# EFFECT OF OPERATIONS MANAGEMENT STRATEGIES ON THE PERFORMANCE OF INSURANCE COMPANIES IN KENYA

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES, UNIVERSITY OF NAIROBI**

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# DECLARATION

This research project report is my original work and has not been presented or examined for an award of a degree in this or any other university.

Signature Date: 16th November 2021

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This research project report has been submitted with my approval as the university supervisor.

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It is with much gratitude that I render this research paper upon its successful completion. I have given much effort and time towards the study but I do not regret any of it as I have come out at the end of the exercise having learnt so much. The research cemented my understanding of the studies I have received both through classwork, peer research, personal studies, and practical work. The research also helped me to engage numerous people in different job levels, organizations, backgrounds, ideologies, perceptions, and approaches. As a result, it improved my social skills that are fundamental in my career and life in general. Also, I got to learn how to approach matters differently in regards to the ambience presented. All these factors have enriched my knowledge wealth in the marketplace. I have also caught up with much information regarding the insurance industry in Kenya, its strengths, weaknesses, and potential while still acquiring education on how the industry runs and performs. The lessons gathered have surely enriched my understanding of the sector and even wider, the workings of industries in Kenya and applications of policies from top government offices, to top organizational offices, and the general workforce all towards the attainment of better performance, profits, and customer, workers, and stakeholder satisfaction. The exercise has been successful in many ways. Completion of this research was made possible by the following. Firstly, the Grace of God for the presence and strength throughout the project until its successful completion. Secondly, the support, prayers, and consistent push from my family and friends who wanted no less than my completion of the research in flying colours. Lastly, Dr. Job Mwanyota, my supervisor at the least but at the most my anchor, supporter, and disciplinarian for his instructions throughout the project. Dr. Mwanyota ensured a

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# DEDICATION

I dedicate this work to my family for believing in me and encouraging me to always be at my best. Your sacrifices have made pursuing my MBA a possibility.

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# ABBREVIATIONS AND ACRONYMS

| | | |
|---|---|---|
| DMAIC | : | Define Measure Analyze Improve Control |
| GDP | : | Gross Domestic Product |
| IRA | : | Insurance Regulatory Authority |
| SMART | : | Specific Measurable Achievable Relevant & Time-bound |
| OMS | : | Operation Management Strategies |

# ABSTRACT

The primary goal of the study was to determine the impact of Operations Management Strategies such as Lean, Just-In-Time, Service, Total Quality Management, and Product Management on the performance of Kenyan insurance businesses. Descriptive survey research approach was used. The survey's goal was to explain organizational performance in 55 Kenyan insurance companies based on data obtained from an average of three respondents in each company. The three respondents were chosen to represent top management, middle management, and middle-level workers, respectively. For the aim of data analysis, a multiple regression model with six variables was used. Organizational performance was the dependent variable in the model, whereas the five operations management strategies were the independent variables. The study used a sample value of 55 to represent each company. Data analysis used multiple regression analysis.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Firms are faced with dynamic business situations requiring them to constantly adjust their strategic choices in operations to create a competitive edge. To become market leaders, most companies are currently adopting operations management strategies as effective approaches of enhancing their sustainability and financial growth. Operations Management Strategies relate to processes that are key in managing tasks, designs and quality improvement actions in converting an organization's inputs into outputs which must be employed in all the functional units of any organization such as marketing, finance, management and operations department (Kiptoo, Kariuki & Ocharo, 2021). The independent strategies that will apply in this research are; Lean practice, Just-In-Time Practice, Service Integration, Total Quality Management, and Product Management. The implementation of the strategies will lead to the ultimate goal of attaining positive organizational performance.

The performance of a company is its financial success measured in terms of revenue generated or the measure of its ability to meet the desired sustainability and financial obligations. For instance, Kiprono and Kinyua (2021) determine a firm's financial position within its operating industry to be influenced by its competitive performance. The resource advantage theory of competition considers the advantages related to the resources a company incorporates to stay ahead of competitors. This theory suggests that the value of a resource to an organization is evident in the competition it relays or the customer value it holds that improves performance. The systems theory, on the other

hand, considers the inter-connection between the sub-units of a system in addressing a company's operation efficiencies towards its financial growth.

The theory of constraint points out on the limitations a company has in achieving its targets and therefore emphasizes more on improving the efficiencies of a firm's operations leading to its sustainability. Therefore, the theories will help bring out the relevance of operations management strategies on organizational performance. The Insurance Regulatory Authority (IRA) in Kenya is tasked with the role of overseeing the entire operations of insurance companies in facilitating their smooth operations to ensure their performance (Kiptoo, Kariuki & Ocharo, 2021). The insurance entity comprises of insurance brokers, medical insurance providers, insurance companies, insurance investigators, motor assessors, reinsurance companies, insurance surveyors, claim settling agents, reinsurance brokers, risk managers, loss adjusters, and insurance agents.

IRA provides consultancy services for the vulnerable insurance firms to the management of inefficiencies that may hinder their financial growth (Wabita, 2013). The annual financial report in Kenya gives a comprehensive overview of the state of the Kenyan economy and provides various competitive indicators and strategies that precede the success and performance of insurance companies (Sproull, 2019). Such information further includes performance indicators like the written premium, loss ratios, incurred loss, total assets, commissions and expenses as well as the income statements suggesting the performance of insurance companies (Wabita, 2013). For example, at a period when the Covid-19 pandemic continues to suppress the economy from all angles, the IRA

annual report of the 2019 fiscal year provides a brief of the pressures of the pandemic on different elements in the insurance industry.

The report indicates reduced levels of demand for products and services provided by insurance companies. On the other hand, there is a heightened and intensified demand for the same products and services. As a result, the penetration rates for insurance services have plummeted across Kenya due to increased claims on insurance claims against slow returns from slackened payments by insured parties. The primary reasons for this are increased case of hospitalization, cancellation of events, and extreme business interruptions amongst other eventualities (Insurance Companies, 2019). Whereas, avenues such as insurance business for travel factors and aviation have been highly affected by restriction of movements without and outside Kenya creating more friction towards the insurance industry. Life assurance and pension have suffered through the investable reductions in salaries, turnover intentions, and redundancies that followed the break out of the Covid-19 pandemic. The pandemic also led to friction between insurers and insured parties due to the rise in claims pertaining to effects of the pandemic against the unwillingness of insurers to receive the claims because of the pressures on their organizations.

All the mentioned factors led to a situation where insurance premiums are bound to subside whereas the expected number of insured people is bound to decrease along with the expected number of new parties seeking insurance. The indications in the report provide a summarized view of the areas most affected in the insurance industry, giving

companies formidable information to work with. These challenges provide the motivation of the study. Hence, an insight to research that can provide solutions.

### 1.1.1 Operations Management Strategies

Canzaniello, Hartmann and Fika (2017) referred to operations management strategies as the administration of various business practices that aims to create efficiency in business operations. Saffar and Obeidat (2020) considered operations management strategies as concerned with converting input factors of production into goods and services in an efficient manner possible in maximizing the profits of an organization. Ivanov, Tsipoulanidis and Schonberger (2017) considered operations management strategies as strategic business practice that attempt to balance costs with an organization's revenue in trying to achieve the highest net operating profit possible.

According to Szabo, Williams, Rafacs, Newsome and Lydon (2012), numerous operations management strategies is essential in creating a competitive product or service for the successful performance of a firm. They include internal lean practices, service integration, just in time, product management and total quality management. The lean practices emphasize on meeting the demands of customers with quality products and little wastages (Danmei, 2016). According to Biener, Eling and Wirfs (2016), JIT concepts, on the other hand, plans and controls all the activities of a firm towards improving its competitiveness. Producing a quality product enhances a firm's brand equity thereby encouraging more sales associated with its positive corporate image (Biener, Eling & Wirfs, 2016).

These operations strategies further seek to reduce wastage in finding continuous improvements in the operations processes of a firm forming part of operations management strategies that share the universal principle of creating product quality with minimal wastages in improving the performance of an organization. An organization's effort in integrating its services equally reduces the barriers with which its customer's access services (Sharma & Modgil, 2019). This will create improved customer experience and as such improve service sales (Fernando, 2011). The adopted strategies are therefore centered towards ensuring that the entire operations of a firm adopt financial and human labor management, place suitability and sustainability, service design, organization's response time, inventory, supply chain management, cost and control management as key growth measures in meeting their organizational performance (Danmei, 2016).

The study used the operationalization method to measure OMS. Operationalization is a research design that involves setting indicators that can be used to measure various concepts of a study (Endres, 2018). According to Endres (2018), operationalization especially aids in taking account of the changes in different concepts. In this research and by use of a questionnaire, operationalization will help in setting indicators that will help in measuring lean practices, JIT, service integration, TQM, and production management across the insurance industry in Kenya. The indicators will help with identifying the industry's performance. Growth of the insurance sector stood at 2.34 per cent of GDP. The consideration of the results against previous and expected performances will help beneficiaries to project for the success of the future.

### 1.1.2 Organizational Performance

Asri & Mohsin (2020), defined an organization's performance as measure of the company's productivity and competitiveness within the market. Osborne (2016), emphasized that a company's performance is largely dependent on its choice of management strategies and can be measured in monetary terms through its financial growth and profitability which refers to as the yield or the financial gains attached to any corporate institution attributable to its daily management strategies. This research aimed to adopt performance measures such as business sustainability and financial growth, as well as Return on Investments and Return on Equity.

Business sustainability improves the image and competitiveness of an organization. To achieve a sustainable business level, an organization must identify suitable measures of increasing productivity while reducing costs (Osborne, 2016). Such measures include increasing the business' ability to comply with the provided statutory requirements, hiring qualified employees to safeguard the interests of the investors and also reducing on costs. As a result, the company's long-term goals are easily realized in line with the investors' expectations on the company's performance. ROI is a perfect measure of financial growth relating the company's incomes with its investments. This financial factor ensures a monetary measure of an organization's performance (Jovanović, Arsić & Nikolić, 2018).

The measures of performance in this paper were relative to performance. As such, benchmark and audit performances, gross and net profit margins, debt-to-equity ratio, and working capital were the measures that the research referred to upon analysis (Wabita, 2013). While performances on benchmarks and audits helped to identify sustainability, gross and net profit margins and working capital helped in assessing financial growth and ROI. Debt-to-equity ratio enabled the study to point out on the ROE. A combination of these results provided a comprehensive view of the general organizational performance in the insurance companies.

### 1.1.3 Operations Management Strategies and Organizational Performance

Operations management is a technical term that defines simple process involved in production and delivery. Central to the operations management is the measure of its resultant effect measured in terms of a company's performance (Danmei, 2016). Operations management significantly reduces and controls supply related costs. The reduced cost is key in creating an attractive performance with regards to sustainability and financial growth of a company (Doktoralina & Apollo, 2018). As such, the lean approach to managing operations enhances the predictability of market demands. Maintaining a superior customer value creates a competitive advantage for an organization (Danmei, 2016). The operations management's role in creating, producing, and delivering effective products, therefore, leads to the development of the customer-centered business processes.

The customer-centered business operations create a mutual relationship between the supply chain functions and the customers. It is this mutual partnership that increases an organization's brand equity, which is crucial in promoting the brand image as well as the corporate brand identity. As a result, the brand image increases the performance of a company (Santiago, 2020). Matching all the operations processes of a firm with its core competencies is vital for a firm's competitiveness performance (Wabita, 2013) Insurance companies compete using a combination of both their marketing and operations strategies. Such a competitive advantage encourages a successful performing organization (Baynes, 2011). Different companies that utilize operations management strategies in improving the value of their service will effectively manage their wastages, minimize costs, and presents a high profit return in accelerating business performance.

### 1.1.4 The Insurance Industry in Kenya

The insurance act of Kenya defines an insurance company as a profit or non-profit making organization exchanging the burden of financial expenses for any financial risk with common based cover policies. Insurance is described as a risk transfer mechanism, the common pool and equitable premiums. IRA presides over insurance issues in the country (Odhiambo & Njuguna, 2019). This body is tasked with the role of overseeing the entire operations of insurance companies in facilitating their smooth operations to ensure their success. IRA provides a summary of the insurance industry that acknowledges interested parties of the position of the industry in the economy, which entails: the total number of insurance companies, insurance agents, reinsurance brokers, brokers, investigators, surveyors, loss adjusters, risk managers, and Medical Insurance Providers (IRA, 2021) as contained in Table 1.1

**Table 1.1 Number of Licensed Insurance Industry Players in Kenya**

| INSURANCE INDUSTRY | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| Insurance Companies | 51 | 52 | 53 | 54 | 55 |
| Reinsurance brokers | 3 | 4 | 6 | 15 | 17 |
| Agents | 6,242 | 6,481 | 9,320 | 8,955 | 9,262 |
| Brokers | 139 | 186 | 221 | 216 | 213 |
| Investigators | 133 | 123 | 142 | 145 | 131 |
| Medical Insurance Providers | 22 | 29 | 31 | 33 | 31 |
| Insurance Surveyors | 30 | 27 | 32 | 36 | 25 |
| Risk Managers | 7 | 7 | 9 | 11 | 9 |
| Loss Adjusters | 27 | 31 | 32 | 31 | 28 |

(IRA, 2021)

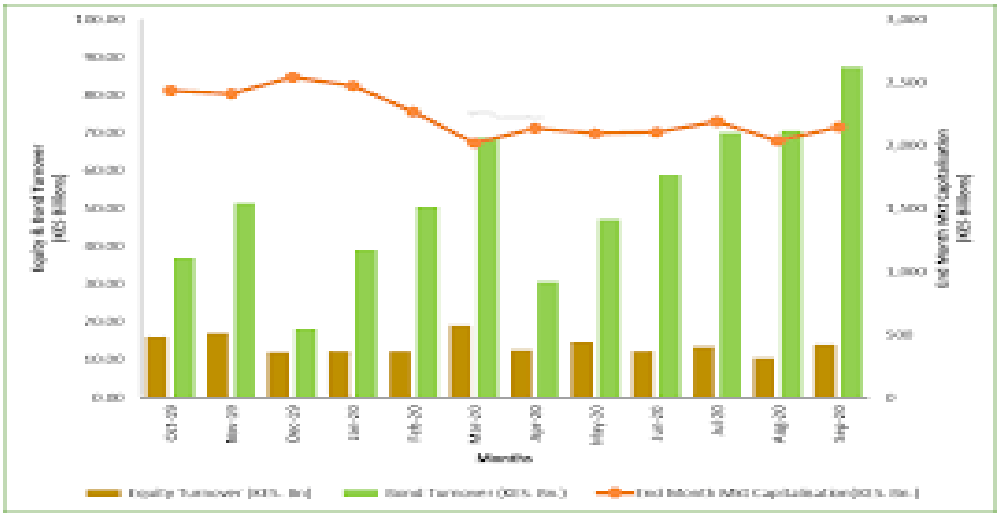

**Figure 1.1 Comparison of Insurance Performance versus Gross Domestic Product**

Figure 1.1 represents a declining trend in penetrating the life insurance market from 1.06% to 0.85% through 2020 into 2021 (Insurance companies, 2021). Insurance companies in Kenya have been facing the problem of inadequate information and poor management of insurance activities. This has exposed these companies to experience fraudulent human activities, operations inefficacies associated with risk exposures, and poor cost control. However, another huge reason for the downfall was due to the negative

effects of Covid-19 since its official onset in the country in March, 2020. Table 1.2 provides performance summary of the sector over a five year period.

**Table 1.2 Summary of Income Categories, KES in Billion**

| Income Categories | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| Gross Earned Premium | 178.48 | 178.80 | 179.10 | 188.58 | 184.60 |
| Reinsurance ceded | 43.22 | 43.99 | 44.22 | 46.68 | 42.46 |
| Net Earned Premium | 135.27 | 134.81 | 135.86 | 141.90 | 137.50 |
| Investment & Other Income | 55.28 | 50.23 | 56.49 | 69.85 | 61.82 |
| Net Income | 190.54 | 185.04 | 188.80 | 211.76 | 199.43 |
| Net Incurred Claims | 110.00 | 111.01 | 111.74 | 117.30 | 113.84 |
| Total Commissions & Expenses | 68.53 | 69.63 | 69.90 | 76.36 | 74.56 |
| Profit/(Loss) before Taxation | 12.01 | 4.40 | 11.20 | 18.09 | 10.11 |
| Provision for Taxation | 2.66 | 1.40 | 2.88 | 5.40 | 3.64 |
| Profit/(Loss) after Taxation | 9.35 | 3.00 | 10.42 | 12.69 | 8.91 |

(IRA, 2021)

This table dictates the minimal but gradual increase in overall returns in the insurance industry in Kenya from 2017 to 2021. This growth spells from the aggressive changes in policy making within the sector upon the second term of the current government (Insurance companies, 2019). However, most of the changes that led to this improvement are pressures from IRA alongside insurance organizations on the government to respond to the needs of the industry. According to the Insurance companies (2019), at that point, the respond of the Kenyan market was positive towards insurance in light of new information and exposure about insurances. However, it is clear that the changes were not as significant as to create huge improvement in the income. The more involving information is the more recent numbers for 2020 and 2021 that replicate the effect of Covid-19 on the industry. Therefore, while there already existed numerous issues in insurance, research now needs to take additional but critical concern on policies that will revert back the numbers to its positive trend.

## 1.2 Research Problem

There was a concern of determining the fundamental framework of managing operations activities of insurance companies for better sustainable performance. Focusing on a more strategic approach of management will ensure that the insurance companies emphasize on the quality of their services through a value-added approach to create an appealing and competitive service within the insurance industry. Insurance companies like any other business entities operate within a global competitive market (Kader, Adams & Hardwick, 2010). These companies must emphasize on the role of operations management in achieving business sustainability and financial growth to enhance on their performance.

On the contrary, most insurance organizations face the problem of inadequate information and poor management of insurance activities. This has exposed these companies to experience unsustainability and poor financial growth, fraudulent human activities, operations inefficacies associated with risk exposures, poor customer service, and cost control issues have affected the performance of insurance companies (Fernando, 2011). The survival and financial growth of insurance companies relies on their utilization of different forms of operations efficiencies in managing their Performance.

As such, studies concentrate on learning the relevance of adopting effective operations management strategies in gaining a competitive edge over other companies as opposed to fully putting implications under assessment of operations management strategies on the performance of individual firms. There exists a high necessity to consider the effect of all the operations management strategies of all insurance companies as opposed to a more generalized sample of different organizations (Wabita, 2013). What is the role of

effectively implementing a product's process as a critical step in enhancing the performance of an insurance company? Therefore, what is the impact of operations management strategies on the performance of insurance companies in Kenya?

### 1.3 Research Objective

The purpose of the research was therefore to establish the effect of operations management strategies on the performance of insurance companies in Kenya

### 1.4 Value of the Study

This study is significant to the researcher, academia, and the insurance companies as well as policymakers. The study pointed to the impact of operations management strategies on the performance of the insurance companies and any other contributions the operations management has brought up in the general survival and performance of the insurance companies. The fraternity of academia and researchers will benefit from the in-depth analysis of the operations management as a field of study. They will find the outlined management strategies in Kenya a source of knowledge and the various challenges as a research limitation to improve on.

This study will be important for theoretical benefits to the government of Kenya, any other state agencies, higher learning institutions in implementing policies within the insurance companies that complies with the outlined regulations in sustaining their performance. As such, the paper will provide well-researched guidelines on the aspects that each arm has to change to factors that lead to sustainability and growth in rewarding

performance for insurance companies. To the business firms, the study will equip them with knowledge about better operations management using the principles of operations management strategies towards business performance. It also provided a new insight on the nature, structure and performance of the various key players in the field of insurance. The research will be of help to the industry in helping them determine how effective operations management strategies are towards the performance of these firms. The information can serve as a reference for future needs when opting to venture into the field of insurance.

The report will increase the research on strategic management as regards to insurance policies formulation. Through the paper, the community will tend towards more urgent and prevailing solutions pertaining the challenges faced under strategic management and implementation in operations management with regards to performance. The study went a long way to resolve gap of information across strategy implementation. These are factors that can be changed through improving policy making by tapping the information uncovered in the entirety of this study. There are various points policy makers can build from such as aiming specifically on enhancing employee performance as opposed to generally resolving issues with insurance companies.

# CHAPTER TWO: LITERATURE REVIEW

## 2.1 Introduction

The purpose of literature review was to equip the researchers with basic and past knowledge about the connection between the performance and operations management strategies in insurance companies. The chapter will review studies related peer reviewed works on external oversight mechanisms from the global and local perspectives. The areas reviewed include: the concept of insurance organizations, company productive value, organizational accountability, promoting professionalism, independent oversight of handling production and service functions, management capabilities and qualification of a firm all in relation to their influence on performance.

## 2.2 Theoretical Review

The theories specific to this study are the resource advantage theory of competition, theory of constraints, and the systems theory.

### 2.2.1 Resource Advantage Theory of Competition

The theory works on the fundamental ideas that the equilibrium-based analysis of resource utilization eliminates the industrial competition on such resources. The value of a business resource is measured on its potential to generate competitive differentiation or customer delivery aimed at enhancing performance outcomes of an organization. A firm's choice to effectively utilize its resources is key in addressing the many pressing issues surrounding the operations of an organization (Varadarajan, 2020). Such issues include the need to efficiently manage the agency relationship with other organizations, understanding the structure of operating a lean business. The theory emphasizes on the

adoption of comparative advantages that any of the firm's resource is likely to generate. This will result in a superior performance.

Insurance companies can utilize the benefits associated with an absolute advantage over other companies to produce better and efficient performance. The source of this comparative advantage relies on the company's use of the various operations strategies such as total quality management, lean practices, and just-in time practice. This competitive advantage enjoyed by a firm over the other companies could be associated with its maintenance of a quality product compared to its competitors (Zehir, Can & Karaboga, 2015). A firm's engagement in non-price competition is also seen to attract its comparative advantage (Vasi & King, 2012). For instance, adopting the lean business practice and total quality management is key in enhancing the brand equity of a product thereby increasing the product's marketability.

A noteworthy factor to consider in this concept is that it is limited to the conceptual framework that leaders set for an organization or sector. This limitation circles around the objective set by leaders that any strategy included in a business should only go towards advantage (Varadarajan, 2020). While this is the preferred outcome and performance is the target, this advantage may not always be achieved due to economic pressures, un-projected circumstances such as Covid-19, competition, external forces, and uncertainty among others. Organizations should therefore not consider the strategy as a failure because it did not lead to an advantage. On the contrary, leaders should consider

contemporary assumptions of the theory as opposed to the old-fashioned ones to avoid suffering from competitive loss.

### 2.2.2 Systems Theory

Systems theory adopts an interdisciplinary approach of studying systems. The theory views an organization as a cohesive group of various interrelated departmental units. As such, an organizational setup is a social institution that must connect with the environment to survive and enhance its performance within the market. Such systems include the organization's customers, suppliers, managers as well as the entire stakeholders of the company (Barry, 2011). The interaction between the management, employees, customers, suppliers as well as the government must be that which focuses on creating a lean environment for the efficiency in the operations of the organization. The first step in improving the operations management of an insurance company would be to set the stage correctly by defining all the sub units of the organization (Kerzner, 2018). The company must define the individual goals of these sub units in aligning them with the corporate strategy.

The theory however presents certain limitations. For instance, viewing an organization as made up of different sections sharing similar attributes may not be practically realistic. The different sub units of an organization pose different characteristics in impacting to the entire organization. These sections are made up of different environmental conditions which cannot be assumed to be uniform in forming the organization. Employing total quality management and product management strategies is also directly linked systems theory (Sharma, 2019). Maintaining a superior customer value creates a brand equity

crucial in promoting the brand image useful in generating more sales for the company enhancing its performance.

### 2.2.3 Theory of Constraints

The theory of constraints is a new method that seeks to effectively utilize the limited production resources to provide a maximum output in the entire operations of an organization. Eli Godrantt's theory of constraint highlights the two major components of any investment as philosophical and generic approaches to investment. He asserts that the two processes are crucial in analyzing and creating value for any product in what is referred to as the thinking process. The theory further emphasizes more on improving the efficiencies of any system and concentrating on removing any bottlenecks associated with a system (Fernando 2011). This theory ensures that the management of any organization adds an additional effort in improving the performance of a given firm. As a result, the management of the company will identify all the organizational challenges in creating a root cause solution to those problems. The smooth flow of operations of the organization will, therefore, ensure its competitiveness performance.

The importance of this theory is that it reveals the major policies of operations management strategies which affects the performance of an insurance company. Total quality management concepts adopt the quality philosophy to enhancing efficiency within an organization. It therefore borrows the concepts of maximizing the available resources considered as major constraints to the production or servicing processes of an organization (Wabita, 2013). For instance, the inventory used from one process to the other must be balanced between these processes in realizing efficiency in the operations

of a firm. The supplies or inventories and the products or services produced by firms must therefore be constantly regulated in using other concepts such as the lean practice.

The problem with the theory of constraints is that there are always several to numerous constraints that affects a business and need identification. The good news is there is always one that provides the biggest threat to an institution. The bad news is that most if not all constraints have to be identified, checked, and analyzed to uncover the one that needs immediate and the most attention. Then there are the ones that will follow. This is evidently a time-consuming approach, especially with the consideration that credible results are not ascertained. Identification is therefore a critical limitation in this approach (Cox, 2021). The lack of consideration for variable factors is another limitation that is prone to affect this research as the study is based on different variables.

### 2.3 Constructs of Operations Management Strategies

A number of operation management strategies influencing the performance of a company were presented in the study. They included lean practice, just in time concept, service integration, total quality management and product management.

#### 2.3.1 Lean Practice

The performance of an organization is directly linked to its emphasis on a lean business that embraces the DMAIC approach of reducing variations in operation processes and enhancing process control as a solution to managing problems. Considering a lean business practice for the insurance companies will ensure that these organizations are able to define their problems, analyzing any negative implications attached to these

problems. To measure the effectiveness of a lean business practice, the paper aims to monitor the total cost of production, quality of service provision as well as the promptness of service delivery (Patrinley, 2020). These variables directly influence the performance operations of a firm in assessing their sustainability and financial success.

### 2.3.2 Just-In-Time Practice

Embracing the concept of JIT is also key in planning and controlling all operation processes of the insurance firms towards improving their competitive performance. For instance, the insurance firms must adopt various control systems for the safety and efficient flow of all operation procedures. As such, the insurance firms must plan all the processes relating to the identification of the best technology for every business strategy adopted in the operation departments of these companies in providing quality services (Heidinger & Gatzert, 2018). One such strategy would be to consider a Unified Financial Reporting system in providing an integrated report of all operation for accountability purposes that will hence impact on its performance.

### 2.3.3 Service Integration

Service integration plays a key role in aligning the operation of any insurance firm towards its performance. For instance, an insurance firm's adoption of a unified financial reporting system would be key in providing a simple but one platform for data management and customer-driven user-friendly support system. This approach of managing the operations of an organization ensures that the management team can run a multiple of processes with the use of the technology to integrate such procedures is a single unit of functioning (Heidinger & Gatzert, 2018). With this, the organization is in a

position to enjoy the benefits of running numerous interdependent processes through a single command.

### 2.3.4 Total Quality Management

Total quality management performs a special role of assessing the performance of all the departments of an insurance company to address the challenges relating to operation processes. Total quality management as a strategy is tasked to provide key strategies for service improvements for the sustainability and financial growth of insurance firms (Patrinley, 2020). An efficiency review of all the insurance processes is also a core function of quality management thereby playing a vital in addressing inefficient operations of the insurance companies.

### 2.3.5 Product Management.

The success of an insurance company relies on its ability to design and develop a suitable product for the targeted market. An Insurance company needs to create products in accordance with a product life cycle policy as well as the general insurance strategies.

A well-blended insurance policy with the marketing choices of an insurance company increases the revenue that reflects on its performance (Heidinger & Gatzert, 2018). The process lag and claims handling must be clearly defined in establishing a specific insurance product as well as identifying new business lines for an insurance company's performance purposes (Patrinley, 2020). To measure the level of product management, the study adopts the level of implementation of a product design in creating brand equity to a product or service.

## 2.4 Empirical Review

The impact of operations management on the performance of an insurance company has been a crucial topic for discussion. The survival of insurance companies relies on their utilization of different forms of operation efficiencies in managing their problems. There is an emphasis on the efficiency of different organizational forms like the insurance industry in managing their operations, the findings of these studies are consistent with the stock and insurance firms dominating the financial market. These studies paint a picture of the relevance of adopting effective operations management strategies in gaining a competitive edge over other companies. These studies, however, do not fully discuss the implications of operations management strategies on the performance of each individual firm (Slack, Chambers & Johnstone, 2010).

Ayele (2012) in his major focused on the strategic perspectives of an organization surveyed a sample of the USA managers in investigating the prevalence of them adopting management practices found out that the management practices were correlating with the performance of those companies. This study emphasized the role of management strategies as the key to enhancing the performance of an organization. Agus & Hassan (2008) conducted a study on strategic supplies partnership in managing quality and business performance in the manufacturing sector and similarly concluded that enhancing quality and efficient business operations had a positive effect on the business performance of any organization.

This study, therefore, improved on these findings by looking at all the facets of operations management strategies and how they relate to the organizational performance

in general. Mbithi, Muturi and Rambo (2015), investigated the impacts of development strategies in the performance of firms in the manufacturing industry and reported their findings of the significance of product and process design in creating a better performing company. Wang & Sarkis (2013), conducted a study focusing on the operations management policies adopted by the Kenyan insurance companies in managing their performances and established a significant effect of the OMS incorporated by these companies towards their profitability. The study's findings approved of the use of operations management strategies in improving the performance of an organization and recommended for the management of insurance companies to invest more on the OMS to increase the profits earned by these firms. Szabo et al., (2012), show their finding in determining factors affecting the performance of insurance companies.

Wabita (2013) only discussed various performance factors of insurance companies with regard to the financial aspects of such companies and asserts that the operation management practices incorporated by the non-governmental organizations had a positive influence on their performance. The adopted OMS increased the efficiency and effectiveness of the overall performance of these companies. The research further emphasized the role of total quality management towards improving the quality of delivery of services and in the entire organizational success (Pelham, 2013). The study, therefore, presents a research gap on the utilization of other operation management strategies like product and service design as well as a company layout among other factors as integral components of OMS necessary in improving the performance of an organization.

## 2.5 Summary of Literature Review and Knowledge Gaps

The literatures situation to this study discussed such as Columbia Business School's Center for Excellence in Accounting and Security Analysis and the Society of Actuaries has mostly correlated either one of the operations management strategies with the performance of different insurance companies (Ayele, 2012) The study identified feasible options of applying operations management strategies in describing the performance of insurance companies (Wang & Sarkis, 2013). The study also identified best practices in managing the entire operations for the targeted. This study considered a comprehensive approach of focusing on the effect of operations management strategies on the performance of insurance companies in Kenya. According to Biener et al., (2016), it is essential to adopt relevant research literature in analyzing the correlation between operations management and performance as well as borrowing knowledge on these studies in arriving at the researcher's findings. This study, therefore, focused on establishing the impact of operations management strategies on the performance of insurance companies in an effort to identify whether those insurance companies apply the principles of operations strategies, management, and present possible recommendations going forward.

## 2.6 Conceptual Framework

**Further analysis of conceptual framework as shown in Figure 2.1**

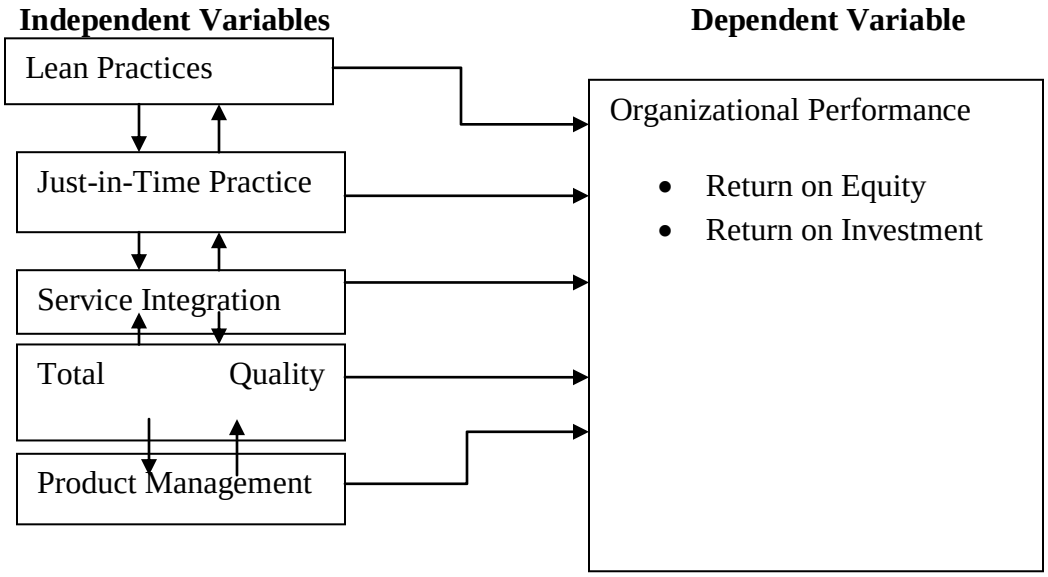


**Figure 2.1 Conceptual Framework**

# CHAPTER THREE: RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter described the research design, data collection and the techniques for data analysis that were used to carry out the project research. The section discussed methods of research used in outlining the research data analysis techniques, population, design, and data collection in the study. The research method that will be employed will permit the researcher to make successful quantitative collection of data and analysis.

## 3.2 Research Design

The study will be a descriptive survey research design. The survey aimed to explain organizational performance relative to a certain population in light of the crucial variables with the main objective being to ascertain the relationship between these variables and the overall influence they have on performance. This happened through gathering information in the field followed by description of information collected, field observation, data analysis, and reporting. Since all this happened during regular organizational operations across various organizations, the research necessitated the use of the cross-sectional research method (Wilson & Post, 2013).

The method allowed researchers to observe a large population and collect huge data at a particular point in time. As such, it involved careful observation alongside other means of collecting information such as questionnaires in this case. Cross-sectional research helped to gain adequate information on the traits that exist in insurance companies and aid in creating a view of the relationship between different variables as applied in those

organizations. The suitability of descriptive research on any research design is that it is inclusive of a large population.

### 3.3 Population of the Study

The population of this study comprised of all insurance companies in Kenya. According to IRA 2021 report there were 55 insurance companies in Kenya. The reason behind using census was to make an exhaustive consideration of all insurance companies in Kenya pertaining to how different insurance policies strategies affected different organizations that is; large or small, local or international to mention a few. The respondents included employees and leadership of various job levels across Kenyan insurance firms and the IRA. Due to time allocation and number of insurance firms, there was a maximum of 3 respondents per insurance firm. The interviews involved 3 people per organization as opposed to 1 (bearing time in perspective) because it was vital to get the point of view of different workers from each company and more importantly workers in different job description levels notably; top-level management, middle level management and the average worker at the job place. The data collection tools were questionnaires, computers, and virtual video platforms.

### 3.4 Data Collection

The study drew conclusions and made policy suggestions based on field data collected from primary and secondary sources on the effects of OMS on insurance company performance in Kenya. The core data was OMS plans, while the secondary data was profitability, which was used to quantify the organization's performance (dependent variable).

The questionnaires were self-administered to ensure that both respondents and researchers were satisfied. The study used closed-ended questions for dependent and independent variables and so the Likert scale was the most suitable method. The Likert scale is designed to examine how strongly subjects agree or disagree with the statements (Alhojailan, 2012). The "5-point Likert scale ranged from 'Strongly disagree' which was represented by 1 to 'Strongly agree' which was represented by 5. For the dependent variable a 5-point Likert scale ranged from very large extent which will be represented by 5 to 'not at all' that was represented by 1".

### 3.5 Validity and Reliability Test

The reliability measures for instance, was used to indicate the extent to which the various variables yield the same results on repeated trials. Such measures ascertained whether there was consistency in the results gathered during different periods. According to Baynes (2011), validity refers to the quality that a procedure or instrument or tool used in the research is accurate, correct, true, meaningful and right.

- $= 1 - \frac{\sum d2}{n\,(n2-1)}$

Where d = Absolute deviation of the actual ranks of variables x and y n = Number of pairs of scores

Validity – Convergent validity considered two factors that implicate two measures that should have any measurable relation to actually be in relation. Discriminant validity shows the exact opposite. However, both validities are crucial for an unquestionable construct validity.

Correlation covers a scale of -1 to 1, where r=-1 is perfect negative correlation, r=1 is perfect positive correlation, and r=0 is no correlation at all.

The Multitrait-Multimethod Matrix (MTMM) is an approach to assessing the construct validity of a set of measures in a study. Another method to convergent and discriminant validity is by the means of MTMM. The concept will enable this research to identify both discriminant and convergent values of the study in question.

### 3.6 Operationalization of Study Variables

The study assessed the effects of operations strategies on the performance of insurance companies in Kenya. The table below shows the objectives identified variables (independent and dependent variables), indicators, measurements, level of scale as well as the tools of analysis.

**Table 3.1: Operationalization of Study Variables**

| Objectives | **Indicators** | **Measurements** | **Level of scale** | **Tools of Analysis** |
|---|---|---|---|---|
| Establish how operations management strategies affect performance of insurance companies in Kenya. | - Level of employee productivity on performance of insurance companies. | - MT of employee productivity<br>- No. of insurance companies' performance above par | - Nominal<br>- Ordinal | - Descriptive statistics<br>- Frequency tables<br>-Percentages<br>-Mean<br>-Standard deviation |

### 3.7 Diagnostic Tests

Table 3.2 below summarizes the diagnostic tests performed in this study. These were the tests of normality, autocorrelation, multicollinearity and heteroscedasticity.

**Table 3.2 Diagnostic Tests**

| Diagnostic Test | Method | Criteria |
|---|---|---|
| Autocorrelation | Durbin – Watson | The test will show the positivity (<2.0) or negativity (>2.0) of the autocorrelation between the variables of the study. |
| Multicollinearity | Tolerance and Variance Inflation Factor | An issue with multicollinearity will present itself when tolerance statics go below 0.10. Whereas, VIF will denote the inflation of multicollinearity through variance of the coefficient estimate denoted by a value higher than 10 (vif > 10). |
| Normality | Shapiro- Wilk's | The p-values should be greater than 0.05 for normality to be presumed. |
| Heteroscedasticity | Koenker | The hypothesis that no significant differences exist among group variances was tested. For the test, if the p-value was > 0.05 homoscedasticity was assumed. |

### 3.8 Data Analysis Techniques

For the purposes of data analysis, a six-variable multiple regression model was adopted. Organizational performance was the dependent variable in the model, whereas operation management tactics were the independent variables.

$Y=X_1 + X_2 + X_3+ X_4 +X_5+e$

Where:

Y = is dependent variable - Organizational Performance

$X_1$= Independent variable – Lean practice

$X_2$= Just -In –Time Practice

$X_3$= Service Integration

$X_4$= Total Quality Management

$X_5$=Product Management

e= Error term

# CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSIONS

## 4.1 Introduction

This chapter presents a summary of the information gathered through primary sources; questionnaires, observation, and interviews as well as secondary sources; articles, journals, and books. Tables, figures, frequencies, percentages, mean scores, standard deviations, and data descriptions are used to explain general trends in the investigation's findings. The findings of the empirical investigation, as well as comments and interpretations of the findings, are also presented.

## 4.2 Response Rate

The data was collected from 55 insurance companies in Kenya. According to the gathered data, 130 of the 165 questionnaires were successfully filled and submitted, representing a response rate of 78.79%. In drawing conclusions for the study, this response rate is deemed good. An adequate response rate acquires a score of 50%, whereas 60 and 70 represents a good and very good score (Mugenda & Mugenda, 2013). This means that, based on this statement, the 78.79 percent response rate in this scenario is excellent. Below is the response rate as per Table 4.1

**Table 4.1: Response Rate**

| **Response rate** | **Frequency** | **Percentage** |
|---|---|---|
| Response | 130 | 78.79% |
| Non-response | 35 | 21.21% |
| **Total** | **165** | **100%** |

## 4.3 Reliability Analysis

The ability of an instrument to deliver consistent and steady measurements is referred to as its dependability. The two sides of reliability are reliability, which is the degree of

accuracy, and unreliability, which is the degree of inaccuracy. Cronbach's alpha is a frequently used reliability coefficient that provides information on internal consistency by assessing the interrelations of all items in a test and to the entire test - data internal coherence (Ansoff, 2010). In most cases, dependability is stated as a coefficient between 0 and 1.00. The test is considered sufficiently reliable if the coefficient is higher.

Cronbach's Alpha was used to measure reliability of the questionnaire. To establish the reliability of the constructs, employees were randomly selected from the insurance companies in Kenya and administered with the questionnaire. The coefficient computation was done with the use of Statistical Package for Social Sciences (SPSS) Version 24. The findings indicated that lean practice had a coefficient of 0.944, just-in-time characteristics score had a coefficient of 0.877. Service integration had a score of 0.726. Total quality management scored 0.624. Whereas, product management managed a coefficient score of 0.515. The coefficient scores provide a comprehensive view of the organizational performance across insurance companies in Kenya.

**Table 4.2: Reliability Test of Constructs**

| Constructs | Reliability Cronbach's Alpha | Comments |
|---|---|---|
| Lean practice | 0.944 | Accepted |
| Just-in-time practice | 0.877 | Accepted |
| Service integration | 0.726 | Accepted |
| Total quality management | 0.624 | Accepted |
| Product Management | 0.515 | Accepted |

## 4.4 Demographic Data

The researcher began by examining the data in general, which included the respondent's management level and length of service in the organization of the respondents to establish the demographic data of the respondents.

### 4.4.1 Period of Service in the Organizations

The purpose of the study was to determine how long the respondents have worked for the companies in years. The period of service helps the research in identifying the level of dependency of information as well as how informed the respondents are. Table 4.3 summarizes and presents the responses.

**Table 4.3: Respondents' Period of Service in the Organizations**

| Period of Service in Years | Frequency | Percentage (%) |
|---|---|---|
| Below 5 years | 4 | 7 |
| Between 6 and 10 years | 18 | 32 |
| Between 11 and 15 years | 21 | 38 |
| Above 15 years | 12 | 23 |
| Total | 55 | 100 |

According to table 4.2, most respondents (38%) had worked in the organizations for 11 to 15 years, while just 7% had worked for less than 5 years. 32 percent of those who had worked for 6 to 10 years had done so, while 23 served under the organizations for more than 15 years. This conclusion suggests that the majority of the respondents existed in the business long enough to understand its operations and were thus better positioned to provide objective replies to the study questions. Furthermore, the findings show that certain operations management strategies influenced all respondents, regardless of how long they had worked for the company.

### 4.4.2 Representation of Management Structure

Presented in Figure 4.2, is the respondents' distribution based on the category of the management structure which they fall under in the organization.

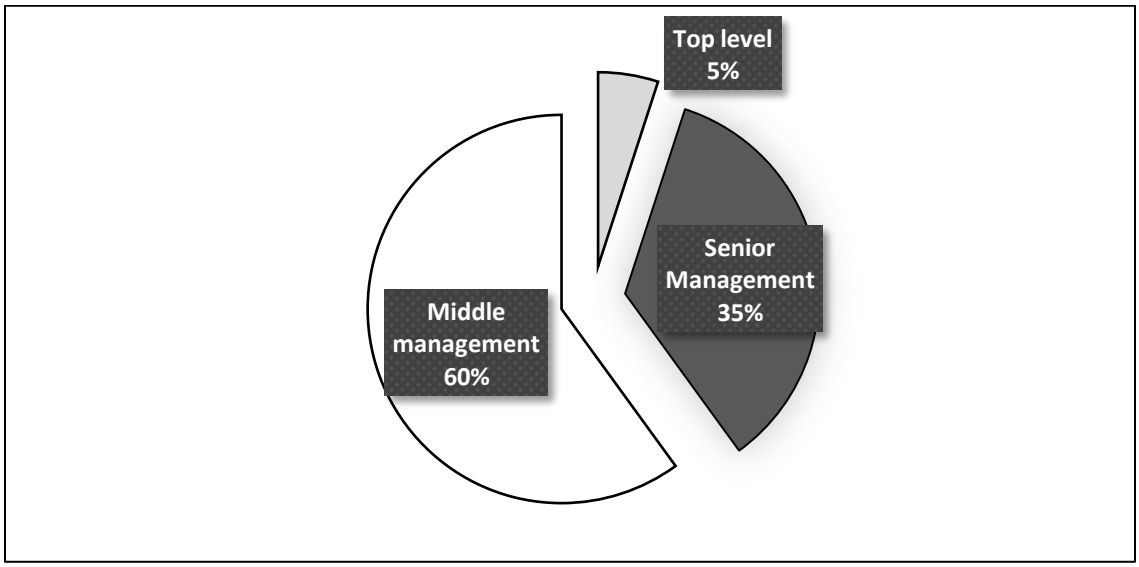


**Figure 4.1: Level of Management of Respondent**

Findings indicate that most respondents came under the middle management (60%), 35% of the respondent were on senior management, while only 5% were in top level management. The findings shows that the issue of the influence of selected operations management systems cuts across all the three levels of management in the organization.

## 4.5 Data Diagnostics

The following data diagnostics were performed to ascertain whether the results of the study will have statistically significant results.

### 4.5.1 Normality Test

The Shapiro-Wilk test was used to check for normality and ensure that the sample's residuals behaved normally.

**Table 4.4 Test for Normality**

| Models | Obs. | Statistic | Df | Sig. |
|---|---|---|---|---|
| Net profit margin | 25.8 | 0.93 | 25.8 | 0.89 |
| ROI | 25.8 | 1.013 | 25.8 | 0.928 |

Source: Research Data, 2021

The p-values for the return on investment and net profit margin regression models were 0.928 and 0.89, respectively. The study's values are more than 0.05, indicating that the residuals have a normal distribution. Because the residuals behaved regularly, the null hypothesis was rejected.

### 4.5.2 Autocorrelation Test

The study used the Durbin-Watson test to test the null hypothesis that there exists no serial correlation.

**Table 4.5 Test for Autocorrelation**

| Return on Assets | Net Profit Margin |
|---|---|
| $H_0$: no serial autocorrelation | $H_0$: no serial autocorrelation |
| d-statistic (8, 55) = 0.8017 | d-statistic (8,55) =0.7923 |

Source: Research Data, 2021

Return on assets had a d-statistic of 0.8017, while Net Profit Margin had a d-statistic of 0.7923. Because the numbers are more than 0.05, there is no autocorrelation.

## 4.6 Descriptive Statistics of Study Variables

The top aim of the research was to observe the impact of the vital operations management strategies on performance of insurance companies in Kenya. The research focused on lean practice, just-in-time practice, service integration, total quality management, and product management towards the influence they have on organizational performance of insurance companies in Kenya.

### 4.6.1 Lean Practice

The following Likert Scale to score the various factors of organisation structure. ***Where:*** "1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree". The summary of responses appears in Table 4.6

**Table 4.6 Lean Practices**

| **Lean Practice Influencing Performance of Insurance Companies** | **Response rate** | | | | | **Mean** | **Std. Dev** |
|---|---|---|---|---|---|---|---|
| | **1** | **2** | **3** | **4** | **5** | | |
| Hierarchies of decision-making process | 5% | 5% | 23.6% | 30% | 36.4% | 3.88 | 1.121 |
| Customers' need for products | 0% | 3.3% | 20% | 33.3% | 43.3% | 4.17 | 0.867 |
| Real time flow of products | 3.3% | 10% | 20% | 23.3% | 43.3% | 3.93 | 1.163 |

Findings in Table 4.6 indicates that customer's need for products was a leading factor in terms of influencing performance of insurance companies (Mean 4.17), followed by real time flow of products (Mean 3.93). The respondents also indicated that hierarchies of decision-making process influenced performance with a mean (3.88). Although the means of the three components in lean practice (hierarchies of decision-making process, customers' need for products, and real time flow of products) have more variation, this is not the case for standard deviation. Overall, the standard deviations show relatively little variation, indicating that variation in responses across the averages of the various lean practice components was uniform. The findings presented here and reported throughout this research are supported by Zheng, Yang and McLean (2010), who claim that lean practice has a significant impact on performance since it affects how things are done, the philosophy of the organization, the work environment, and performance.

### 4.6.2 Just-in-Time Practice (JIT)

The score was based on the following five-point Likert Scale. ***Where:*** "1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree". The summary of responses appears in Table 4.7

**Table 4.7 Just in Time Practices**

| Just-in-Time Characteristics Influencing Performance of Insurance Companies | Response rate (%) | | | | | Mean | Standard deviation |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | |
| Uninterrupted work flow | 1.8% | 3.6% | 25.0% | 28.3% | 41.7% | 4.05 | 0.982 |
| Top management commitment | 1.8% | 11.7% | 18.3% | 30.0% | 38.3% | 3.92 | 1.094 |
| Total quality control | 0.0% | 3.6% | 20.0% | 30.9% | 46.7% | 4.2 | 0.879 |

From the findings as summarized in Table 4.7 above, total quality control was a leading factor in terms of influencing performance (Mean 4.2), followed by uninterrupted work flow (Mean 4.05) and third was top management commitment (Mean 3.92). The variation in the means of the three factors in JIT (uninterrupted work flow, total quality control, and top management commitment) is quite minimal and same scenario applies in the case for standard deviation. Sharma and Modgil (2019), noted that JIT characteristics exert a great influence on the manner in which employees carry out their tasks and ultimately influences their day-to-day operations based on their decision made in terms of vision, mission and mandate in their strategic plans.

### 4.6.3 Service Integration

The score was based using the following five-point Likert Scale. ***Where:*** "1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree". The summary of responses appears in Table 4.8

**Table 4.8 Service Integration**

| Service Integratio Factors Influencir Operational Performance | Response rate (%) 1 | 2 | 3 | 4 | 5 | Mean | Std. Dev |
|---|---|---|---|---|---|---|---|
| Service providers | 0.0% | 5.0% | 18.3% | 20.0% | 56.7% | 4.28 | 0.94 |
| Service integrator function | 3.3% | 5.0% | 18.3% | 36.7% | 36.7% | 3.98 | 1.033 |
| Customer function | 1.7% | 6.7% | 28.3% | 25.0% | 38.3% | 3.92 | 1.046 |

Respondents agreed that service providers had a key role in boosting performance, as shown in Table 4.8 (mean 4.28). Service integrator function and customer function, according to respondents, have an impact on performance (mean 3.98) and (mean 3.92), respectively. The means of the three service integration components (service providers, service integrator function, and customer function) vary slightly, as does standard deviation. Endres (2018), addresses that when the standard deviations show relatively little fluctuation, showing that there is little variety in responses across the means of the individual components.

### 4.6.4 Total Quality Management

The following five-point Likert Scale was used. ***Where:*** "1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree". The summary of responses appears in Table 4.9

**Table 4.9 Total Quality Management**

| Total Quality Management Factors Influencing Organizational Performance | Response rate (%) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | Mean | Std. Dev |
| Customer focus | 6.7% | 11.7% | 16.7% | 25.0% | 40.0% | 3.8 | 1.273 |
| Leadership | 0.0% | 8.3% | 21.7% | 25.0% | 45.0% | 4.07 | 1.006 |
| Employee relations | 1.7% | 5.0% | 21.7% | 33.3% | 38.3% | 4.02 | 0.983 |

From the findings in table 4.9 above, leadership was a leading factor that influenced performance (Mean 4.07) as indicated by the respondents. This was followed by employee relations (Mean 4.02) while customer focus was also indicated to influence performance (Mean 3.8). The variation in the means of the three factors in total quality management (customer focus, leadership, and employee relations) is quite minimal and same scenario applies in the case for standard deviation. The small disparity in the standard deviations shows the variation in responses across the means of the various factors of total quality management was uniform. According to findings in this study Gupta (2012), observes that performance in insurance is influenced by total quality management both positively and negatively depending on the characteristics of the organization.

### 4.6.5 Product Management

The following five-point Likert Scale was used. ***Where:*** "1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree". The summary of responses appears in Table 4.10

**Table 4.10 Product Management**

| Product Management Factors Influencing Organization Performance | Response rate (%) | | | | | Mean | Std. Dev |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | |
| Product marketing | 0.0% | 6.0% | 16.1% | 21.0% | 58.3% | 4.18 | 0.92 |
| Strategic product management | 2.3% | 6.0% | 16.1% | 35.6% | 38.3% | 3.96 | 1.011 |
| Technical product management | 0.7% | 7.7% | 26.3% | 24.0% | 39.7% | 3.94 | 1.027 |

It is evident from respondents that product marketing had a vital role in improving performance, as shown in Table 4.10 (mean 4.18). Strategic product management has an impact on performance (mean 3.98) and whereas technical product management just comes under at (mean 3.92). The means of the three product management components (product marketing, strategic product management, and technical product management) vary slightly. The slight disparity is similar with the standard deviation. Overall, the standard deviations show relatively little fluctuation, showing that there is little variety in responses across the means of the individual components of product management.

The findings indicate that the all the five elements of the operation management strategies discussed in this study have a significant effect on the performance of insurance companies in Kenya. As such, it amplifies the need to ensure that employees, being the most vital resource of the organization, are continuously engaged in the planning process of OMS to guarantee proper implementation and ensure positive results. Hence, improved performance.

## 4.7 Organizational Performance

The research aimed to assess the influence of OMS on performance. Performance was primarily based on the OMS of insurance companies. The collection and analysis of data was done using Statistical Package for Social Sciences (SPSS) version 23.0. The respondents were asked to score using the following five-point Likert Scale: ***Where:*** "1 = Very large extent; 2 = Large extent; 3 = Moderate extent; 4 = Less extent; 5 = Not at all". The responses are summarized and presented as follows.

**Table 4.11 Stakeholder Engagement**

| Response | Frequency | Valid percent (%) | Mean | Std. Dev |
|---|---|---|---|---|
| Not at all | 2 | 3.3 | | |
| Less Extent | 5 | 8.3 | | |
| Moderate extent | 13 | 23.3 | | |
| Large extent | 25 | 45.0 | | |
| Very large extent | 10 | 20.0 | | |
| **Total** | **55** | **100.0** | **3.7** | **0.997** |

With respect to high level of stakeholder engagement, the findings show 20% indicated that there was a high level of stakeholder engagement to a bigger margin, 45% indicated stakeholder engagement. 23.3% of the respondents noted a moderate extent of stakeholder engagement. 8.3% of them showed a less extent while only 3.3% noted no stakeholder engagement.

**Table 4.12 Value for Money Strategies**

| Response | Frequency | Percent (%) | Mean | Std. Dev |
|---|---|---|---|---|
| Not at all | 2 | 3.3 | | |
| Less Extent | 6 | 10.0 | | |
| Moderate extent | 8 | 15.0 | | |
| Large extent | 16 | 28.3 | | |
| Very large extent | 23 | 43.3 | | |
| **Total** | **55** | **100.0** | **3.98** | **1.142** |

Findings show 43.3% indicated a very large extent that insurance companies had value for money for strategies in the organization, followed by 28.3% who agreed to a large extent. 15% and 10% showed moderate and low extents respectively. Only 3.3% noted no value for money for the strategies carried out in the organization.

**Table 4.13 Monitoring and Evaluation Strategies**

| Response | Frequency | Percent (%) | Mean | Standard deviation |
|---|---|---|---|---|
| Not at all | 2 | 3.3 | | |
| Less Extent | 6 | 11.7 | | |
| Moderate extent | 14 | 25.0 | | |
| Large extent | 15 | 26.7 | | |
| Very large extent | 18 | 33.3 | | |
| **Total** | **55** | **100.0** | **3.75** | **1.44** |

With respect to effective monitoring and evaluation of strategies, findings show 33.3% indicated that there is effective monitoring and evaluation of strategies, followed by 26.7% who noted to a large extent and 25% noting a moderate extent of effectiveness. 11.7% indicated that the effectiveness was to a less extent and only 3.3% noted that there was no effectiveness of monitoring and evaluation of strategies.

**Table 4.14 Customer Satisfaction Strategies**

| Response | Frequency | Valid percent (%) | Mean | Standard deviation |
|---|---|---|---|---|
| Not at all | 3 | 5.0 | | |
| Less Extent | 6 | 11.7 | | |
| Moderate extent | 8 | 15.0 | | |
| Large extent | 20 | 35.0 | | |
| Very large extent | 18 | 33.3 | | |
| **Total** | **55** | **100.0** | **3.80** | **1.176** |

Findings in Table 4.14 indicated that 33.3% noted to a very large extent that there was a high level of customer satisfaction for strategies implemented by insurance companies, followed by a majority of 35% indicated that to a large extent there was a high level of customer satisfaction on the same. 15% noted to a moderate extent that there was a high level of customer satisfaction for strategies implemented by insurance companies, while only 11.7% indicated there was customer satisfaction to a less extent. However only 5% noted there was no customer satisfaction.

**Table 4.15 Strategies to the Policies, Legal and Regulatory Requirements**

| Response | Frequency | Valid percent (%) | Mean | Standard deviation |
|---|---|---|---|---|
| Not at all | 2 | 3.3 | | |
| Less Extent | 5 | 8.3 | | |
| Moderate extent | 12 | 21.7 | | |
| Large extent | 20 | 36.7 | | |
| Very large extent | 16 | 30.0 | | |
| **Total** | **55** | **100.0** | **3.82** | **1.066** |

Findings in table 4.15 show that insurance strategies adhere to the policies, legal and regulatory requirements to a large extent, as indicated by (30%), (36.7%) indicated large extent, (21.7%) indicated moderate extent, (8.3%).

**Table 4.16 Duration of Strategy Implementation**

| Response | Frequency | Valid percent (%) | Mean | Standard deviation |
|---|---|---|---|---|
| Not at all | 1 | 1.7 | | |
| Less Extent | 3 | 6.7 | | |
| Moderate extent | 17 | 30.0 | | |
| Large extent | 20 | 36.7 | | |
| Very large extent | 14 | 25.0 | | |
| **Total** | **55** | **100.0** | **3.77** | **0.963** |

With respect to strategies implemented are achieved within the specified duration, findings of the study in table 4.16 show that 36.7% indicated that to a large extent strategies implemented are achieved within the specified duration, followed by 30% who noted a moderate extent and 25% noting a very large extent to which strategies implemented are achieved within the specified duration, 6.7% indicated that the strategies implemented are achieved within the specified duration to a less extent. Only 1.7% indicated that strategies implemented are not achieved within the specified duration.

**Table 4.17 Strategic Planning Timelines**

| Response | Frequency | Valid percent (%) | Mean | Standard deviation |
|---|---|---|---|---|
| Not at all | 2 | 3.3 | | |
| Less Extent | 2 | 3.3 | | |
| Moderate extent | 13 | 23.3 | | |
| Large extent | 18 | 33.3 | | |
| Very large extent | 20 | 36.7 | | |
| **Total** | **55** | **100.0** | **3.97** | **1.025** |

Findings in Table 4.17 show that the majority (36.7%) indicated to a very large extent that strategic planning timelines are met on time in insurance followed by 33.3% indicated that strategic planning timelines are met on time. (23.3%) and (3.3%) indicated

moderate and less extent respectively. Only (3.3%) noted strategic planning and implementation timelines are not met on time.

**Table 4.18 Scheduling of Strategies**

| Response | Frequency | Valid percent (%) | Mean | Standard deviation |
|---|---|---|---|---|
| Not at all | 2 | 3.3 | | |
| Less Extent | 2 | 3.3 | | |
| Moderate extent | 14 | 25.0 | | |
| Large extent | 17 | 31.7 | | |
| Very large extent | 20 | 36.7 | | |
| **Total** | **55** | **100.0** | **3.95** | **1.032** |

Findings in Table 4.18 reveal that strategies are implemented on schedule, as indicated by (36.7%) whose response was very large extent, (31.7%) indicated large extent, (25%) indicated moderate extent and (3.3%) indicated less extent''. Only (3.3%) noted the strategies are not implemented on schedule.

**Table 4.19 Claims Settlement Statistics**

| Performance Measure | Unit of Measure | 2016 | 2021 Q2 |
|---|---|---|---|
| Claims Payable | No of Claims | 4,573,239 | 2,069,274 |
| No of Claims Paid | No of Claims | 3,575,152 | 1,211,733 |
| Time taken to pay the claims | Months | 12 | 4 |
| ROI | Rate | 24.81 | 25.8 |
| ROE | Rate | 14.36 | 15.22 |

Table 4.19 above shows the performance of insurance companies in Kenya for the entire period of 2016 (1st January to 31st December) and the second quarter (Q2) of 2021 (April 1st to 30th June). Both periods show a relative comparison that highly speaks to the effects of Covid-19 on the growth of the insurance industry in Kenya and beyond. However, a

comparison of the ROI and ROE for both periods shows that there is still acceptable improvement considering the pressures of the ongoing pandemic. ROI in 2016 was an average of 24.81 and that of 2021 Q2 is 25.8, registering a variance of 0.99. On the other hand, the ROE in 2016 was an average of 14.36 and that of 2021 Q2 is 15.22 registering a variance of 0.86. Both comparisons indicate a slight improvement which in actual sense is a downward curve from the growth picked through 2017 to 2019.

## 4.8 Inferential Statistics

### 4.8.1 Introduction

The findings of correlation and regression analyses between the dependent variables, performance, and the independent variables; lean practice, JIT practice, service integration, total quality management, and product management are shown in this section.

### 4.8.2 Correlation Analysis

The Karl Pearson Correlation Coefficient between the dependent variable (performance) and the independent factors was calculated using correlation analysis (lean practice, JIT practice, service integration, total quality management, and product management). The correlation study was carried out using a 95% confidence level. Table 4.20 summarizes and presents the findings.

**Table 4.20 Correlation Analysis**

| Independent variable | Karl Pearson coefficient | Interpretation | Significance level | Comment |
|---|---|---|---|---|
| Lean practice | 0.853 | High correlation | 0.000 | Significant |
| Just-in-time practice | 0.822 | High correlation | 0.000 | Significant |
| Service integration | 0.852 | High correlation | 0.000 | Significant |
| Total quality management | 0.810 | High correlation | 0.000 | Significant |
| Product management | 0.851 | High correlation | 0.000 | Significant |

Results in table 4.20 provide an implication of a 0.853 lean practice coefficient that implies a 0.000 high correlation with performance. A correlation coefficient of 0.822 in JIT practice characteristics was found to be of high correlation at a significance level of 0.000. On the other hand, a correlation coefficient of 0.852 in service integration was considered high at a 0.000 significance level. The statistics implies a high correlation of performance to organizational relations and organizational culture respectively. A correlation coefficient of 0.810 in total quality management was found to be at a 0.000 significance level high indicating total quality management influences performance to as much of a high extent. At the bottom, we observe a relatively high correlation coefficient of 0.851 for product management. This clearly demonstrates the level of influence all independent variables had on performance.

### 4.8.3 Linear Regression Analysis

At a 95% confidence level, multiple regression analysis was performed. This strategy allowed respondents' ratings on one variable to be predicted based on their scores on several other variables. The results were given in the following tables.

**Table 4.21 Lean Practices**

| Model | R | R square | Adjusted R square | Std. Error | Sig |
|---|---|---|---|---|---|
| **1** | 0.853a | 0.727 | 0.722 | 0.32233 | 0.000 |

**a. Predictors:** (Constant) lean practice

**b. Dependent Variable:** Organizational performance

The link between the dependent variable (strategic decision making) and the independent variable is depicted in Table 4.21 (lean practice). The linear regression model Y=0+

1X1+E, where X1 denotes lean practice and E denotes error. The degree of link between lean practice and performance is shown by the coefficient of determination (R2) and correlation coefficient (R). R and R2 have values of (0.853) and (72.7%), respectively. The link between lean practice and performance is represented by the R value of (0.853). The R2 indicates the independent variable's explanatory power. This suggests that performance accounts for 72.7 percent of the variation in lean practice., where X1 denotes lean practice and E denotes error. The degree of link between lean practice and performance is shown by the coefficient of determination (R2) and correlation coefficient (R). R and R2 have values of (0.853) and (72.7%), respectively. The link between lean practice and performance is represented by the R value of (0.853).

**Table 4.22 Just In Time**

| Model | R | R square | Adjusted R square | Std. Error | Sig |
|---|---|---|---|---|---|
| **1** | 0.822a | 0.676 | 0.670 | 0.35120 | 0.000 |

**a. Predictors:** (Constant) JIT practice

**b. Dependent Variable:** Organizational performance

R and R2 have values of (0.822) and (67.6%), respectively. The association between JIT traits and performance is represented by the R value of (0.822). The R2 indicates the independent variable's explanatory power.

**Table 4.23 Service Integration**

| Model | R | R square | Adjusted R square | Std. Error | Sig |
|---|---|---|---|---|---|
| **1** | 0.852a | 0.725 | 0.718 | 0.32335 | 0.000 |

**a. Predictors:** (Constant) service integration

**b. Dependent Variable:** Organizational performance

The association between service integration and performance is represented by the R value of (0.852). The R2 indicates the independent variable's explanatory power. The result's R2 value is high, indicating a significant association between service integration and performance.

**Table 4.24 Total Quality Management**

| Model | R | R square | Adjusted R square | Std. Error | Sig |
|---|---|---|---|---|---|
| **1** | .810a | .657 | .651 | .36136 | 0.000 |
| **a. Predictors: (Constant) Total Quality Management** | | | | | |
| **b. Dependent Variable: Organizational performance** | | | | | |

R and R2 have values of (0.810) and (0.657), respectively. The association between TQM and performance is represented by the R value of (0.810). The R2 indicates the independent variable's explanatory power.

**Table 4.21 Product Management**

| Model | R | R square | Adjusted R square | Std. Error | Sig |
|---|---|---|---|---|---|
| **1** | 0.851a | 0.723 | 0.716 | 0. 32436 | 0.000 |
| **a. Predictors: (Constant) product management** | | | | | |
| **b. Dependent Variable: Organizational performance** | | | | | |

R and R2 have values of (0.851) and (0.723), respectively. The association between product management and performance is represented by the R value of (0.851). The R2 indicates the independent variable's explanatory power.

### 4.8.4 Multiple Linear Regression Analysis

The linear regression model; "$\boldsymbol{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon}$, where $Y$ is performance, $\beta_0$ is constant and ε is the error term of the model." $X_1$ is lean practice, $X_2$ is JIT practice, $X_3$ is service integration, $X_4$ is TQM, and $X_5$ is product management.

**Table 4.26 Multiple Regression Analysis**

| Variable | Unstandardized Coefficients | | Sig. |
|---|---|---|---|
| | β | Std. Error | |
| (Constant) | 0.229 | | |
| Lean practice | 0.535 | 0.027 | 0.011 |
| Just-in-time practice | 0.302 | 0.105 | 0.021 |
| Service integration | 0.391 | 0.037 | 0.007 |
| Total quality management | 0.106 | 0.090 | 0.019 |
| Product management | 0.361 | 0.047 | 0.005 |

The results on the above table show that all the independent variables (lean practice, JIT practice, service integration, TQM, and product management) had constructive implications on performance in insurance companies. The statistics show lean practice ($X_{1)}$ with ($\beta_{1=}0.535$) that is the huge influence on performance followed by service integration ($X_3$) with ($\beta_{3=}0.391$), product management ($X_5$) with ($\beta_{5=}0.361$), just-in-time practice ($X_2$) with ($\beta_{2=}0.302$) and last is total quality management ($X_4$) with ($\beta_{4=}0.106$). The 95% confidence level represents all of these values. Therefore, $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$, the multiple linear regression model.

$Y = 0.229 + 0.535X_1 + 0.302X_2 + 0.391X_3 + 0.106X_4 + 0.361X_5 + \varepsilon$

### 4.8.5 Analysis of Variance (ANOVA)

The analysis of variance (ANOVA) was employed to see if financial structure variation could explain variance in financial performance. The findings for net profit margin and return on investment are presented in the tables below.

**Table 4.27 ANOVA**

| | Model | Sum of Square | Df | Mean square | F | Sig |
|---|---|---|---|---|---|---|
| **1a** | Regression | 33.264 | 5 | 6.653 | 50.293 | .000b |
| | Residual | 6.482 | 49 | .132 | | |
| | Total | 39.745 | 54 | | | |

a. Dependent Variable: Performance

b. Predictors: (Constant), Product Mgt, Lean Practice, Just in Time, Total Quality Mgt, Service Integration.

The model overall is a good fit (p=0.000). Hence, financial structure explains financial performance of insurance companies in Kenya.

### 4.8.6 Regression Coefficients

The regression coefficient was used to indicate the coefficient values between the dependent variables of net profit margin and ROA and the independent variables.

**Table 4.28 Analysis of Coefficients**

| Mode | Variables | Coef. | Std. error | t | P- value | 95% confidence interval | |
|---|---|---|---|---|---|---|---|
| | Total Quality Management | .748 | .108 | .649 | 6.915 | .000 | .378 |
| | Service Integration | .062 | .166 | .041 | .371 | .712 | .267 |
| | Just-In-Time | -.116 | .097 | -.074 | -1.198 | .237 | .869 |
| | Lean Practice | .233 | .118 | .133 | 1.983 | .053 | .743 |
| | Product Management | .538 | .154 | .288 | 3.498 | .001 | .493 |
| | Constant | -1.935 | .553 | -3.502 | 001 | . -1.935 | |

Dependent Variable: Performance

## 4.9 Discussion of Findings

### 4.9.1 Organizational Performance in Relation to Lean Practice.

The study's first objective was to evaluate the performance of insurance companies in Kenya through the influence of lean practice. Therefore, the research is dedicated towards the same causality. The findings show that customers' need for products was a leading factor in terms of influencing performance (Mean 4.17), followed by real time flow of products (Mean 3.93). The respondents also indicated that hierarchies of decision-making process influenced performance with a mean (3.88). The results show most participants agreed to the significance of lean practice on performance.

Lean structure had a 0.853 coefficient, showing a high correlation between itself and significance level of 0.000 on performance. Simple regression analysis was also performed and the resulting R square value (72.7%) indicated a very high influence on performance. A multiple regression analysis at significance level (0.000) that led to a regression coefficient ($\beta_1$=0.535) indicated that lean practice was most contributive to performance among other independent variables.

### 4.9.2 Organization Performance in Relation to Just-In-Time Practice Characteristics.

The second objective was to determine the influence of JIT practice characteristics on the performance of Kenya's insurance companies. The study sought to answer the question**;** how does JIT practice characteristics influence performance of insurance companies in Kenya?

Majority of responses in the study showed that total quality control flow was a leading factor in terms of influencing performance (Mean 4.2), followed by uninterrupted work (Mean 4.05) and third was top management commitment (Mean 3.92). A correlation analysis was performed at 95% confidence level that produced a Karl Pearson coefficient of (0.822). This showed a high correlation between JIT practice characteristics and performance. Regression analysis produced R square value of (67.6%) and regression coefficient ($\beta_2$=0.302) at a significance level of (0.021) which indicates that JIT practice characteristics has a positive influence on performance of insurance companies.

### 4.9.3 Organization Performance in Relation to Service Integration

The third purpose was to identify service integration and its effects to the performance of Kenya's insurance companies. The study was guided by the research question**; t**o what extent does service integration influence performance of insurance companies in Kenya?

The findings indicate that most participants agreed that service providers played a leading role in increasing the performance (mean 4.28). Respondents also agreed that service integrator function and customer function have an influence on performance (mean 3.98) and (mean 3.92) respectively. A correlation coefficient value of (0.852) obtained from correlation analysis further indicates high correlation between service integration and performance at significance level of 0.000. R square value (72.5%) obtained from a correlation analysis indicates a high degree of influence on performance a regression coefficient ($\beta_3$=0.391) also indicates greater influence of service integration on performance.

### 4.9.4 Organizational Performance in Relation to Total Quality Management

The fourth element was the identification of the similar relation between TQM and performance. The question that based the guideline of this study was**;** to what extent does TQM influence performance of insurance companies in Kenya?

From the findings, leadership was a leading factor that influenced performance (Mean 4.07) as indicated by the respondents. This was followed by employee relations (Mean 4.02) while customer focus was also indicated to influence performance (Mean 3.8). Correlation coefficient of (0.810) shows a high correlation between the two variables at a significance level of 0.000. R square value (65.7%) from regression analysis performed at 95% confidence level further confirms the influence of TQM on performance while regression coefficient value (($\beta_4$=0.106) shows the moderate influence of TQM on performance relative to other independent variables.

### 4.9.5 Organization Performance in Relation to Product Management

The third purpose was to identify product management and its effects to the performance of Kenya's insurance companies. The study was guided by the research question**; t**o what extent does product management influence performance of insurance companies in Kenya?

The findings indicate that most participants agreed that product marketing played a leading role in increasing the performance (mean 4.18). The case study also uncovered that strategic product management and technical product management have an influence on performance (mean 3.96) and (mean 3.94) respectively. A correlation coefficient value

of (0.851) obtained from correlation analysis further indicates high correlation between service integration and performance at significance level of 0.000. R square value (72.5%) obtained from a correlation analysis indicates a high degree of influence on performance a regression coefficient ($\beta_5$=0.361) also indicates greater influence of service integration on performance.

# CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

The findings of the investigation are summarized in this chapter. The study's objectives and research questions were employed as analytical units. The data was analyzed, and the findings were compared to the empirical and theoretical literature that was available. Conclusions are also drawn that are directly related to the study's unique aims. The conclusion and discussion of the findings are then stripped of any recommendations. There are also proposed areas for further research in this chapter. The study's major goal was to look into the impact of chosen operations management strategies on performance of insurance companies in Kenya.

## 5.2 Summary of the Findings

The goal of the study was to look into the impact of a few key operation management strategies on performance of insurance companies in Kenya. The study looked into the impact of lean practice, just-in-time practice, service integration, total quality management, and product management on performance.

### 5.2.1 Influence of Lean Practice on Organizational Performance

According to the findings, lean practice has the largest beneficial impact on performance, with 70% of respondents agreeing that organization structure plays a role in performance. Hierarchies of decision-making process, customers' need for products, and real time flow of products are among the primary qualities found to exercise impact. Furthermore, the high correlation coefficient of 0.853 indicated a significant association between lean practice and performance, while the R2 of 72.7 percent indicated that the variable of lean

practice had a high explanatory power on performance. Lean practice showed the largest regression coefficient when compared to other variables, confirming that lean practice is important.

### 5.2.2 Influence of Just-In-Time Practice on Organizational Performance

The results of the research uncovered that the independent variables with a high influence on performance was JIT practice. This made 60% of all participants. Vital JIT practice characteristic factors uncovered included uninterrupted work flow, top management commitment, and total quality control. The value of the correlation coefficient of 0.822 and $R^2$ square value of 67.6% denoted that overall JIT practice characteristics made a high contribution towards performance.

### 5.2.3 Influence of Service Integration on Organizational Performance

According to the findings, service integration has a strongly positive impact on performance, with 65 percent of respondents agreeing that service integration plays a critical role in performance. Service providers, service integrator function, and customer function were identified as critical service integration values that have a significant impact on performance. Furthermore, the high correlation coefficient indicated a strong association between service integration and performance, while the R2 of 72.5 percent indicated that the variable of service integration had a high explanatory power on performance. Service integration, besides lean practice, had the highest regression coefficient.

### 5.2.4 Influence of Total Quality Management on Organizational Performance

According to the findings, TQM has a favorable impact on performance, with 65 percent of respondents agreeing that it plays a role in performance. Customer focus, leadership,

and employee relations were the primary TQM factors analyzed and reported. The high value of the correlation coefficient indicates that there is a substantial association between TQM and performance. Furthermore, the R2 value of 65.7% indicated that the variable of total quality management had a high explanatory power on performance. The significance of the regression coefficient value added to the conclusion that total quality management has a significant impact on performance.

### 5.2.5 Influence of Product Management on Organizational Performance

Statistics from the study shows that product management is one of the independent variables with primary importance to the achievement of organizational performance. This was a popular opinion evidence across 68% of all participants. The product management characteristic factors researched and analyzed included product marketing, strategic product management, and technical product management. The value of the correlation coefficient of 0.851 and $R^2$ square value of 72.3% expounded on the high contribution of product management towards performance.

## 5.3 Conclusion

The study discovered that the analyzed operations management strategies have an impact on organizational performance of insurance companies in Kenya. The study's findings revealed a substantial positive link between performance and five major components of operational management strategies: lean practice, just-in-time practice, service integration, total quality management, and product management. The data also revealed that, of the five components, lean structure played the most important influence in performance, while just-in-time practice played the least. The study's findings served to demonstrate three points. First, organizations must instill the operations management

strategies properly in order to enhance performance. Second, the study's findings show that one of the most significant elements to consider in order to improve performance is lean practice. Organizations must create policies that promote the creation of an effective performance in order to be successful in managing performance.

## 5.4 Recommendation

According to the study, high lean practice methods lead to enhanced performance, hence Kenyan business leaders, even outside the insurance sector should implement them. Organizations should ensure that they have a strong lean practice approach, which in context implies having commendable hierarchies of decision-making process, customers' need for products, and real time flow of products that can handle all performance processes. Future scholars and researchers should seek to explore the association between lean practice and performance using sub variables other than hierarchies of decision-making process, customers' need for products, and real time flow of products to expound on the scope of the study and in turn achieve a larger perspective on ways to improve business performance. In addition, his can add rigor to the process and provide platforms for comparing outcomes.

According to the survey, firms in Kenya should have strong just-in-time values to bolster its lesser contributions towards performance. One way to achieve greater performance is by ensuring the weaker links contribute more towards the collective performance of an organization. Organizations should ensure that just-in-time qualities such as uninterrupted work flow, top management commitment, and total quality control are adequate to allow for effective strategic decision management. Future researchers and scholars should investigate the relationship between just-in-time characteristics and performance using

variables other than aforementioned to the broaden the study and understanding of different ways the OMS element can be incorporated better to uphold performance.

According to the report, Kenyan firms should have adequate and efficient service integration in place since this leads to effective implementation of strategic decisions. To increase performance, organizations must ensure that service integration elements such as service providers, service integrator function, and customer function are adequate and efficient. Future researchers and scholars should investigate the association between service integration and performance using variables other than the aforementioned to broaden the perception of the OMS model.

## 5.5 Limitations of the Study

Various challenges were encountered in the bid to acquire information in most organizations. These difficulties were enhanced by the bottlenecks and protocols that had to be endured to acquire the information, further causing delays in projected timelines. Some respondents expressed evident reluctance in accepting questionnaires or even providing genuine answers out of fear of what would happen to them if they provided sensitive information about their companies. It was vital to assure all respondents of the level of confidentially and anonymity the information they provide will be treated and that it is all aimed towards academic purposes. Since the limit period for the research was short, it was critical to focus on most of the branch offices of insurance companies located within the Coast region. However, this will unlikely affect the research as most of the branches are represented and also provide a comprehensive view of the conditions of insurance companies around Kenya.

## 5.6 Areas for Further Research

The findings of this study are intended to add to the existing body of knowledge and serve as a foundation for future research. The following are the areas where this report recommends more research. First, using insurance companies in Kenya in the case study, the current study focused on operations management strategies and their impact on performance. Future research should look to examine if the same selected OMS components; lean practice, just-in-time practice, service integration, total quality management, and product management apply to other firms than insurance organizations in Kenya and beyond. Second, as mentioned in the first area of future research, this study's scope was limited to five components. Additional research is needed to determine the impact of other components on performance that are not covered in the scope of this research.

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# APPENDICES

## APPENDIX 1: QUESTIONNAIRE

This questionnaire is designed to investigate if Operations Management Strategies have contributed to the performance of insurance firms in Kenya. The questionnaire is divided into 4 parts. The information acquired will then be strictly for academic purposes and the responses will be treated with high confidentiality.

### Part A: General Information

Name of the organization……

What is your highest level of education PHD { } Masters { } Degree { } Diploma { }

- For how long has the Insurance Company been in existence
  Less than 5 years [ ] Between 5 to 10 years [ ]
  Between 10 to 15 years [ ] Above 15 years
- For how long have you worked in the Company?
  Less than 5 years [ ] Between 5 to 10 years [ ]
  Between 10 to 15 years [ ] Above 15 years [ ]
- What is your market share within the insurance industry?
  Yes [ ] No [ ]
- How many clients does your organization have?
  Less than 100 clients [ ] between 100 to 200 Client [ ]
  Between 200 to 400 clients [ ] above 400 client [ ]
- What is you level of satisfaction in your organization?
  Rate your satisfaction between 0 – 5 [ ]
- From your records, would you say that operations management strategies are effective tools in profit maximization?
  Strongly Agree [ ]
  Agree [ ]
  Neutral [ ]
  Disagree [ ]
  Strongly Disagree [ ]
- How old are you? [ ]
- What is your career level? [ ]
  High managerial level [ ]
  Managerial level [ ]
  Entry level [ ]

### Part B: Operations Management Strategies

- To what extent does your company use the following Operation Management Strategies?

| | Ratings | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| Lean Practice:<br><br>There is high total cost of production.<br><br>There is high quality of service provision.<br><br>Your organization has promptness in service delivery.<br><br>The performance gap in your organization is low.<br><br>The ongoing functions of work are highly achieved. | | | | | | |
| Just – in- time:<br><br>Time taken to serve a client has reduced.<br><br>The average period between each process is short and precise.<br><br>There is consistency of the time taken for a single activity to be performed.<br><br>The control system in your organization is exemplary.<br><br>Your organization consistently uses updated technology. | | | | | | |
| Service Integration:<br><br>The level of integration between internal and external services of your firm is optimized to current standards.<br><br>Your internal services are well aligned to the needs of your | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| business.<br><br>Your external services are well aligned to the needs of your business. | | | | | | |
| Total Quality Management:<br><br>There is involvement of all employees in the strategy designing process.<br><br>There are continuous improvement processes in your organization relative to customer satisfaction.<br><br>There is high frequency of your organization's production evaluation. | | | | | | |
| Product Management:<br><br>There is high frequency of new product assimilation.<br><br>There is high organization of the planning process in your business.<br><br>The average time of your firm's forecast on the performance of products is exemplary compared to your goals. | | | | | | |

- Kindly provide the following information to help determine the performance index for your insurance company.

| Performance Measure | Unit of Measure | 2016 | 2021 Q2 |
|---|---|---|---|
| Claims Payable | No of Claims | | |
| No of Claims Paid | No of Claims | | |
| Time taken to pay the claims | Months | | |
| ROI | Rate | | |
| ROE | Rate | | |

## APPENDIX 2: LIST OF INSURANCE COMPANIES

1. "AAR Insurance Company Limited
2. African Merchant Assurance Company Limited
3. AIG Kenyan Insurance Company Limited
4. Allianz Insurance company of Kenya
5. APA Insurance Limited
6. APA Life Assurance Company Limited
7. ABsa Life Assurance
8. Britam General Insurance Company (K) Limited
9. Britam Life Assurance Company (K)
10. Carpex Life Assurance Company Limited
11. CIC General Insurance company Limited
12. CIC Life Assurance company
13. Corporate Insurance company Limited
14. Direct- Line Assurance company Limited
15. Fidelity Shield Insurance company Limited
16. First Assurance Company Limited
17. GA Insurance company
18. GA Lift Assurance Limited
19. Geminia Insurance company Limited
20. ICEA Lion General Insurance company Limited
21. ICEA Lion Life Assurance company Limited
22. Intra Africa Assurance company Limited
23. Jubilee Health Insurance
24. Invesco Assurance company Limited
25. Kenindia Assurance company Limited
26. Kenya Orient Insurance Limited
27. Kenya Orient Life Assurance Limited
28. KUSCCO Mutual Assurance Limited
29. Liberty Life Assurance Kenya Limited
30. Madison Insurance company Kenya Limited

31. Madison General Insurance Kenya Limited
32. Mayfair Insurance company Limited
33. Metropolitan Cannon Life Assurance Limited
34. Occidental Insurance company Limited
35. Old Mutual Assurance company Limited
36. Pacis Insurance Company
37. Mua Insurance (K) Limited
38. Pioneer General Insurance company Limited
39. Pioneer Assurance company Limited
40. Prudential Life Assurance company Limited
41. Resolution Insurance company Limited
42. Saham Assurance company Limited
43. Sanlam Assurance company Kenya Limited
44. Sanlam General Insurance company Limited
45. Sanlam Life Insurance company Limited
46. Takaful Insurance of Africa Limited
47. The Heritage Insurance company Limited
48. The Heritage Life Assurance company Limited
49. The Jubilee Insurance company of Kenya Limited
50. The Kenyan Alliance Insurance company Limited
51. The Monarch Insurance company Limited
52. Trident Insurance company Limited
53. UAP Insurance company Limited
54. UAP Life Assurance Limited
55. Xplico Insurance company Limited"

(Source: IRA, 2021)