

**QUALITY MANAGEMENT SYSTEM IMPLEMENTATION  
AND CONTINUOUS IMPROVEMENT IN  
GLAXOSMITHKLINE KENYA LIMITED**

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## DECLARATION

This project is my original work and has not been presented for a degree in any other university.

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## **DEDICATION**

I dedicate this study to my parents Alex and Ruth, brothers Evans and Obed, GlaxoSmithKline colleagues and friends supported me throughout my research.

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## **LIST OF ABBREVIATIONS**

GDP	Gross Domestic Product
GMS	Global Manufacturing and Supply
GSK	GlaxoSmithKline
HIV	Human Immunodeficiency Virus
ICH	International Conference on Harmonization
ISO	International Organization for Standardization
KHF	Kenya Healthcare Federation
MoH	Ministry of Health
NDRA	National Drug Regulatory Authority
NHIF	National Hospital Insurance Fund
OTC	Over the Counter
PPB	Pharmacy and Poisons Board
QMS	Quality Management System
SFS	Finnish Standards Association
UNDP	United Nations Development Programme

## **ABSTRACT**

Global competition is ever increasing and with the increase in the demand for better quality products and services by buyers, organizations have come to the realization that the only option to survive in business is through delivery of high-quality products and services. Growing application of quality deployment has made more organizations appreciate and recognize Quality Management System (QMS) as among popular continuous improvement tools. The study examined QMS implementation and continuous improvement in GlaxoSmithKline (GSK) Limited. The specific objectives of the study were to determine the perceptions of implementing QMS in GSK; evaluate the extent of QMS implementation in GSK Limited and evaluate the influence of QMS on continuous improvement at GSK Limited. This study was guided by four theories namely Quality Improvement Theory (QIT), the Resource-Based View (RBV), the Theory of Constraints (TOC) and the invitational theory. "The study used the descriptive research design and the target population was all the 279 employees working at GSK Limited. A census was adopted for the study upon which 73 percent response rate was achieved. Primary data was collected from the respondents by use of self-administered structured questionnaires containing closed and open-ended questions. The questionnaires were administered through the drop and pick method. The collected data was edited and coded and both descriptive and inferential statistics were computed. The inferential statistical analysis was undertaken by performing linear regression analysis on the dependent variable - organizational continuous improvement of performance and the independent variable - QMS." On the first objective, the study found that the respondents held positive perceptions about the implementation of QMS in the organization and that it was an important tool for continuous improvement as evidenced by an aggregate mean of 4.26 on the attributes presented. On the second objective, the study found that QMS had been adopted to a large extent as demonstrated by an aggregate mean of 4.39 on the attributes presented. The findings on the third objective were that there exists no statistically significant relationship between QMS implementation and firm continuous improvement framework. This was so because the p-value of 0.216 at 95 percent level of significance. The study recommends that a study on QMSs of other firms from related or different industries could be done in order to identify areas of improvement in a bid to achieve the full benefit of QMS implementation with tangible benefits in continuous improvement rather than regulatory compliance only. The study also recommends that the management should undertake frequent system reviews to ensure that all operations are undertaken as per the standard operating procedures which facilitates timely identification of variations and opportunities for improvement using QMS. GlaxoSmithKline will benefit from the better understanding on the QMS implementation and use that for competitive advantage of the organization while correcting the relationship of QMS and continuous improvement.

# **CHAPTER ONE: INTRODUCTION**

## **1.1 Background of the Study**

Manufacturing and service operations endeavor to provide the customer or consumer with the required product package to meet their needs while the organization is achieving its business goals of making profit (Jovanoski et al., 2017). These operations have to be managed effectively in order to realize customer satisfaction, business goals and subsequently define a purpose for existence. This management includes processes, staff, information and all involved in the delivery of customer satisfaction from the desired to the delivered product package. The quality of goods or services as defined by the customer is the backbone of customer satisfaction leading to loyalty which defines the business case of the organization (Kulkarni & Vemuri, 2015). This quality of product package is strategically managed by use of various quality management tools and techniques such as QMS.

This study aimed at evaluating the current approaches to quality management in the pharmaceutical manufacturing environment. Currently, the context of QMS has emerged to be a key factor where organizations customize regulatory requirements to local procedures to assist in delivery of the quality agenda hence overall productivity. Governments and regulatory bodies carry out periodic inspections to evaluate the maintenance of quality systems in the company's ways of working. These QMS inspections to some extent sway organizations to regulatory contentment rather than realization of tangible benefits of QMS hence this study.

The manufacturing industry especially the drug manufacturing production, carries out studies, manufactures and markets medicines, biological merchandises and medical gadgets. Inferior quality medicines or products are a health hazard and a waste of resources for both republic and individuals. Therefore, preservation of quality constantly improving in amenities is extremely vital to the business. The quest for quality is being advanced by the model of QMS, which is directed at avoidance of deficiencies rather than discovery of the same (Mazumder et al., 2011). Wanyoike (2016), the Kenyan goods production sector has been utilizing quality management endeavors to advance its merchandise superiority and procedures to heighten performance. In the International Organization for Standardization (ISO) standing, Kenya is placed top in East Africa, because the country has the classy industrial organizations in the area. The popular companies in Kenya produce moderate consumer goods, farming products, horticulture, oil purifying, steel industries, cement, aluminum, lead and commercial ship repair. Equally, to compete in current exceedingly competitive commercial atmosphere, businesses in Kenya are enforced to emphasize on the gratification of buyer necessities as a means of improving business success (Macharia & Mwangangi, 2016).

The assumption of a QMS ought to be a calculated resolution (Stroh, 2015) creation and execution of this structure ought to think about the uniqueness of every business, since it is represented by a few components like precise goals; provided items, and practices utilized (Salgado et al., 2014). The QMS provides universal direction and necessities for establishing a fitting quality administration methodology, to bring down cost, increment yield, customer's satisfaction, and market fragment in the foundations since the most

recent twenty years (Neyestani, 2016). Quality management in medicine industries is an essential matter because the consumer goods are directly taken to the consumer's body, thus identity, pureness, safety and eventually suitable quality of product are intensely critical (Pandey & Anju, 2018). There exist various procedures universally that have made some instructions and conditions, which must be monitored by all consumer goods manufacturing businesses.

Quality refers to the “degree to which a set of in-built features satisfies necessities”. This meaning comes from ISO. The ISO customary defines quality broadly, because it encompasses more than just a product, it embraces processes, institution, accountabilities, work guidelines and resources (Rosenberg, 2017). Quality is not just interrelated to tangible products; it also involves everything from driving a decent car to getting a hairdo or getting a secured loan. The International Conference on Harmonization (ICH) Q10 dispensation is an actual scheme of outlining and relating these foundations in the quality system in order to provide the peak level of quality conceivable and in turn, decreasing their gamble of adverse happenings or recall (Clay-Williams et al., 2020).

The ICH Q10 release has three main intents, which are to triumph product realization, that is device a system that guarantees a product that follows the quality traits that will satisfy the prerequisites of health specialists, patients and regulatory consultants; to launch and sustain a state of stability in order to cultivate and exploit an operational checking and control structure for product quality and process performance that safeguards persistent proficiency of processes; and to simplify incessant improvement in

order to determine and apply product quality and process perfections, chance of inconsistency and inventions to the pharmaceutical quality system to successfully fulfill quality desires (Calnan et al., 2013).

This study was anchored on QIT developed by Deming in 1986 and QIT places duty regarding faming links conclusively at the entryway of top management (Chun, 2016). This empowers the company to remove inadequate quality by successful managerial systems. The RBV theory, which advances that the procession and effective distribution of resources to selected locations enables sustainable competitive advantage shall be reviewed with QMS as a resource (Huang et al., 2015). The theory of constraints shall outline the amalgamation of concepts standards and devices to be exploited to improve quality. The final concept will be the invitational theory with an objective to create settings that deliberately motivate individuals to move in the direction of their potential through preparing Invitational methodology is the use of this theory, particularly where change in techniques is required (Stanley et al., 2004).

### **1.1.1 Quality Management and Quality Management Systems**

The model of quality is extensive and connects to varied human essentials. Collected works discovered the several explanations of quality. The explanations are interrelated to understanding of product package and consumer gratification. There exist no sole common characterization of quality, quite a few biographers and specialists have explained it in unlike ways, alignment to rations (Peljhan & Marc, 2016) quality must be directed at buyer desires, both now and the time to come (Lam, 2011), quality is “the

aptness for usage” (Aghazadeh & Hoang, 2015), the wholesome good and services features of advertising, production, support and engineering by which the in use will satisfy the hope by the shopper and quench the client necessities (John, 2003).

Quality and buyer fulfilment are the equivalent mechanism and quality as a wide perception which is more than product quality but embrace the quality individuals, practice, with all organizational aspects (Goetsch & Davis, 2010). Resolution from these explanations is that quality is professed as gratification of the anticipations of clients’ greater value products and services provision to realize the organizational goals. The ISO 9000 standard delineates quality management as “synchronized undertakings to direct and control an institution in terms of quality” (ISO, 2005) and quality administration is one of the tactics of managing, which emphasizes on quality. Quality management is grounded on everyone’s contribution and targets at long-standing accomplishment (Ali & Abedalfattah, 2012).

The ISO standard has eight principles that leadership must deliberate on for better reward. These include buyer focus, leadership, people involvement, process attitude, system attitude to managing, repetitive improvement, factual methodology in making decisions, and symbiotic provider liaison. Generally, QMS enables an establishment’s activities to tally to the quality of product mix and management. In ISO 9000, QMS is directs and controls businesses with regard to quality.” (ISO, 2008). The QMS must define and manage procedures with inputs and outputs using wealth to add value to a client’s product or service. Normally, the output becomes a contribution for the coming

activity. Implementing QMS is a premeditated resolution of the business. Objectives, products, processes, structure and size of the organization affect the design of QMS. The objective of universal criteria is not uniform structuring or similar documentation, but the model's requirements satisfy product requests (ISO, 2008).

Evolution in quality management exposes that basics were positioned long ago and its growth was by diverse features (Mawby, 2005). From the underlying focal point of value, the executives being the checking of the last item against principles, the journey has been to wipe out item disappointment. "in the past, quality administration has moved from the work spot to different orders, it became clear that each capacity of a business adds to result along these lines should be exposed to some quality norm" (Gitlow, 2000). Furthermore, the phrasing of value the executives from the time it was known as investigation developed to quality control, which advanced to quality confirmation. (Hoyle, 2007). Organization strategy can be expected through quality administration that prompts improvement of item and administration quality (Sambou et al., 2017).

### **1.1.2 Continuous Improvement**

The main task for QMS is to build an organized and measured way to advance and guarantee the quality, the atmosphere where establishments function to inspire company's subdivisions. The key theory of QMS is to reflect the immediate surroundings and society. The best way to improve quality is by innovation and as (Christensen & Kaufman, 2006) indicates "with intention, technology means the processes by which a business converts labor, wealth, ingredients, and data into goods and services of bigger



worth". The notion of technology can be stretched beyond production and construction to advertising, commercial and management processes. This makes QMS a technology. Increasing technology, in the perspective of innovation translates to enhancement in any of elements stated above (Christensen & Kaufman, 2006).

Ceaseless improvement is a post-accreditation organize where the preservation of quality systems is completed Kaziliūnas (2010). This is an important step for the enterprise to unceasingly improve and obtain the lasting profits of ISO accreditation. The business stands to earn durable paybacks by having a QMS that empowers it to absorb in the constant improvement of processes, staff training and structures, constant quality reviews and benchmarking.

Bryman and Bell (2003) in their reading recognized constant improvement as a philosophy of nourishing improvement by pointing at the abolition of waste in all schemes and processes of a business to improve overall performance. This calls for teamwork to make progresses with tiniest expenditures, thus generally enhancing performance. The continuous perfection cycle calls for the establishment of buyer desires and satisfying those requests, evaluating achievement, and ongoing check on clients' desires and promising that improvement elements made to boost performance are done. Customers may be in-house or exterior to the organization. In-house clients work towards external firm performance (Chang, 2009). A number of writers argue that the success of industry performance is dependent on continuous improvement initiatives (Arumugam et al., 2008).

### **1.1.3 Quality Assurance**

Quality assurance of medicines is a key community health trial, predominantly in the light of developing worldwide health concerns and the transnational breadth of trade (Lakhal et al., 2006). In numerous emergent nations, a disastrous blend of the two causes occurs. On one hand, there is prevalence of smuggled products and on the other, a deficiency of acceptable analytical amenities and suitable human capitals. The turnover of medicinal products in intercontinental trade demands various protections on the part of smuggling states and bodies to pledge that medicinal products are harmless, effective, and of acceptable quality when received by their final users. Quality assurance of medicinal products is based on a trustworthy system of assessment and action to inaugurate safety, effectiveness, and validation through scrutiny that the manufacturing accomplishes requests for Good Manufacturing Practices (GMP).

Registration of the product in the region of production; authorization of manufacturing environments by medical scrutiny of the industrial facility; accrediting of the produce in the country of introduction; medicine quality investigation of a consignment of the product by the maker's laboratory before the product is dis-positioned; and extra diagnostic testing to endorse that the consignment received remains fit during transit entails quality assurance of imported medicines. Quality reassurance of medicine plays a substantial role in certifying that drugs intended for human use meet the least possible desires or stipulations (Seiter, 2005). The National Drug Regulatory Authority (NDRA) in a state where medicine is manufactured retains the responsibility for appraising and registration of the drug, inspection and accrediting industrial sites. The NDRA also

control introduction and distribution agents, brokers and venders, and oversee supply chain quality. The success of treatment programs is pegged on quality assurance because medicaments produced below proven criteria of quality can lead to failure, increase in drug resistance and lethal or hostile reactions.

#### **1.1.4 GlaxoSmithKline Kenya Limited**

GlaxoSmithKline (GSK) is a British science-led global healthcare establishment with headquarters in Brent Ford, United Kingdom. The company was established in 2000 by a union of GlaxoWellcome and SmithKline Beecham, GSK remained the second largest drug enterprise globally as of 2015. Pfizer being number one then followed by Novartis and others (Haria, 2016). GSK fabricates and advertises pharmaceutical items, immunizations, Over the Counter (OTC) medications and wellbeing related consumer items. The GSK has pharmaceuticals, pharmaceutical research and development, vaccines, and well-being products. The pharmaceuticals section produces medicines for variety of critical and prolonged conditions. Vaccines segment produces and distributes vaccines globally. The consumer medicinal services division creates and showcases items in different classifications, for example, wellbeing, oral wellness, sustenance, and skin wellbeing. The pharmaceuticals innovative work focus on the location and improvement in exploration, these incorporate Human Immunodeficiency Virus (HIV) and communicable ailments, oncology, immune-inflammation, respiratory, and exceptional maladies (Financial, 2015).

The organization's Kenyan site is along Likoni road at the Lungalunga road junction in Nairobi's industrial area. Presently, GSK Nairobi has around 600 representatives. The site was exceptionally made in 1960's as OTC drug factory. The products made consist of Sensodyne, Aquafresh, Ventolin, Calpol, Actal, Panadol range, Piriton range, Scotts Emulsion range, and ENO fruit salt powder. The location includes the three divisions of GMS, Pharma and Consumer commercial (Haria, 2016).

The GSK as a consumer healthcare organization drives quality through a QMS which is adopted from the ISO standards. This QMS is a collection of world standards into internally identified sections ranging from management, facilities, quality control, process assurance and material testing. This study will explore the use of QMS in different aspects of the business in GSK and possible influence in continuous improvement of business performance.

## **1.2 Research Problem**

Global competition is ever increasing and with the increase in the demand for better quality products and services by buyers, organizations have come to the realization that the only option to survive in business is through delivery of high-quality products and services that meets consumer expectations. Several organizations are therefore, spending considerable amounts of funds in activities driven towards improvement of processes and product package. Growing application of quality deployment has made more organizations appreciate and recognize QMS as among popular continuous improvement tools.

The excessive cost of clinical consideration in Kenya is mostly because of the swelled expense of prescription, which makes up an average of up to 45 percent of patients' hospital bills Kenya Healthcare Federation (Federation, 2018). The QMS are destined to ensure efficiency in operations through waste reduction and lowering costs of operations. This will ensure availability of pharmaceutical products at affordable prices hence improve availability of healthcare as per Kenya's big four agenda, of affordable quality universal health coverage through 100 percent scaling up National Hospital Insurance Fund (NHIF) (Presidency, 2018). Even today, with expanded extension of NHIF inclusion, numerous individuals must compensation for their prescriptions using cash on hand however come up short on the budgetary assets to do as such due to the unaffordable prices (Federation, 2018). Future existence of these manufacturing facilities shall be guaranteed by the continuous improvement approach provided by effective QMS to meet the manufacturing agenda in the Kenya's big four agenda - enhancing manufacturing from 9.2 percent to 20 percent of Gross Domestic Product (GDP) by 2022 (Presidency, 2018).

Manufacturing organizations have attempted to implement various QMS with the intention of improving efficiency in operations, this objective has not been met by many of these organizations, as well as regulatory compliance due to consequences of non-conformances from periodic inspections. The QMS prescribe 'what' but does not outline 'how' to effectively incorporate QMS to organizational ways of working. Nevertheless, some efforts around applicability of quality management undertakings done in various sectors are evident but there exists lack of methodical empirical evidence about the effect

of quality management in the pharmaceutical industry (Yeung et al., 2003). Top Administration Perspectives And ISO 9000 Usefulness recommends that unsuccessfulness of ISO 9000 is fundamentally due to inappropriate managing intentions and anticipations from the dispensation (Rusjan & Alič, 2010). Exploiting ISO 9001 Profits for Tactical Outcomes classifies the major empirical benefits of QMS in four clusters as per the Balanced Score Card (BSC) methodology to corporation intents which connect potential benefit to specific standard requirement and pre-conditions to attainment of these benefits. This study did not focus on standard releases, therefore provides a generic view of commercial paybacks, which is a platform for additional exploration to support administration and quality experts in developing QMS.

Kenya's industrial division is challenged by scarcity of resources, prohibitive energy overheads, unpredictable electricity source, underutilized technology and diminishing product invention (UNDP, 2013). Regardless, Kenya encountered a normal development of 4.1 percent per annum between the years 2006 and 2013 yet this was not as much as development every year in the entire GDP of 4.6 percent. Insufficient electricity and timewasting rigid processes are the major trials facing the industry.

Local readings by (Njuguna, 2013) and (Mutua, 2014) established a connection between quality administration and performance in manufacturing industry, (Wachira, 2013) set up that institutional exhibition influences organization of value the board exercises at 75.5 percent. Ondoro et al. (2012) focused on the correlation in client service quality and buyer devotion in merchandizing drugstores in western Kenya. Quality measurements of

trust, package quality, fulfillment and obligation had substantial progressive result on customer allegiance. A study done by (Githae, 2004) focused on Total Quality Management (TQM) practices in selected private hospitals and the critical factors of TQM and found out that TQM has become popular as a transformational change tool in an establishment's decision-making way of life and operating efficiency. None of above studies have concentrated on quality management activities in the pharmaceutical industrial sector.

### **1.3 Objective of the Study**

The major objective of this study was to appraise QMS in GSK Kenya Limited, whereas the specific objectives of the study were to:

- (i) Determine the perceptions of implementing QMS in GSK Kenya Limited.
- (ii) Evaluate extent of QMS implementation in GSK Kenya Limited.
- (iii) Evaluate the influence of QMS on continuous improvement in GSK Kenya Limited.

### **1.4 Value of the Study**

Pharmaceutical manufacturing companies commit massive investment and vigorous processes, attaining high quality medicinal products impact the health of the user. Nonetheless, assessment of pharmaceutical outputs may be obstructed by diverse explanations of "quality" by firms. This research will seek to inculcate more appreciation of the current body of knowledge in the context of QMS deployment, qualification and maintenance in pharmaceutical manufacturing companies. Additionally, the study targets

to supplement the extant works with an up-to-date angle on QMS in Kenyan pharmaceutical companies. It will benefit the Kenyan regime through the Ministry of Health (MoH) and the Pharmacy and Poisons Board (PPB) in course of action choices with objectives to fast-track growth in the pharmaceutical production through QMS which will adversely contribute the manufacturing and universal healthcare elements in the Kenyan big four agenda.

In conclusion, the suggested agenda is designed at supporting the introduction of ISO 9001:2015 accreditation of QMS to more Kenyan pharmaceutical corporations. The exploration conclusions will pursue to lengthen understanding academically the area of QMS. This will be used by other researchers and academicians in borrowing ideas from the study to use as a foundation for additional research.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This section highlights the theoretic perspective on which QMS is established, company's performance literature. A review of the experimental examination work is talked about along with conceptual framework connecting QMS implementation and overall organization performance on a continuous improvement basis.

### **2.2 Theoretical Perspectives**

This study is supported by four quality management models progressed by several researchers. The theories are quality improvement theory, RBV theory, theory of constraints and invitational theory.

#### **2.2.1 Quality Improvement Theory**

This theory was developed by Deming in 1986. The QIT suggests that a module of value the executives is that it places obligation with respect to framing links conclusively at the entryway of top management (Deming et al., 1986). This hypothesis expresses that the administration oversees the agendas, also, that the structure produces 80 percent of the worries in organizations (Hill & Wilkinson, 1995). (Deming, 1986) discerned that it is the top organization obligation to empower the success of quality administration framework; the administration locates funds to the measures, creates company philosophy, chooses providers and facilitates long-lasting connections. Deming's QIT empowers the company to remove inadequate quality by successful managerial systems. Administration's

demeanor forms the commercial mentality and exemplifies essentials for attainment and endurance of the organization.

Deming (1986) put confidence in an exact genuine way of thinking to advance the for the most part perceived Plan Do Check Act (PDCA) cycle. The PDCA thought of constant change is a comprehensive change idea pointed at enlarging execution, subsequently contracting the error between client essentials and execution of amassing plants (Davis & Goetsch, 2006). The hypothetical quintessence of QIT focused on quality worries for a confident framework that nurtures involvement and knowledge for inspiring uptake of process administration, prompting implementation (Anderson et al., 1999). Oakland (2004) given that the commitments of top organization should direct the change of structures and techniques.

The level to which QMS principles are implemented in an organization entirely depends on the top management commitment. The top management provides adequate resources in terms of quality department personnel, time for QMS activities and training for staff. This promote corporate quality culture, improves the perception of quality by all staff and positively influences the continuous quality improvement thus QIT consideration to this study.

### **2.2.2 Resource-Based View Theory**

The RBV model nominates that maintainable competitive advantage is derived from interior valuable, rare, inimitable and without substitute company resources (Penrose,

1959) and therefore boost performance. The RBV notion recommends that the capital profile of an organization enhances success whereas superior performance is rooted in the proprietorship and positioning of unique resources that are difficult to mimic (Wernerfelt, 1984). The RBV concept advances that the procession and effective distribution of resources to selected locations enables sustainable competitive advantage (Barney & Clark, 2007). Ngo and O'Cass (2009) argue that a company's specific characteristics determine the performance variation among competitors by producing inimitable resources. The RBV model further indicates that a organizational excellence is pegged on inherent precise resources and proficiencies (Fotopoulos et al., 2009). According to (Barney, 2001), acquisition of resources is not enough for competitive advantage, development, combination and affective deployment of all the company resources in a style to add unique value hard for competitors to imitate is fundamental. This hypothesis is a business device used to control the key resources accessible to a firm and that the focal standard behind the hypothesis, is that the establishment for upper hand of a firm lies transcendently in the utilization of a heap of important assets available to the company (Wernerfelt, 1984).

As per RBV models, a firm's is considered a bundle of resources which include all tangible and intangible assets that facilitate the firm to create, develop and apply strategies that enhance its efficacy (Daft & Weick, 1984). An enterprise's image name, authoritative qualities, systems and cycles that are excluded from typical administrative bookkeeping data comprise the immaterial assets. Assets like item quality which are immaterial, are bound to produce unrivaled execution (Rousse & Daellenbach, 2009)

unlike the tangible ones. The major determinants of success according to RBV theory, is largely based on the organizational factors and their suitability within an environment, and the behavioural and sociological paradigm. Inward cycle factors are believed to be the most intense achievement factors, particularly by methodology models with this inner direction and 'inside-out' approach.

Barney and Clark (2007) opine that resources need to be heterogeneous in nature and not entirely versatile to switch from short to long term competitive advantage. Consequently, valuable though unsustainable and imitable resources are attained without much effort. Barney and Clark (2007) submitted that a firm's resources can help it sustain above average returns if these conditions remain constant. This concept is pertinent to this study because an organization's excellent management procedures enable it to create quality image. According to (Klassen & Whybark, 1999), the hypothetical ramifications for environmental management are multifaceted. Essential significance is the way that environmental and economic performances are identified with at least one vital asset yielding different competitive advantages. Quality performance can be linked to environmental procedures on condition that the necessary strategic organizational assets have been created as part of the management program. For instance, a firm may strive to achieve an international standard like the ISO 9000 through continuous improvement guidelines.

This strategic resource is valuable and applicable in the implementation of preventive environmental technologies (Hart, 1995), offering albeit, hypothetical basis for integrated

processes, such as total quality environmental management (Willig, 1994). The organization resource profile can either be acquired or developed within the organization. The acquired resources like staff, materials and machines must be developed further to the uniqueness of the organization to make the resources inimitable. The quality culture and mindset forms part of the overall organization unique resources in realizing quality through QMS approach. To achieve the desired level of QMS implementation RBV theory enables the requirement to identify the unique resources which put the organization at a competitive edge against the competitors. The QMS tools and concepts are generally available but the effective implementation requires those unique traits as resources in the organization which promote quality and continuous improvement hence the consideration of RBV theory in this study.

### **2.2.3 Theory of Constraints**

Eliyahu M. (Goldratt & Cox, 1984) first presented TOC in 1984 through his liberal book - the goal. The TOC, as TQM tool refers change as a procedure in processing. It assaults the main drawback or bottleneck that restrains the framework's performance instead of focusing on restricted enhancements in all sectors. The usage of TOC as a crucial system in quality management is advised. The tool should not replace quality management but be utilized to assist the organization detect challenges in its execution and focus the quality administrative efforts towards the firm's objective. In this regard, it is essential to adopt the degree of quality management and TOC implementation. The TOC which is an amalgamation of concepts, standards and devices can be exploited to improve organizational structures and increase execution. This is done by highlighting the top ten

components that adversely affect the framework's performance, as it focuses on improving performance rather than in reducing expenses. Rahman (1998) illustrates the TOC model where by every aspect of the framework must have at least one requirement and some challenges in order to be open to development. A unique feature of TOC, which is worlds apart from other change approaches, is how it evaluates change endeavors. By focusing on several quality change endeavors, cost decreases can be realized.

The execution of a superior framework is fundamental to realization of effective QMS. It is the duty of the organization to illustrate the current level of QMS implementation and the target level. A major target of this study is to evaluate the challenges of implementing QMS which come as constraints to the execution. The constraints like cost of implementation provide an avenue for continuous development in identifying the most prohibitive variable and employing resources around it to realize QMS implementation.

#### **2.2.4 Invitational Theory**

Invitational theory promotes individual and professional practices that transform and motivate society, organizations, programs, procedures, and strategies in any area that requires quality improvement. Its main objective is to create settings that intentionally inspire people to work towards their potential through training. Invitational approach is the application of this theory, especially where change in procedures is required (Purkey & Novak, 1992). In this approach, positive affirmative messages to self and others are used to encourage growth and empowerment.

The theory dismisses both the psychoanalytic belief and the traditional behaviorist view that our behavior is the product of unconscious forces, and reinforcement, reward or stimulus respectively. This theory operates on four essential assumptions: trust, respect, optimism, and intentionality (Purkey & Novak, 1992). These four traits, commonly used to cement relationships, provide a consistent "stance" by which people create and maintain environments that allow the ideal growth of proficiency which are required in quality improvement. Invitation theory thus recommends that systems should be developed and implemented to allow professionals to enhance quality. QMS is people based, and for effective implementation, it requires the organization leaders to play a central invitation role by using quality programs, reward systems and personal overtures. This will motivate and create a quality culture that will cascade to all enabling the organization actualize benefits. The objective in this study will thus be supported by the change of perception of QMS.

## **2.3 Empirical Review**

Past studies have been done on quality management and QMSs at both local and international level. This section presents empirical review on existing knowledge on QMS based on research objectives.

### **2.3.1 Perceptions of Implementing Quality Management Systems**

A study by (Alolayan, 2014) purposed to survey the exhibition of QMSs in the Kuwait work associations according to ISO 9001:2008 from the clients' viewpoints (end clients) in light of the reviewing practices and quality executions. In particular, the examination

objective was to research about the current ISO 9001 implementation in the Kuwait ensured associations and upgrade any possibility for quality enhancements. The discoveries of the investigation were that ISO ensured producing associations in Sweden beat ISO affirmed administrations associations in Kuwait.

Visamaki (2016) wrote a thesis assessing QMS as an asset. The fundamental target was to improve the nature of items and administrations by methods for re-evaluating and re-building procedures to empower the client to get desired items and services. This was a contextual investigation on the past of strife in the maritime market. The investigation found that how the development of a QMS and sharp utilization of it as a piece of the advertising activity helps in picking up an aggressive toehold in new potential markets just as protects the brand with the old market clients in a consistently changing business environment.

Mwaura (2017) studied the effect of TQM on performance of Kenya Revenue Authority (KRA). From data gathered using an interview guide and administered to KRA senior management, and content analysed, the study established that reforms, modernization, and changes in quality systems at KRA have been effective in the restructuring of revenue collection in Kenya.

### **2.3.2 Extent of Quality Management Systems Implementation**

Muthama (2016) completed a spellbinding examination study to decide the degree of actualizing TQM rehearses (initiative; viable correspondence; client center; providers'



relations; preparing and instruction; workers' strengthening; persistent improvement; and cycle improvement) by the versatile media transmission firms in Kenya and set up the connection between the execution of TQM rehearses and authoritative execution (quality, development, and budgetary) in the portable media transmission firms in Kenya. The census survey on five mobile telephone operators in Kenya: Safaricom Limited, Airtel Networks Kenya Limited, Orange Telkom Kenya Limited (Orange), Finserve Africa Limited (Equitel), and Sema Africa Limited as per the Communication Authority of Kenya. From data collected using closed ended questionnaires from the headquarters, 81.25 percent of firms had implemented TQM, 62.5 percent had fully implemented TQM practices, and 18.75 percent had either partially, or none implemented TQM practices.

The culture profiles Indonesian construction organizations (Willar, 2012) along with the current execution of ISO 9001 and their exhibition during actualizing QMSs. The destinations were to analyze the adequacy of QMS being worked in Indonesian development organizations, recognize current issues inside the frameworks, and look at organizations' exhibition while actualizing their QMS in order to get findings intended to study the effectiveness of their QMS implementation, questionnaires were utilized to gather data from civil engineering contractors in provinces of Makassar and Manado, and the public capital, Jakarta. The outcomes strengthened advancement of a culture-based QMS improvement usage structure, intended to help Indonesian development organizations perceive some particular difficulties that influenced the compelling execution of QMS; to help them to create social guidelines that can start viable QMS

usage; to set out on powerful QMS rehearses; and to perceive the possible outcomes and strong advantages achievable from actualizing successful QMS.

### **2.3.3 Influence of Quality Management Systems on Continuous Improvement**

Mokamba (2015) investigated to find out the impact of QMS on the relationships between funding mobilization, organizational systems, infrastructure, and admission on the performance of Kenyan public universities. The study objective was to investigate influence of the combined internal factors (funding, administrative, infrastructure, and admission systems) and the performance of Kenyan public universities. Using the survey research design, structured questionnaires were used in the collection of data and a preliminary study was done to check for the reliability and validity of the research instruments. The results of this study established that QMS played a significant influencing role between each of the individual internal factors and the performance of Kenyan public universities. Infrastructure systems had the highest coefficient of determination compared to all the other internal factors.

Wanyoike (2016) completed an investigation to set up the effect of management practices on performance of Kenyan manufacturing firms. The particular goal were to develop the effect of ceaseless enhancement for firm performance; assess the effect of customer base on firm performance; decide the degree to which top administration duty influences the performance of manufacturing firms in Kenya; survey the degree to which the working condition directs the connection between quality management practices and the Kenyan manufacturing firms performance; and set up the intervening impact of hierarchical

ability on the connection between quality management practices and performance. The investigation utilized both clear and informative research plan and the objective populace contained every one of the sixty producing firms in Kenya and an example size of one hundred and twenty respondents. The investigation embraced evaluation examining strategy and utilized essential information which was gathered utilizing self-controlled polls. The discoveries demonstrated that consistent improvement had positive and critical impact on execution of assembling firms. Client center was observed to be noteworthy in clarifying the variety of performance and top administration duty was found to have a critical impact of performance of manufacturing firms.

Bhatia and Awasthi (2014) sought to established the impact of QMS on business performance. The performance factors focused on were: “information quality, operating performance; design performance; environmental performance; product and service quality; supplier and customer relationships; and competitive priorities.” So as to examine the impact of QMS usage, a reason model connecting these performance factors, was created. The model showed how improvement in one factor acquires improvement another. In such manner, a poll was readied identified with execution of QMS on business execution factors, and an overview study was directed with experts associated with quality administration and building to gather their perspectives on QMS usage. The study results uncovered that organizations as often as possible perform QMS as an impetus for change and daily practice them. The vast majority of the proposed premises were found to have considerable positive relationship, though insufficient centrality was

found between data quality and environment performance; between design performance and product quality; between environmental performance; and product quality.

Neyestani (2016) carried out a study on the effect of QMS usage on primary variables of development extents in Metro Manila, Philippines. For this goal, the study explored a top to bottom literature review to see profoundly QMS, distinguish the attributes of the crucial components of development ventures, and the findings of observational investigations concerning the impacts of QMS on development ventures. The discoveries showed that the usage of QMS can be influenced generally on consumer satisfaction, trailed by expense, and time respectively, while minimum viability of QMS was on degree through QMS implementation in construction projects in Metro Manila.

Njenga and Kidombo (2017) sought to investigate the impact of implementing QMS on functioning performance of procedural training institutions. The operational performance of technical training institution was largely based on the customer's perceptions, while the performance of technical training institution was found to greatly affect by communication. The research outcome was that leadership style had a great influence on the operational performance of technical training institutions in the county.

#### **2.4 Summary of Empirical Review**

The empirical reviews from previous studies were evaluated in connection to this research. The studies' objectives, research methodologies and study conclusions were analyzed in relation to the focus of the current research. The concepts of QMS, ISO 9001

and TQM have been studied in context of various organizations locally and globally with varied objectives, methodologies and have come up with numerous findings. The use of questionnaires in survey appeared to be widespread practice for the researchers whose studies were reviewed. The focus of the current research was evaluated alongside the previous studies to address the knowledge gaps and provide a basis for further research. The empirical review studies were summarized in the table below.

Table 2.1 Summary of Empirical Review

Author(s)	Study Topic	Objectives	Research Methodology	Findings	Focus of Current Study
Seppälä (2015)	Implementing QMS for an engineering and services company.	Give a proper solution on successful 9001 QMS implementation	Analysis of literature and information obtained from the case organization was achieved through discussions, workshops, surveys and reviews.	There is need for Organizations upgrade so that ISO 9001 necessities would adjust to corporate review.	Focus on GSK in Kenya, a manufacturing organisation.
Muthama (2016)	Determine extent of implementing TQM practices and the relationship between the implementation of TQM practices and organizational performance by mobile telecommunication firms in Kenya.	Evaluate impact of implementing leadership; successful correspondence; focus on customers; suppliers' relations; employee training; workers' strengthening; consistent improvement; and process improvement to quality, innovation, and financial performance.	Descriptive case study and carried out census survey on 5 mobile telephone operators in Kenya and data was collected using closed ended questionnaires from the head of departments.	The study found that 81.25 percent of companies had executed TQM, 62.5 percent had wholly employed TQM requirements, and 18.75 percent had either somewhat, or not a bit instigated TQM principles.	Focus on manufacturing set up of fast-moving consumer health care goods in multinational organisation in Kenya.
Löfgren (2012)	Developing and implementing QMS in a start-up company.	Create a solid start that can guide and support the people in the organization towards better learning and development of the business.	Information was gathered through interviews with professionals and benchmarking interviews with other small companies who work with QMS.	Workshop is a decent instrument for making organizations in a change procedure since it triggers discourses which invigorate learning.	Based on existing organisation with current QMS in place.
Willar (2012)	Improving QMS implementation in Indonesian construction companies.	Set up beliefs summaries within Indonesia in development associations, combined with present usage of ISO 9001 and organisations	Questionnaire reviews were dispersed to chosen agent grade seven structural designing	There is a huge relationship between an organization's authoritative culture and the quality	A case study with phenomenologic al approach

Author(s)	Study Topic	Objectives	Research Methodology	Findings	Focus of Current Study
		enactment amid actualizing QMS.	engineering workers.	performance of contractors.	
Mokamba (2015)	Influence of QMS on the connection amid interior aspects and success of public campuses in Kenya.	The appropriateness of QMS standards, procedures and devices to the advanced education part and their relationship with performance of those establishments.	Survey research design, seven certified public universities published by commission for university education in Kenya were sampled and structured questionnaires were used in collection of data.	QMS played a significant influencing role between each of individual internal factors and Kenya state funded colleges performance	Based on QMS in a manufacturing business environment on a case study in GSK.
Mane and Patil (2015)	QMS at a construction project.	Determine which quality tool used at construction projects, quality control measures used on site, and which aspect was most important for maintaining QMS at construction projects.	A cross-sectional survey design was used.	Most significant quality device utilized at building site was check records, fish bone outline, stream graph, pareto investigation, histogram, check sheets, control outlines, dissipate chart and factual examination.	The study was to have a targeted survey on quality and non-quality departments.
Visamäki (2016)	QMS as an asset.	Improve the nature of goods and services by methods for absolutely revaluating and re-designing procedures to empower client to get wanted items and administrations.	A case study on past of turmoil in the maritime market.	Construction of QMS and clever use of it as a part of the marketing initiative helps in gaining a competitive foothold in new potential markets.	Focus on evaluating level of QMS implementation in relationship with performance.

Author(s)	Study Topic	Objectives	Research Methodology	Findings	Focus of Current Study
Wanyoike (2016)	Quality management practices and firm performance among manufacturing firms in Kenya.	Establish consequence of improving continuously on business outcome; evaluate impact of client attention on company performance; define the degree to which leadership assurance touches performance of Kenyan manufacturing businesses.	Descriptive and illustrative study strategy was used, goal population encompassed 60 industrial Kenyan companies and 120 respondents were sampled	Continuous improvement had positive and weighty consequence on performance; Buyer attention entirely explained disparity of performance and senior leadership assurance.	Study was to focus on QMS on all employees in the case study organisation.
Bhatia (2014)	Investigating effectiveness of QMS.	“Establish whether QMS are implemented as a catalyst to bring a change, use of QMS in daily practice and reasons for the implementation of QMS. Study the performance factors that are favoured by QMS.”	Study involved quality management and industrial experts views on enactment of QMS.	QMS is habitually used in everyday practise as a promoter for change management	Study was to include all aspect of QMS.
Muchara (2012)	Total quality and competitive advantage of firms in the horticultural industry in Kenya.	Understanding contradictions and determination of the exact effect of total quality on an organization’s competitive advantage.	A cross-sectional survey design was used.	TQM has solid and positive effect on competitive advantage, and there was solid connection between tasks viability and TQM.	Addresses QMS and associated processes.
Alolayan (2014)	Experiential assessment of the ISO 9001 QMS for Kuwait certified work establishments as benchmarked against analogous Swedish organizations.	Investigate present ISO 9001 employment in Kuwait certified establishments and examine current inspecting regime and their influence in implementing and enhancing any prospect for quality improvements.	Target respondents were given as a list of ISO 9001 certified establishments by state of Kuwait Public Authority for Industry (PAFI).	Swedish industrial businesses which are ISO certified outperformed the ones in Kuwait.	Case study in GSK.



Author(s)	Study Topic	Objectives	Research Methodology	Findings	Focus of Current Study
Neyestani (2016)	Effectiveness of QMS on construction projects.	Appraise the influence of QMS application on the key aspects of building tasks in Metro Manila, Philippines.	Random apportionment of survey to 37 managers. Previous studies were the basis of the questionnaire development	Enactment of QMS can be exaggerated by client's contentment, price, and period while least efficiency of QMS was in scope through QMS application.	Study was focused on different levels of management.
Njenga (2017)	Influence of implementing QMS on operative functioning of technical teaching colleges.	Examine the stimulus of instigating QMS on operative functioning of technical teaching institutions in the county of Meru, Kenya.	Census sampling method was used.	Training influence operative functioning of technical teaching establishment.	Addresses all elements of QMS in a manufacturing organisation.
Sherif (2010)	The barriers in implementing TQM that requires to be fixed because of the disparities in societal cultures.	Identify the cross societal cultures hindering TQM implementation as contrasted to the acceptable cultural barriers.	Libyan construction sector case study.	Come up with barriers in relation to information on inter-societal and intra-organisational barriers	Study was to address QMS principles.
Mwaura (2017)	Effect of TQM on performance of KRA.	Study the effect of TQM on performance of KRA.	Used content analysis method to analyze data.	Reforms, modernization and changes in quality systems at KRA has been effective.	Study was to focus on manufacturing segment of GSK.

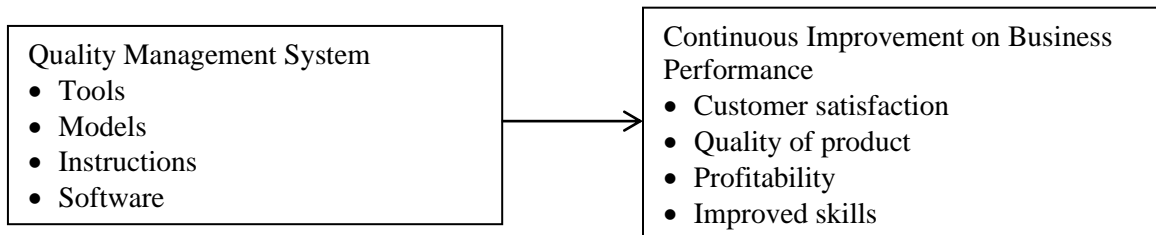
## 2.5 Conceptual Framework

The dependent variable for this study was continuous improvement of business performance, which was influenced by three independent variables and indicated by customer satisfaction, quality of product, development of competence, and profitability. The first variable was steering as indicated by values, mission and vision while the second variable was operations with tools, models, instructions, and software being the indicators. The third variable was cooperation with structures, processes, teams, and networks being the indicators – see Figure 2.1 below.

Figure 2.1 Conceptual Framework

Independent Variables

Dependent Variable



Author: Researcher (2020)

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This section presents the research design for the study, the target population, sample size and sampling technique, data collection procedure and instruments, type of data, research instrument, information gathering technique, pilot study, information legitimacy and information dependability. The section likewise introduces data analysis and presentation.

### **3.2 Research Design**

The study employed an explorative study approach, to evaluate the effects of QMS on organizational performance. Experience survey was utilized to seek information from persons experienced in this area of study. The QMS is an initiative of top management and the departmental heads. The explorative study was considered appropriate for this investigation on the grounds that the focal point of the examination was to answer "how" and "why" questions and the investigation needed to cover logical conditions that are pertinent to the marvel under examination. It also involved seeking the opinions of employees at GSK Ltd on QMS.

### **3.3 Target Population**

GSK Kenya has office and factory staff based at the Likoni road site in Nairobi and other marketing staff based in various regions in Kenya and East Africa. These regional based staff do not report to the office regularly thus the study targeted all the employees based at the Likoni road site which had a pool of approximately 279 employees.

### 3.4 Operationalization of the Variables

All employees in GSK were included and it was ensured that the following elements in the population were included; all levels of management, quality and non-quality department employees and varied years of experience. The research variables of work experience, current department and current level of management or operation with their type of scale and measurement have been summarized in Table 3.1 below:

Table 3.1 Operationalization of Variables

Variable	Operational Definition	Type of Scale	Measurement
Experience	Number of years an employee has worked in GSK or similar organisation.	Less than 1 year, 1 to 5 years, 6 to 10 years and above 10 years.	Ordinal
Department	The functional area of day to day work.	Quality department or another department.	Nominal
Level of management.	The level of influence in decision making.	Senior, middle or operational level of management.	Nominal

### 3.5 Data Collection

This study utilized both essential and optional information and essential information was gathered through surveys while auxiliary information was included different wellsprings of proof, for example, inner organization reports and friends' sites. Surveys were regulated to the respondents through a drop and pick technique. The analyst left the respondents to fill the surveys at their own one of a kind time and accumulate the structures in a weeks' time. This benefited the respondents' copious opportunity to scrutinize, understand and fill the polls with most extreme focus.

### **3.6 Reliability and Validity Tests**

Test retest technique was utilized in this investigation and questionnaires were controlled twice to each respondent at two-week interims and an unwavering correlation coefficient decided between the two sets of scores. The two sets of scores were relapsed utilizing the Pearson's product moment correlation coefficient formula, to decide the correlation coefficient ( $r$ ) between the two sets of scores. The piloting in this study was done before the real research. This was finished by intentionally testing staff members drawn crosswise over different divisions of GSK. Through this piloting, the analyst decided if there would be any uncertainty in any data and assuming any, if there was, then balanced or amended through expert judgment would be done.

### **3.7 Data Analysis**

The collected data was checked and (Mugenda, 2003) says that such data must be scrubbed, coded, keyed and dissected. It is from the results of such investigation that researchers can comprehend the information. The investigation used both qualitative and quantitative data and the quantitative data was examined through graphic insights by utilization of frequencies and rates and mean, whereas the qualitative data was first sorted out into topics relating to the investigation targets. Data analysis included evaluating, arranging, classifying, and recombining evidence to determine meaning identified with the investigation's initial objective, research questions and issues. Quantitative data was exhibited by use of tabulations, visual diagrams and pie outlines. Tables were utilized to show the frequencies, rates, mean and as standard deviation. Qualitative data, then again, involved the utilization of full clarification of the substance where topics were

incorporated and introduced as paragraphs. Table 3.2 below shows summary of objectives, data to be collected, analysis and interpretations.

**Table 3.2 Summary of Objectives, Data to be Collected, Analysis and Interpretations**

Objective	Data to be Collected	Questionnaire Items	Analyses	Interpretations
Determine the perceptions of implementing QMS in GSK Kenya Limited.	Qualitative information on staff perceptions of QMS implementation in GSK.	Appendix III	Descriptive	Strongly agree, agree, neutral, disagree and strongly disagree.
Evaluate extent of QMS implementation in GSK Kenya Limited.	Qualitative information on the extent of QMS implementation in GSK including awareness, audits, maintenance, communication and funding.	Appendix IV	Descriptive	Very large extent, large extent, moderate extent, little extent and No extent.
Evaluate the influence of QMS on continuous improvement in GSK Kenya Limited.	Qualitative information on level of influence to organisation's key performance indicators by QMS in GSK.	Appendix V	Descriptive	Strongly agree, agree, neutral, disagree and strongly disagree.

### **3.8 Ethical Consideration**

This case study used questionnaires distributed to employees of different departments and levels of management. The employee experience details and opinions on QMS were key elements to the study. Thus, this study ensured confidentiality and anonymity of research respondents and participation voluntarily to avoid any harm to the participants and the organization.

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

### **4.1 Introduction**

This section presents findings based on the proposed methodology and procedures. The chapter comprises of the following sections response rate, background information, perceptions for implementation of QMS in GSK, extent of QMS implementation in GSK and the relationship between QMS implementation and continuous improvement in GSK Limited.

### **4.2 Response Rate**

For the study, out of the 279 questionnaires administered to the respondents, 205 were fully filled and returned, which was rate of 73.5 percent. Seventy-four (26.5 percent) of the respondents did not respond due to various reasons. Subsequently, the reaction rate archived was fit for investigation since, according to Mugenda and Mugenda (2008), any reaction of 70 percent or more is viewed as phenomenal for examination and making deductions.

### **4.3 Demographics of the Respondents**

The researcher sought to establish basic characteristics such the respondent's highest education level, the duration worked for the organization, department of work, duration worked in the department and the position in the organization. To explore these factors, an analysis of frequencies was undertaken after which the output was presented as shown Table 4.1 below.

Table 4.1 Responses Based on Socio-Demographics

Variable	Socio-Demographics	Frequency	Percent
Level of education	Diploma	70	34.2
	Bachelor's degree	120	58.5
	Masters	15	7.3
Duration worked in the organization	Less than 1 year	6	3
	1 to 5 years	55	27
	6 to 10 years	121	59
	Over 10 years	23	11
Management level in the organization	Top management	14	7
	Middle management	10	5
	First level supervisor	17	8
	Non-managerial position	164	80
Department of work	Quality and compliance	48	23.4
	Others	157	76.6

Table 4.1 above shows that majority of the respondents 58.5 percent had attained bachelors' degree followed by 34.2 percent who had attained diplomas while the least 7.3 percent had acquired masters' degrees. It can be concluded from the findings that most respondents were knowledgeable and were highly conversant with the role of QMS towards continuous improvement in the organization.

With respect to duration worked in the organization, majority (59 percent) had worked for the organization for a period ranging between 6 and 10 years followed by 27 percent who had been in the organization for a period ranging 1 to 5 years, then 11 percent who had been employed for over 10 years while the least, 3 percent had worked for the company for less than one year – see Table 4.1 above. It can be deduced that the respondents were better placed to provide data as most of them had been in the organization for a reasonable number of years and thus were conversant with the subject of the study.



As Table 4.1 above shows, it is evident that most respondents were ranked in non-managerial positions at 80 percent. Other respondents were placed in other categories namely first level supervisor, top management and middle management in nearly equal proportions of 8 percent, 7 percent and 5 percent, respectively. On management level in the organization. In addition, Table 4.1 above shows that most respondents worked in other departments (76.6 percent) from the quality and compliance department, whereas 23.4 percent were from the quality and compliance department. This shows that there was entire representation of the organization that not only quality department employees who are expected to be conversant with the subject of study

#### **4.4 Perceptions of Implementing Quality Management System**

The first objective of the study was to examine the perceptions for implementing QMS in GSK Kenya Limited. This was achieved by asking the respondents to indicate the degree to which they agreed with different statements on QMS implementation. The responses were rated using a five-point Likert scale of 1 - strongly disagree, 2 - disagree, 3 - moderate, 4 - agree, and 5 - strongly agree - Table 4.2 below shows the responses

**Table 4.2 Perception of Implementing Quality Management System**

Statements	Mean	Standard Deviation
Process for designing and building QMS is clear and practiced	4.40	0.58
Company and its suppliers are mutually beneficial	4.32	0.70
Management uses QMS to continually improve process performance	4.29	0.79
Company's quality functions play a key role in enhancing performance improvement on continuous basis	4.16	0.66
There is a continuous evaluation of various business strategies at the company	4.12	0.60
Average	4.26	0.67

The study's findings as shown in Table 4.2 above shows that the respondents agreed with the different statements on QMS implementation as evidenced by a grand mean of 4.26. The highest mean recorded was on the process for designing and building QMS is clear and practiced (mean = 4.40, standard deviation = 0.58) followed by the company and its suppliers are mutually beneficial (mean = 4.32, standard deviation = 0.70) then management uses QMS to continually improve process performance (mean = 4.29, standard deviation = 0.79) while the company's quality functions play a key role in enhancing performance improvement on continuous basis and there is a continuous evaluation of various business strategies at the company recorded means of 4.12 and 0.60, respectively. The study recorded a grand standard deviation of 0.67 implying that the responses were clustered around the mean response.

#### **4.5 Extent of Quality Management System Implementation**

The study's second objective was to evaluate the extent of QMS implementation at GSK Kenya Limited. The respondents were asked to indicate the extent to which different components of QMS had been implemented. The responses were rated in a five-point Likert scale of: 1 - very little extent 2 - little extent, 3 - moderate extent, 4 - large extent, and 5 - very large extent – Table 4.3 below shows the results. In general, the study's findings on the extent of QMS adoption in GSK Kenya Limited reveals that QMS has been adopted to a large extent in this organization. This is evidenced by a grand mean of 4.39, that is most respondents agreed to a large extent that different components of QMS had been implemented by GSK Kenya Limited.

Table 4.3 Extent of Quality Management System Implementation

Statements	Mean	Standard Deviation
Standard operating procedures for key processes are in place	4.72	0.33
There is adequate awareness creation and sensitization of staff on benefits of ISO 9001	4.48	0.61
Benefits of QMS implementation are tangible and known to staff	4.48	0.55
Sequence and interactions of key processes in the company are determined by organization charts and flow charts	4.46	0.56
Funds are available to facilitate implementation of the quality management system	4.44	0.53
Adequate time is given for the implementation of the quality management system	4.42	0.59
A quality manual and quality policy statement are prepared and displayed	4.35	0.52
There is appointment of ISO/ QMS champions (Coordinators)	4.31	0.63
ISO standards are communicated to staff effectively	4.30	0.60
Internal and external audits/ inspections are conducted as planned	4.26	0.65
Commitment of top management is evident to everyone in GSK Kenya limited	4.22	0.66
Management reviews are held at planned interval	4.19	0.64
Average	4.39	0.57

Specifically, the mean and standard deviation were standard Operating Procedures (SOPs) for key processes are in place (mean = 4.72, standard deviation = 0.33); there was adequate awareness creation and sensitization of staff on benefits of ISO 9001 (mean = 4.48, standard deviation = 0.61); benefits of QMS implementation are tangible and known to staff (mean = 4.48, standard deviation = 0.55); sequence and interaction of key processes in the company are determined for example, organization charts and flow charts (mean = 4.46, standard deviation = 0.56); funds are available to facilitate implementation of QMS (mean = 4.44, standard deviation = 0.53); adequate time is given for the implementation of QMS (mean = 4.42, standard deviation = 1.56); a quality manual and quality policy statement are prepared and displayed (mean = 4.35, standard deviation = 0.52); there is appointment of ISO/QMS champions as coordinators (mean = 7.31, standard deviation = 0.63); ISO standards are communicated to staff effectively

(mean = 4.26, standard deviation = 0.65); internal and external audits/inspections are conducted as planned (mean = 4.26, standard deviation = 0.65); commitment of top management is evident to everyone in GSK Kenya Limited (mean = 4.22, standard deviation = 0.66); and management reviews are held at planned interval (mean = 4.19, standard deviation = 0.64). The overall mean recorded was 4.39 while the average standard deviation was 0.57 implying that the responses were dispersed around the mean response.

#### **4.6 Influence of Quality Management System on Continuous Improvement**

The study sought to establish the extent to which organizational continuous improvement in performance had been achieved using QMS. The statements were designed to establish the deliberate use of QMS to influence performance on a continuous basis. The responses were rated using a five-point Likert 1 - strongly disagree, 2 - disagree, 3 - neutral, 4 - agree, and 5 - strongly agree and Table 4.4 below shows the results.

**Table 4.4 Influence of Quality Management System on Continuous Improvement**

Statements	Mean	Standard Deviation
Staff use QMS mainly for audits and inspection preparation	3.93	0.95
Primary governance for operations is derived from QMS	3.87	1.04
There is deliberate consultation of QMS requirements in cases of negative performance	3.80	1.00
Increase in number of new markets entered has been enhanced by QMS implementation	3.74	0.85
There is evidence of increased customer satisfaction after implementation of QMS	3.66	1.15
The firm's ability to attain new customers has increased drastically after QMS implementation	3.61	1.14
The firm's audits and inspections have produced positive results after QMS implementation	3.42	1.19
Generally, profitability in GSK can be attributed to the use of QMS in value chain processing	3.20	1.33
Average	3.64	1.09

When presented with different statements on the extent to which the different parameters of performance have been achieved, majority of the respondents agreed that the staff use QMS mainly for audits and inspection preparation (mean = 3.93, standard deviation = 0.95). This was closely followed by the primary governance for operations is derived from QMS (mean = 3.87, standard deviation = 1.04). Further, a good number of respondents agreed that there was deliberate consultation of QMS requirements in cases of negative performance (mean = 3.80, standard deviation = 1.00) while 3.74, 3.66 and 3.61 stated that there was number of new markets entered, there was evidence of increased customer satisfaction after implementation of QMS and the firm's ability to attain new customers had increased, respectively. On the other hand, the firm's audits and inspections indicated positive results after QMS implementation (mean = 3.42, standard deviation = 1.19 and the firm's profitability attributed to the use of QMS in value chain processing mean = 3.20, standard deviation = 1.33 recorded the least mean. From the findings shown above, it can be concluded that although GSK Kenya Limited has been doing well, the performance was not to a large extent connected to QMS processes.

Simple linear regression analysis was done, and the independent variable was QMS while the dependent variable was continuous improvement in performance indicators. The results of the analysis are shown in Table 4.5 below.

Table 4.5 Model Summary, Analysis of Variance, and Coefficients

Model		R			R Square	Adjusted R Square	
1		0.087			0.008	0.003	
Model		Sum of Squares	Df	Mean Square	F-Value	P-Value	
1	Regression	1.401	1	1.401	1.558	0.213	
	Residual	182.501	203	.899			
	Total	183.902	204				
Model		Unstandardized Coefficients			Standardized Coefficients	T-Value	P-Value
		B			Beta		
1	(Constant)	3.383				7.676	0.000
	QMS	0.130			.087	1.248	0.213

The R-square value in the model was 0.008 meaning 8 percent of the variation in performance improvement at GSK Kenya Limited was explained by QMS while the other 92 percent was attributed to other factors not considered for the study. The significance test indicated that the overall model was not significant since the p-value of 0.213 was more than the alpha level of 0.05 meaning that QMS was not significant in explaining performance improvement on continuous basis at GSK Kenya Limited.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

Based on the study objectives, this chapter looks at the summary of findings, conclusion, recommendations. In addition, limitations, suggestions for further research and implication of the study are also presented.

### **5.2 Summary**

The study examined QMS implementation and continuous improvement in GSK Kenya Limited using field data to derive findings. The demographic information results indicated that majority of the respondents had attained bachelor's degrees as the highest education level. The study also found that the respondents had been working for the organizations for the organization for a considerable period with most ranging from between 6 to 10 years. Furthermore, majority of the respondents were found to be serving in the non-managerial position and that most individuals that responded to the study were from the other departments apart from quality department while most stated that they had worked in their departments for long.

The findings on the different statements that sought to establish the perceptions towards the implementation such as process for designing and building QMS is clear and practice; the company and its suppliers are mutually beneficial, management uses QMS to continually improve process performance; the company's quality functions play a key role in enhancing performance improvement on continuous basis; and there is a

continuous evaluation of various business strategies at the company produced – the aggregate mean was 4.26 implying that the respondents were positive about the implementation of QMS at GSK Kenya Limited. Further, the respondents cited the factors that might have led to adoption of QMS, as compliance to regulations, request by customers, need for smooth operations, and the desire to offer better customer care as among the reasons. The study also found out those quality initiatives such as supplier partnerships, handling of customer complaints, and end to end supply chain relationships had been established since the adoption of ISO 9001. Further, the study noted that successful implementation of QMS required resources such as QMS training and dedicated staff starting from the management and thus the organization must allocate adequate resources and time for successful implementation of QMS.

The findings on the extent to which QMS has been implemented at GSK Kenya Limited showed an overall mean of 4.39. The respondents agreed with articulations, for example, SOPs for key cycles are set up; there is sufficient mindfulness creation and refinement of staff on advantages of ISO 9001; advantages of QMS execution are unmistakable and known to staff; grouping and communication of key cycles in the organization are controlled by association charts and stream diagrams; reserves are accessible to encourage usage of the quality administration framework; satisfactory time is given for the usage of the quality administration framework; a quality manual and quality strategy explanation are arranged and shown; there is appointment of ISO/QMS champions (coordinators); ISO standards are communicated to staff effectively; internal and external audits/inspections are conducted as planned; commitment of top management was



evident to everyone in GSK Kenya Limited; and management reviews are held at planned interval. The study also suggested full QMS training, allocation of resources and dedicated staff right from the management as prerequisites for attainment of QMS.

Similarly, the respondents construed that the firm's respondents were well positioned to adapt to changes in the environment. Most respondents agreed that the company undertakes frequent analysis of changes in customer needs; business has put in strategies to mitigate any likely changes in the industry; business was well prepared to deal with changes in the industry; and the company had better strategies to adapt to market and economic changes in the industry than the competitors. The study's findings on the third objective showed that there exists a minimal relationship between the implementation of QMS and performance on a continuous basis. The simple linear regression analysis findings indicated that QMS was statistically insignificant in explaining organizational performance.

### **5.3 Conclusion**

Based on the first objective which was to explore the perceptions towards the implementation of QMSs, the study concludes that QMS was perceived as a tool for continuous improvement and the respondents held positive opinions towards its implementation since it enables the firm to meet the ever-rising customer desire for quality in all aspects. The study also concludes that QMSs have been adopted to a large extent at GSK Kenya Limited and the organization had put in place standard operating procedures in place which was highly critical having in mind that the company deals with

sensitive products upon which any mishap could result in major consequences. From the research, quality management has been inferred to be very important for firm to attain superior performance on a continuous basis especially in the challenging competitive environment. Evidence shows that the implementation of QMS is not perceived as the core driver of continuous improvement despite the high level of implementation. This trend coupled with the drivers of QMS implementation, indicated that QMS implementation was triggered by regulators and customers rather than attraction to performance improvement continuously at GSK Kenya Limited.

#### **5.4 Recommendations**

From the research findings, implementation of quality management in an organization requires huge resource allocations. This comes in form of money, and time that should be allocated to train staff or improve the existing systems. The management must, therefore, allocate adequate resources to facilitate the process and initiate frequent team building sessions and attachment to the quality department. This resource allocation should be commensurate to the performance improvement desired from implementation.

The study further recommends the company should study QMSs of other firms from related or different industries to identify areas of improvement for survival in the highly competitive environment. Furthermore, management should undertake frequent system reviews of performance against the level of implementation to ensure that all operations are undertaken as per the standard operating procedures, which facilitates timely identification of variations and taking of corrective measures.

## **5.5 Suggestions for Further Research**

Further studies should be carried out on with potential predictors of performance on a continuous basis. The same study can also be carried out using a wider population across a mix of industries in Kenya to get findings that are applicable to all industries in Kenya where QMS is evident. Since the study was quantitative, a qualitative study can be undertaken that would capture opinions, believes and value expressions by respondents. Since this study used non-financial measures of organizational continuous improvement, another study would investigate the inclusion of financial measures in order to bring insight to the firm on the importance of implementation of QMSs.

## **5.6 Limitations of the Study**

It was difficult, because of confidentiality policy of the company, to obtain all the required information as some of the respondents were seeking approval from the legal department and this also explains why the response rate was 73.3 percent. Most respondents were from the non-managerial positions and thus might not have exhibited adequate knowledge on QMS practices as those in the managerial positions. This could have left out important information in this study. In addition, some of the respondents who were senior management and may have felt obligated to give a positive response since it was measuring the extent of performance to create a positive impression about the performance of the firm and therefore attract clients. The respondents were also reluctant especially when responding to the open-ended questions.

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## APPENDICES

### Appendix I Letter of Introduction



## UNIVERSITY OF NAIROBI SCHOOL OF BUSINESS

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---

**DATE:** 13/8/2019

### TO WHOM IT MAY CONCERN

The bearer of this letter **Edwin K. Munyalo** of Registration Number **D61/88026/2016** is a Master of Business Administration (MBA) student of the University of Nairobi.

He is required to submit as part of his coursework assessment a research project report

- We would, therefore, appreciate if you assist him by allowing him to collect data within your organization for the research.

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

Thank you.

  
**PROF. JAMES NJIHIA**  
**DEAN, SCHOOL OF BUSINESS**



**Appendix II Characteristics of the Respondents**

The purpose of this questionnaire is to collect data to be utilized in the study titled “Quality Management System implementation and Continuous Improvement in GSK Kenya Limited”. Your participation is highly appreciated.

**General Information**

1. State your highest education level.  
Diploma ( )  
Undergraduate degree ( )  
Master Degree ( )  
Doctorate (PhD) ( )
  
2. In which department do you work?  
Quality and Compliance [ ] Other [ ]  
(For Others Please Specify) .....
  
3. What is your employment designation?  
Top Management ( )  
Middle management ( )  
First level supervisor ( )  
Non managerial ( )
  
4. For how long have you worked in GSK?  
Less than 1 year ( )  
1 – 5 years ( )  
6 – 10 years ( )  
10 years and above ( )
  
5. How long have you served in your current department?  
Less than 1 year ( )  
1 – 5 years ( )  
6 – 10 years ( )  
10 years and above ( )
  
6. Do you know which year GSK obtained the ISO 9001 certification?  
Yes [ ] No [ ]

**Appendix III Questionnaire for Objective One**

This section rates your view on QMSs implementation. Please mark appropriately in the box to rate your level of agreement or disagreement. On a scale of 1-5.

(5 = strongly Agree, 4 = Agree, 3 = neutral, 2 = Disagree, 1 = strongly disagree).

Statement	5	4	3	2	1
Management uses QMS to continually improve process performance The process for designing and building QMS is clear and practised The company's quality functions play a key role in enhancing performance improvement on continuous basis					
There is a continuous evaluation of various business strategies at the company					
The company and its suppliers are mutually beneficial.					

What led your organization to adopt the ISO 9001/QMS standards in terms of internal or external requirements?

.....  
 .....  
 .....  
 .....  
 .....

Are there any other quality initiative(s) established after the adoption of ISO 9001? YES/NO Tick one. If yes, briefly explain

.....  
 .....  
 .....

What do you think are the major resource(s) required in implementing the ISO 9001 QMSs?

.....  
 .....  
 .....

**Appendix IV Questionnaire for Objective Two**

To what level are the following items implemented as part of GSK QMS? Please tick (√) (with the guidance of the key below) in column that best describes your implementation experience

(5 = Very Large Extent, 4 = Large Extent, 3 = Moderate Extent 2 = Little Extent and 1 = No Extent)

Items Implemented	5	4	3	2	1
There is adequate awareness creation and sensitization of staff on benefits of ISO 9001 ISO standards are communicated to staff effectively Commitment of top management is evident to everyone in GSK Kenya limited					
A quality manual and quality policy statement are prepared and displayed					
Standard Operating Procedures (SOPs) for key processes are in place.					
Management reviews are held at planned interval Internal and external audits/ inspections are conducted as planned There is appointment of ISO/ QMS champions (Coordinators) Benefits of QMS implementation are tangible and known to staff.					
Adequate time is given for the implementation of the quality management system					
Funds are available to facilitate implementation of the quality management system					
Sequence and interaction of key processes in the company are determined for example organisation Charts and flow charts					

In your own opinion(s) which measures can be put in place to speed up the level of implementation of quality management systems?

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.....

.....

**Appendix V Questionnaire for Objective Three**

This section measures the use of QMSs in driving continuous improvement in business performance. Please mark one box only. On a scale of 1-5.

(5 = strongly Agree, 4 = Agree, 3 = neutral, 2 = Disagree, 1 = strongly disagree).

Statement	5	4	3	2	1
Staff use QMS mainly for audits and inspection preparation					
Primary governance for operations is derived from QMS					
There is deliberate consultation of QMS requirements in cases of negative performance					
Increase in number of new markets entered has been enhanced by QMS implementation					
There is evidence of increased customer satisfaction after implementation of QMS					
The firm's ability to attain new customers has increased drastically after QMS implementation					
The firm's audits and inspections have produced positive results after QMS implementation					
Generally, profitability in GSK can be attributed to the use of QMS in value chain processing					

Is use of QMS part of the strengths in GSK's strengths, weakness, opportunities, and threats analysis outcome? If not do you think it should be included? If included, briefly justify.

.....

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.....

In your own opinion, has QMS enabled business success in GSK? Outline the key performance indicators influenced by QMS

.....

.....

.....

.....

.....