extent	0	0
Little extent	11	8.46
Moderate extent	117	90.00
Great extent	2	1.54
Very great extent	0	0
Total	130	100

The interviewees were asked to explain how their companies manage quality. From the findings, a large number of interviewees indicated that their companies endeavour to educate people on insurance products and their benefits. Furthermore, their companies strive to take part in corporate social responsibility activities and explain to the society the importance of insurance. Increased insurance awareness enables individuals to make well-informed decisions about insurance purchases. Additionally, increased insurance awareness empowers individuals to be active in improving services offered by insurers.

The interviewees were asked to illustrate how quality management influences home insurance performance. From the results, a majority of interviewees mentioned that competent quality management steers an insurance company to constantly evaluate quality. Continuous checks on compliance are conducted. An insurer focuses on incremental improvements, therefore resulting in enhanced processes. This gives rise to a motivation in home insurance performance.

Home Insurance Performance

The best principle insurance companies apply to achieve their objectives was ascertained. The study pointed out that 22.31%, 25.38%, 30.77% and 21.54% of the respondents chose recognition and rewarding of staff, alignment of goals at different levels, articulation of strategies and utilization of metrics respectively to be the best principle as shown by table 12. This signifies that articulation of strategies was the best principle.

[3] similarly stated that articulation of strategies promotes the understanding of company mission, thus stimulating achievement of objectives. Articulation of strategies enables insurers to explicitly state their proposed actions. Firm-specific factors positively correlated with performance of insurance companies. Articulation of strategies relates to firm-specific factors. Expression of plans is a critical part of company-focus factors.

Table XII Principles to Achieve Objectives

Principle	Frequency	Percentage
Recognition and rewarding of staff	29	22.31
Alignment of goals at different levels	33	25.38
Articulation of strategies	40	30.77
Utilization of metrics	28	21.54
Total	130	100

The level of yearly profit insurance companies attained in Nairobi County, Kenya was evaluated. From the results, 25.38%, 33.08%, 22.31%, 7.69% and 11.54% made out below 0, 0-10,000,000, 10,000,001-20,000,000, 20,000,001-30,000,000 and 30,000,001 and above respectively as represented by table 13. A majority of insurers made small profits. This denotes that most insurance companies in Nairobi County, Kenya experienced slightly good performance. [22] likewise remarked that a large number of insurers end up having small profits while executing their primary role of promptly paying valid claims. Performance gauges making of profit. Profitability positively correlated with accomplishment of predefined objectives. Profit relates to the difference between revenue and expenses. Profit is an important determinant of measuring the efficiency of an insurance company in its activities.

Table XIII Yearly Profit

Yearly Profit	Frequency	Percentage
Below 0	33	25.38
0-10,000,000	43	33.08
10,000,001-20,000,000	29	22.31
20,000,001-30,000,000	10	7.69
30,000,001 and above	15	11.54
Total	130	100

The amount of market share insurance companies achieved in Nairobi County, Kenya was ascertained. The study pointed out that 40.77%, 15.38%, 16.92%, 11.54% and 15.38% confirmed that 0-1.50, 1.51-3.00, 3.01-4.50, 4.51-6.00 and 6.01 and above was obtained respectively as shown by table 14. The bulk of insurers achieved little market share. This signifies that a large number of insurance companies in Nairobi County, Kenya had marginally penetrated the market. [12] similarly stated that many insurers turn out narrowly convincing the public to purchase their products. Performance gauges raising of market share. Market dominance positively correlated with accomplishment of predefined objectives. Market share relates to the portion of a sector held by a company. Market share is an important determinant of measuring the relevance of an insurance company in the market.

Table XIV Market Share

Market Share	Frequency	Percentage
0-1.50	53	40.77
1.51-3.00	20	15.38
3.01-4.50	22	16.92
4.51-6.00	15	11.54
6.01 and above	20	15.38
Total	130	100

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Inferential Statistics

The study had four independent variables, one intervening variable and one dependent variable. The four independent variables were: scope management, time management, cost management and quality management. The intervening variable was gross domestic product growth rate. The dependent variable was home insurance performance.

Correlation Analysis

The study embarked on correlation analysis to scrutinize the association between scope management, time management, cost management and quality management, and home insurance performance. Pearson moment correlation analysis was carried out to obtain the coefficient of correlation, denoted by r. This coefficient ranged from -1?r?1. The confidence level was 95% or significance level was 0.05. A correlation matrix was determined as revealed by table 15.

Table XV Correlation Matrix

Correlation Coefficients					
Scope Management	Time Management	Cost Management	Quality Management	Home Insurance Performance	
1.000	-0.202	-0.236	0.041	0.185	Scope Management Sig $9.5e^{-8}$
	1.000	0.319	0.192	0.491	Time Management Sig $2.68e^{-10}$
		1.000	0.157	0.509	Cost Management Sig $6.48e^{-10}$
			1.000	0.455	Quality Management Sig $3.34e^{-8}$
				1.000	Home Insurance Performance

It was observed that a weak positive correlation between scope management and home insurance performance existed with a correlation coefficient, r=0.185. The correlation was statistically significant, $p=9.5e^{-8}<0.05$ at 95% confidence level. There was a moderate positive correlation between time management and home insurance performance with a correlation coefficient, r=0.491. The correlation was statistically significant, $p=2.68e^{-10}<0.05$ at 95% confidence level. It was noted that a moderate positive correlation between cost management and home insurance performance existed with a correlation coefficient, r=0.509. The correlation was statistically significant, $p=6.48e^{-10}<0.05$ at 95% confidence level. There was a moderate positive correlation between quality management and home insurance performance existed with a correlation coefficient, r=0.455. The correlation was statistically significant, $p=3.34e^{-8}<0.05$ at 95% confidence level.

Regression Analysis

Regression analysis was carried out to examine the proportional variation of the independent variables on the dependent variable. The study obtained the coefficient of determination, denoted by R^2. The coefficient ranged from 0? R^2?1. The coefficient of determination was established as shown by table 16.

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Table XVI Coefficient of Determination

R^2	Adjusted R^2	S.E. of Regression
0.6284	0.6165	0.0553

An R^2 of 0.6284 pointed out that there was a variation of 62.84% in the dependent variable due to a unit change in the independent variables. Similarly, an adjusted R^2 of 0.6165 revealed that there was a variation of 61.65% in the dependent variable due to a unit change in the independent variables, taking into account the number of independent variables. This is in agreement with [23] who indicated that effective management of the quadruple constraint is an indispensable tool to the success of projects. Before 2015, project managers in the construction industry of South Africa disregarded sound management of the quadruple constraint. This led to massive failures in construction projects. The success rates of the projects were 3% never, 48% rarely, 13% sometimes, 23% mostly and 13% always successful. From 2015, competent management of the quadruple constraint has proved to be the pinnacle of every construction project. The study highlights that the success rates have greatly improved to 63% always, 23% mostly, 11% sometimes, 3% rarely and 0% never successful.

Analysis of variance (ANOVA) was carried out to find out the goodness of fit of the model as listed in table 17.

Table XVII Analysis of Variance

Analysis of Variance	Sum of Squares	df	Mean Square	F	Sig
Regression	0.647	4	0.162	52.835	$5.47e\text{-}^{26}$
Residual	0.383	125	0.003		
Total	1.030	129	0.008		

From the findings in table 22, the total variance (1.030) was the sum of the variation explained by the independent variables and the variation not explained by the independent variables. Additional findings revealed that $F_{cal}=52.835>F_{cri}=0.428$, $p=5.47e\text{-}^{26}<0.05$. This meant that there existed a significant goodness of fit of the model $Ⱥ_i=b_0+b_1v_i+b_2w_i+b_3x_i+b_4y_i+e_i$.

Coefficient analysis was conducted to determine the nature and magnitude of the influence of the independent variables on the dependent variable. The study obtained the regression coefficients, denoted by b. The regression coefficients were as indicated by table 18.

Table XVIII Coefficients of Regression

Regression	Coefficient	Std. Error	t	Sig
Constant	-3.139	0.105	?29.94	$7.32e^{-59}$
Scope management	0.086	0.014	6.391	$2.96e^{-9}$
Time management	0.073	0.011	6.392	$2.95e^{-9}$
Cost management	0.101	0.014	7.311	$2.78e^{-11}$
Quality management	0.090	0.016	5.559	$1.57e^{-7}$

Therefore, the regression model was:

$Ң_i = -3.139 + 0.086v_i + 0.073w_i + 0.101x_i + 0.090y_i + e_i$

The regression results revealed $b_0 = -3.139$ which was the constant. This predicted the value of home insurance performance at ?3.139 with scope management, time management, cost management and quality management kept constant at zero (0). The regression results evinced that scope management had a positive influence on home insurance performance as shown by $b_1=0.086$, $p=2.96e^{-9}<0.05$, $t=6.391$. The inference was that a unit increase in scope management caused an increase in home insurance performance by 0.086. The regression results also demonstrated that time management had a positive influence on home insurance performance as shown by $b_2=0.073$, $p=2.95e^{-9}<0.05$, $t=6.392$. The inference was that a unit increase in time management caused an increase in home insurance performance by 0.073. The regression results revealed that cost management had a positive influence on home insurance performance as shown by $b_3=0.101$, $p=2.78e^{-11}<0.05$, $t=7.311$. The inference was that a unit increase in cost management caused an increase in home insurance performance by 0.101. The regression results further indicated that quality management had a positive influence on home insurance performance as shown by $b_4=0.090$, $p=1.57e^{-7}<0.05$, $t=5.559$. The inference was that a unit increase in quality management caused an increase in home insurance performance by 0.090.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study explored the influence of quadruple constraint management on home insurance performance in Nairobi County, Kenya so that the findings could be considered in development of effective intervention techniques. The first objective of this study was to establish the extent to which scope management affects home insurance performance in Nairobi County, Kenya. The regression results showed that scope management had a positive influence on home insurance performance. The second objective of this study was to assess the extent to which time management affects home insurance performance in Nairobi County, Kenya. The regression results demonstrated that time management had a positive influence on home insurance performance. The third objective of this study was to examine the extent to which cost management affects home insurance performance in Nairobi County, Kenya. The regression results revealed that cost management had a positive influence on home insurance performance. The fourth objective of this study was to investigate the extent to which quality management affects home insurance performance in Nairobi County, Kenya. The regression results indicated that quality management had a positive influence on home insurance performance.

The study points out that scope management, time management, cost management and quality management are paramount to the monitoring and evaluation process of home insurance performance. The study contributes to knowledge in the area of quadruple constraint management and home insurance performance in several ways. The study makes a contribution to empirical literature by concentrating on the association between combined project constraints and home insurance performance. Previous empirical studies zeroed in on the association between individual project constraints and insurance performance. The study further contributes to theoretical literature by seconding the proposition that effective quadruple constraint management boosts completion of insurance tasks according to specifications, on time, within budget and as per needs. The study additionally makes a contribution to quadruple constraint management in that the study has not only promoted an intricate conceptual framework of quadruple constraint management on home insurance performance, but also tested it.

Recommendations

The study recommends that various authorities, service users or beneficiaries and other stakeholders employ quadruple constraint management in their day-to-day activities. The study additionally recommends that the Insurance Regulatory Authority, Association of Kenya Insurers, Association of Insurance Brokers of Kenya (AIBK) and Insurance Institute of Kenya (IIK) adopt quadruple constraint management in regulating and supervising insurance activities to boost performance of the insurance industry. The study further recommends that insurance companies utilize quadruple constraint management in executing their primary and secondary activities of settling claims and making profits respectively. This will make the public and investors gain confidence in insurers, and in turn, improve performance of the insurance companies. The study also recommends that insurance agents, insurance brokers, insurance investigators, motor assessors, insurance surveyors, loss adjusters, claims settling agents and risk managers apply quadruple constraint management in offering their support services to the industry. This will promote development of sound insurance practices, and in turn, stimulate performance of the insurance sector. The study moreover recommends that a more detailed study be done on quadruple constraint management to appreciate the intricacies of quadruple constraint management. The study further recommends that supplementary researches related to this survey be carried out in order to develop the literature on the association between quadruple constraint management and home insurance performance. The study additionally recommends that studies be conducted on other sectors of the economy in respect of quadruple constraint management in an attempt to broaden the application of quadruple constraint management.

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