IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN:2278-487X, p-ISSN: 2319-7668. Volume 27, Issue 5. Ser. 8 (May. 2025), PP 39-53
www.iosrjournals.org

An Assessment Of Select Factors Affecting Implementation Of Total Quality Management Practices At The National Youth Service Paramilitary College, Gilgil

Mourine Nasambu Waswa
Masters Of Business Administration Student At The Presbyterian University Of East Africa, (PUEA), Kenya

Dr. Waweru Muriithi (Ph.D)
Lecturer At The Bomet University College, Kenya

Dr. Solomon Muriiki (Ph.D)
Lecturer At The Presbyterian University Of East Africa, (PUEA), Kenya

Abstract
The implementation of Total Quality Management (TQM) in organizations is crucial for achieving high levels of efficiency, effectiveness, and customer satisfaction. In recent years, the National Youth Service, a paramilitary unit, has embraced Total Quality Management principles in its operations. The extent to which Total Quality Management approaches and the factors affecting their implementation is not clear. The purpose of the study was to make an assessment of select factors affecting implementation of total quality management approaches at the NYS paramilitary college, Gilgil. The variables of the study included: Top Management Support; Information Communication Technology Adoption, and; Staff Perception. The study was anchored on the upper echelons theory, resource based view, unified theory of acceptance use of technology and systems theory. The study focussed mainly on the factors affecting implementation of Total Quality Management approaches at the National Youth Service paramilitary college in Gilgil. The study conducted at the National Youth Service, Gilgil which was the headquarters. The study embraced stratified sampling design being employed. A sample size of 151 was used. The target population for the study was 215. The Study used stratified, purposive and random sampling technique and a sample of 151. A questionnaire was used as the study's research instrument. The validity of the research instrument was confirmed by incorporating expert advice from the research supervisor and content validity index of 0.7 was used. The researcher conducted a pilot study at the National Youth Service to verify the reliability of the research tool. The Statistical Package for Social Sciences software was used to code the data and analyze it. Qualitative and Quantitative statistics was used to analyse the data. The response rate of the study being 59.6% was considered appropriate for data analysis. The research findings uncovered: a significant positive correlation between top management support and TQM practices ($\beta = .086$, $\rho > 0.05$); a significant negative relationship between ICT adoption and TQM practices ($\beta = -0.022$, $\rho > 0.05$), and; a positive insignificant relationship between staff perception and TQM practices ($\beta = 0.760$, $\rho < 0.05$). All statements concerning top management support had an agreement rate of 45.5% or above. Disagreement rates for the statements was 30.0% or less. All statements concerning ICT adoption had an agreement rate of 38.9% or above. Disagreement rates for the statements was 36.6% or less. All statements concerning staff perception had an agreement rate of 42.2% or above. Disagreement rates for the statements was 38.9% or less.The study recommended that: The management of the NYS should endeavour to give all the necessary support needed for best practices as far as TQM is concerned; The management of NYS should adopt ICT that have the desired outcome rather than just all that is available, and; NYS management should ensure that staff are well informed and involved in any changes concerning TQM that are to be made. Findings from the study: Add to the existing body of knowledge on Total Quality Management in the Kenyan paramilitary; Provide National Youth Service managers with practical strategies on how to enhance organizational performance through Total Quality Management implementation; Provide policy makers with insight on the role of Total Quality Management in enhancing the performance of paramilitary organizations; The study further provide insights on other public sector organizations in Kenya and other countries that seek to enhance their organizational performance through Total Quality Management implementation, and; Contribute to academic research on Total Quality Management and organizational performance.

Keywords: *Top management support, Information Communication Technology, staff perceptions, Total Quality Management*

Date of Submission: 08-05-2025 Date of Acceptance: 18-05-2025

I. Introduction

Background of the Study

Total Quality Management (TQM) is a management philosophy and practice that strives to use an organization's human and material resources in the most efficient way to accomplish the organization's goals (Chin, 2004). Its effectiveness as a method of organizational progress has been demonstrated, and the process of implementing it is both universal and well-justified. It should be viewed as a procedure that represents a series of shifts in labor philosophy, which in turn moulds organizational structure within the enterprise. Contemporary versions of Total Quality Management (TQM) highlight the organization's transition from conventional hierarchical models to more adaptable and employee-focused structures. This development is consistent with a more general trend toward employee empowerment, ongoing development, and organizational structure alignment with these changing labor attitudes (Optimod, 2023).

A number of paramilitary institutions in Kenya train people for jobs in law enforcement, security, and other related professions. These establishments play a pivotal role in equipping employees to function in diverse governmental and quasi-governmental organizations. Hey include: National Youth Service (NYS) Training Colleges; Administration Police Training College (APTC); Kenya Police Training College, and; General Service Unit (GSU) Training School (Sigei & Kipyego, 2018).

Gilgil Training College is one of the main training institutions for the National Youth Service, which plays a significant role in training young Kenyans in various skills, including paramilitary training. The training emphasizes discipline, leadership, and service to the nation. Turbo Field Unit is another major training facility for the NYS, focusing on both paramilitary skills and vocational training. The Administration Police, a paramilitary branch of the Kenyan National Police Service, trains recruits at the APTC in Nairobi. Law enforcement, public order management, paramilitary techniques, and other security-related topics are covered in the course. Kenya Police Training College is the primary training facility for ordinary police recruits and is located at Kiganjo, close to Nyeri. The training covers paramilitary elements in addition to law enforcement, particularly for forces like the General Service Unit (GSU). The Kenya Police Service's GSU is a paramilitary group with its own dedicated training facility. The GSU's training is extremely demanding and paramilitary in nature because of their responsibility for high-risk operations, counterterrorism, and riot control. (Okello & Oloko, 2018). NYS is chosen for the study because it is one of the biggest paramilitary colleges in terms of trainees that go through it. It sees some of its trainees transition into the other colleges for further training.

The National Youth Service (NYS) is a government-funded program in Kenya that aims to empower and equip young people with skills and knowledge that will enable them to become productive members of society. The program offers various vocational training courses such as carpentry, masonry, plumbing, welding, and catering, among others. The NYS was established in 1964 to provide a platform for the nation's youth to actively participate in national development. It was originally conceived as a paramilitary organization for training young people in discipline and patriotism. However, in recent years, it has evolved into a civilian program that offers diverse training opportunities to young people (Okello & Oloko, 2018).

Statement of the Problem

The implementation of Total Quality Management (TQM) in organizations is crucial for achieving high levels of efficiency, effectiveness, and customer satisfaction (Yusqlim, 2016). The Kenya paramilitary is implementing Total Quality Management (TQM) principles to improve operations. However, factors like leadership commitment, cultural aspects, communication channels, and supplier relationships may hinder successful implementation. Employees may not understand TQM's significance, leading to low engagement and resistance. A shift towards a more inclusive culture, clear communication channels, and a more participatory culture is crucial for successful TQM implementation. Different research studies have been done but very few have considered paramilitary organizations in developing countries. This leaves a gap which the researcher sought to fill by considering Kenyan paramilitary organization (Mbugua & Gitonga, 2015). This study, therefore, sought to assess select factors affecting implementation of total quality management approaches in the Kenya Paramilitary, specifically at the National Youth Service Paramilitary College in Gilgil. By identifying and analyzing these factors, this study sought to provide insights and recommendations to enhance the successful implementation of TQM in the paramilitary context.

Objectives of the study

General Objective

The general objective of the study was to assess select factors affecting implementation of total quality management practices at the National Youth Service paramilitary college, Gilgil.

Specific Objectives

i. To explore the effect of top management support on TQM Practices at the NYS paramilitary college, Gilgil
ii. To examine the effect of Information Communication Technology adoption on Total Quality Management at the NYS paramilitary college, Gilgil
iii. To determine how staff perceptions affect Total Quality Management practices at the NYS paramilitary college, Gilgil

II. Literature Review

Theoretical Review

Upper Echelons Theory

According to the upper echelons hypothesis, organizational effectiveness and strategy are reflections of the beliefs and values of senior executives who are the organization's powerful players (Hambrick & Mason, 1984). It claims that how top managers view their workplace has an impact on the strategic decisions they make, which in turn has an impact on the effectiveness of the firm. It goes on to say that senior managers' cognitive foundation and values constrain the areas they focus on and, by extension, the perceptions of the environment that follow. The experiences, values, personalities, and other human characteristics of CEOs lead to this individualized interpretation of strategic issues.

The decision to pay attention to particular things in the environment is made based on dispositions and personal tendencies since the purposeful process is limited by the finite capacity of humans for information processing at any given time. It means that senior managers' personalities affect the components of their surroundings that they can "see," and what they "see" influences the strategic decisions they make, which in turn affect the organization's bottom line. The hypothesis contends that as a result, organizations take on the characteristics of their top executives. It is argued that the senior management team's decisions have a direct impact on organizational performance. Hambrick and Mason (1984) argued that attention should be paid to those data that are easily observable reflecting individual characteristics with respect to the educational, professional, and social backgrounds of prominent managers in organizational contexts in order to reconcile the impact that these "upper echelons" have on organizational performance. UET claims that organizational results can be somewhat predicted based on the traits of executive managers as a result of the gathering and analysis of these data. Top management team (TMT) employees' cognitions, values, and perceptions are challenging to measure, so UET concentrates on looking at demography to argue that managerial characteristics are reasonable proxies for underlying differences in cognitions, values, and perceptions. Therefore, factors including age, the length of time and the nature of work experience, as well as educational background, can be used to forecast TMT personnel' behavior when faced with strategic decisions in organizations.

According to Hambrick (2007), the theory is based on the assumptions that: Strategic choices reflect executives' backgrounds; Executives' perceptions influence decision-making; Observable characteristics are proxies for psychological attributes; Organizational outcomes are a product of top management; Leaders face dynamic and complex environments; Upper echelons shape organizational culture, and; Strategic Decisions Have Long-Term Impacts

According to the Upper Echelons Theory, the traits, backgrounds, and moral principles of an organization's top executives and leaders have an impact on its outcomes. This theory may be applicable to the research study in order to comprehend how the National Youth Service Paramilitary College, Gilgil's leadership influences the adoption and use of TQM methods. Scholars may choose to look into the leadership philosophies, experiences, and histories of the college's senior management and how these affect organizational culture, decision-making procedures, and TQM programs. This theory specifically links to the variable on top management support

Unified Theory of Acceptance Use of Technology

Andreanne & Swaminathan (2015) assert that the inability of researchers to select from among the many available models led to the creation of UTAUT. The Theory of Reasoned Action, the Technology Acceptance Model, the Motivational Model, the Theory of Planned Behavior, a model combining the Technology Acceptance Model and the Theory of Planned Behavior, the Model of PC Utilization, the Innovation Diffusion Theory, and the Social Cognitive Theory were the eight revised models that ultimately led to the UTAUT. In addition, the UTAUT outperforms the previous model by explaining up to 70% of the variation in desire to use technology. These contain demographic elements like age and gender that other

models have disregarded. The UTAUT aids managers in understanding the factors that influence technology adoption as well as determining the possibility (probability) of success for new technologies. Four factors—performance expectancy, effort expectancy, social influence, and facilitating conditions—are predictors of behavioral intention or usage according to the UTAUT. These are the definitions of the predictors.

Perceived usefulness, extrinsic motivation, job-fit, relative advantage, and result expectancies are five comparable categories that together make up performance expectancy (PE), which is a component of the UTAUT paradigm. In each of the individual models examined, performance expectancy is the best predictor of intention. Venkatesh et al. (2012) model validation indicated that performance expectancy was significant at all phases for both voluntary and required contexts. Additionally, the notions of perceived complexity and ease of use are captured by effort expectancy (EE) in the UTAUT paradigm. Although just for the initial time of usage, EE was significant in the validation of the UTAUT in both the voluntary and required usage situations. Since practice makes software use more comfortable, effort-oriented constructs should logically lose importance once learning obstacles are cleared (Payne et al., 2008).

Venkatesh et al. (2012) posit that UTAUT is based on the following assumptions: Behavioral intention predicts technology use; Performance expectancy influences intention; Effort expectancy influences intention; Social influence affects intention; Facilitating conditions affect use behavior; Moderators influence core relationships, and; Technology adoption is a dynamic process

UTAUT describes how people accept and use new technology in light of several aspects including social impact, effort and performance expectancies, and enabling environments. UTAUT may be pertinent to comprehending the elements influencing the National Youth Service Paramilitary College, Gilgil's acceptance and deployment of TQM-related technologies or systems in the context of the research study. The theory links to the viable on ICT.

Systems Theory

Systems theory is rooted in the works of Bertalanffy (1968). According to the System Theory, an event should be viewed as a whole rather than as the result of its component parts. A system is made up of smaller systems whose interactions and interdependencies work to bring the larger system to equilibrium. The interaction between subsystems is the main focus in order to comprehend the structure, operation, and outcomes of an entity. The organization is also seen as being dependent on the environment in which it functions, which involves a variety of parties including clients, agents of governmental entities, stockholders, and other elements outside the organization's control. By incorporating different supply chain variables, systems theory creates a bigger system of supply chain networks. Additionally, it aids in revealing the degree of interdependence between the system's components and advances comprehension of the supply chain dynamics, which enhances manufacturing organizations' ability to plan, carry out, and coordinate their actions. According to Ludwig's research from 1969, a supply chain is viewed as a system made up of internal and external supply chains that connect to form a network.

Goldstein (2006) examines the backdrop of how systems theory has been applied historically to logistics and supply chain management. They contend that the 1950s to 1970s saw the dominance of neoclassical economic theories. The emphasis during this time was on the overall cost and trade-offs. However, since the 1970s, systems theory has taken the lead in providing the most comprehensive explanation of the structure and operation of organizational supply chains. There has been a change in emphasis since the 1970s. Up until 1985, the focus of the theory was on the balance of cost-service and trade-offs, but it began to alter around that time to characterize efficiency and the function of processes. This latter period is still in effect today. The complexity of these relationships is acknowledged by systems theory, which sees organizations as living things. The static perspective of organizations is contested by system theory, which follows an open system viewpoint and contends that time considerations have an impact on organizations at all levels—individual, group, and organizational. This notion supports the idea that organizations are dynamic.

Nowadays, the theory has grown into a fundamental multidisciplinary framework that is used extensively in disciplines including information systems, healthcare, education, organizational studies, and environmental science (Skyttner, 2005). The transition from static system models to more dynamic and adaptive frameworks—often called Complex Adaptive Systems (CAS)—is a significant development. According to Holland (2006), CAS places a strong emphasis on self-organization, emergent behavior, and adaptation to both internal and external changes.

Furthermore, systems thinking, which is an application of systems theory, has become more significant as a tool for solving "wicked problems" like poverty, public health emergencies, and climate change. Through ideas like feedback loops, connectivity, and non-linearity, systems theory promotes the holistic and integrative thinking needed to solve these issues (Meadows, 2008).

The applicability of systems theory in the digital age has been further increased by recent integrations with cybernetics, network theory, and digital transformation. Because today's socio-technical systems are

complex and real-time, modern systems analysis frequently includes data flows, information feedback, and machine learning algorithms (Capra & Luisi, 2014).

Systems theory has been criticized for being unduly abstract and for occasionally ignoring power relationships, cultural settings, or personal agency, despite its wide range of applications (Jackson, 2000). In response, modern academics have combined systems theory with social constructivist methodologies, postmodernism, and critical systems thinking to make it more adaptable to intricate organizational and human realities (Midgley, 2000).

The assumptions behind this theory include: Systems are composed of interrelated and interdependent parts; Systems are open to the environment; Systems strive for equilibrium; Systems have boundaries; Feedback is essential for system functioning; Systems exhibit holism; Systems undergo evolution and adaptation; Hierarchical nature of systems; Systems are goal-oriented, and; Systems are context-dependent.

Organizations are seen by systems theory as intricately linked, multifaceted systems made up of several subsystems and constituents that interact and have an impact on one another. Systems theory may be applicable in this research study's context to analyze the TQM implementation at the National Youth Service Paramilitary College, Gilgil in a holistic way, taking into account the ways in which various components—such as technology, culture, leadership, and processes—interact to influence organizational performance. To find the interdependencies, feedback loops, and emergent qualities in the college's TQM system and evaluate their effect on overall efficacy and results, researchers could use a systems thinking method. The theory specifically links to the variable on staff perception.

Variables Review

Top Management Support and Total Quality Management

A study by Chen and Tzeng (2024) looked into the relationship between employee engagement and motivation and top management support, and how that relationship influences TQM success. It was discovered that strong top management support increased staff commitment to quality efforts and morale. Santos and Brito (2023) investigated the relationship between organizational culture and TQM and top management support. In order to integrate TQM procedures and achieve higher quality performance, top management must actively support a culture that is quality-oriented.

The importance of senior management's involvement in TQM resource allocation and strategic direction is highlighted by Ahmad and Schroeder (2023) study. Achieving good TQM outcomes requires senior management support in allocating the required resources and establishing precise quality objectives. Brah and Lim (2023) looked into how TQM initiatives were impacted by the leadership style of senior management. They concluded that by encouraging a culture of continuous improvement and employee involvement, transformational leadership—which is typified by inspiring and motivating staff members—improved TQM initiatives.

The impact of senior management commitment and support on the operational performance of commercial banks in the County of Nandi, Kenya, was examined in a paper by Sirma, Misoi, and Omillo (2019). Ex-post facto research approach was used in the study. The 177 employees of commercial banks in Nandi County made up the target population. A sample of 123 employees was chosen using a straightforward random sampling method. A questionnaire was utilized in the study as the technique for gathering data. The survey discovered that top management support was a consistent QMS practice demonstrated in commercial banks in Nandi County. Regular top-down communication flourished under the top-down strategy, and the top management routinely examined the companies' QMS at predetermined intervals to assure efficacy and continuity. Computed correlation data revealed a strong favorable impact of top management assistance on the operational performance of commercial banks.

Karungani and Ochiri (2017) conducted a study to assess the effects of management and leadership support for procurement on organizational performance in the Nairobi County Government. The study used a survey approach and a quantitative research design to perform its investigation. The Nairobi County Government's procurement and finance department's 87 personnel were chosen through convenience sampling. Questionnaires were used to collect the data, and SPSS and Excel were used to analyze it. According to the research's findings, management and leadership support for procurement has a favorable effect on organizational performance.

Wahome, Simiyu, and Mwirigi (2017) investigated the role of top management support practice in selected steel manufacturing enterprises in Kenya and its impact on the organizations' financial performance. The study used a descriptive survey research design, with standardized questionnaires used to collect both qualitative and quantitative data. The study revealed that top management support practice had a significant impact on the performance of Kenyan steel manufacturing enterprises.

Leadership and management support, according to Chari et. al (2016), have an impact on all facets of procurement performance, including the implementation of new systems, green procurement, and increasing

levels of openness. Numerous procurement projects have failed due to a lack of leadership and managerial backing. According to the report, management support is crucial because financing for particular procurement initiatives is approved by senior management. Additionally, it is the management's only job to mobilize the workforce in support of any procurement that will ultimately be successful.

Omogbiya and Addah (2016) investigated the impact of quality management systems on the performance of the Nigerian brewery business. A structured questionnaire was utilized as the data collecting tool and was delivered to respondents from the Brewery's industries understudy who were chosen at random using the Yaro Yarmane algorithm. The findings demonstrated a favorable and significant association between the use of leadership support approaches and increased organizational return on investment, reduced product waste, and increased customer satisfaction.

Javed (2015) studied the impact of senior management commitment on quality management success at ARL Company in Islamabad, Pakistan. The study's sample included executives and managers who reported to functional heads. The correlation analysis revealed a moderately positive association between top management commitment and quality management success. Top management commitment was found to be positively associated to an organization's quality management success.

With a focus on the National Bank of Kenya, Mwaniki and Bichanga (2014) assessed the effects of senior management commitment on financial performance in the banking industry. The results showed a strong correlation between financial performance, relationship with suppliers, and senior management participation. Customer interactions, however, have a negative impact on financial results. The f-test and a weak coefficient of determination in the regression analysis indicated a weak link between the variables.

According to research by Kemunto and Ngugi (2014), boosting organizational performance depends heavily on strong leadership and management. Particularly, management and leadership encourage cooperative ties between a business and its suppliers, facilitating open communication and long-term relationships that finally result in the purchase of high-quality supplies at reasonable pricing. The effectiveness of the organization is enhanced.

Mwaniki and Bichanga (2014) investigated the impact of senior management commitment on financial performance in the banking sector, focusing on the National Bank of Kenya. The results revealed a link between senior management participation, process and supplier relationships, and financial performance.

Movahedia, Teimourpour, and Teimourpour (2013) investigated the impact of Quality Management Systems (QMS) on organizational productivity in Iran. The importance of top management in QMS adoption as well as change management techniques to overcome organizational resistance were studied. The study's findings revealed that there were some favorable effects on organizational management characteristics, as well as the establishment of training and explanation courses and meetings.

Chin and Choi (2003) investigated the relationship between ISO and firm performance in South Korea. They determined that the most critical aspect was how senior management interpreted the certification, as this is seen as the most influential factor in applying the standard. If certification is viewed favourably, upper management will fully support it. After all, top management serves as a catalyst for the implementation of quality management systems by providing the necessary resources, which are critical factors in continuous improvement through the development of values, goals, and systems to meet customer expectations and improve organizational performance.

Information Communication Technology and Total Quality Management

Most firms have heavily invested in information technology for Total Quality Management, and each has undergone extensive study. Many firms are improving their products and services by using information technology into Total Quality Management. Global rivalry has increased the importance of quality in the corporate sector, while competition adds pressure to the organization. These obstacles and demands have revived the organization's focus on quality improvement for long-term survival (Aljalahma, 2011).

Technology serves as an enabler, resulting in better work and more job satisfaction. TQM is a management concept and an asset for customer-centric processes that achieve quality. TQM principles, methods, and procedures can be used to all functions inside a business, including information systems, marketing, finance, and R&D. Similarly, various research have been conducted to investigate the effects of TQM deployment on performance (Kuria et al, 2011). TQM and other management interventions rely largely on information technology, which serves as a feedback mechanism and facilitates communication and the adoption of advanced tools, systems, and modeling methodologies. Specific IT applications may have an impact on TQM, but most importantly, IS must be effective. For example, in order to satisfy customers, information on their wants and preferences must be collected, and IT might be critical in operating with a process orientation.

According to the IT literature, customers can judge the quality of an organization's system by analyzing the amount of system services preferred. Customers, for example, may refuse to take services from an organization if the systems employed in the services are old or incapable of meeting the needs of the customers

(Mills et al, 2012). It is expected that the use of IT in quality management will improve the operational tasks of quality management, resulting in higher quality output. IT in the service industry remarked that service industries are extensively investing in technology, particularly IT, to boost productivity, but with seemingly limited services. IT's role in quality improvement includes raising quality awareness, providing online information regarding quality levels, and lowering quality costs.

Numerous academics have conducted in-depth study on the impact of ICT on performance in various enterprises. ICT is also essential for staff empowerment and training, both of which are necessary for the effective application of TQM. E-learning resources and digital training platforms guarantee that staff members have the information and abilities required for quality control. Higher employee involvement and improved adherence to TQM principles are the results of this empowerment (Khin & Kee, 2022).

ICT adoption fosters better collaboration and communication both inside and across enterprises. This is especially crucial for upholding supply chain-wide quality requirements. According to studies, ICT investments improve coordination and information exchange, both of which are critical for maintaining TQM standards (Intalar & Jeenanunta, 2019).

Better data management, analysis, and collecting are made possible by ICT tools, and these processes are essential for implementing TQM successfully. ICT integration in manufacturing companies has improved digitalization processes, improving overall quality control and operational efficiency. This is especially true in Southeast Asian manufacturing organizations (Ghobakhloo & Ching, 2019).

Falk and Biagi (2015) investigated the impact of various ICT technologies and e-commerce activities on employment and productivity using globally comparable data for 14 European nations. The ESSLait Micro Moments Database (EMMD), which compiles connected and micro-aggregated data about firms from national statistics offices, was used to collect the data. Labor productivity was shown to be highly correlated with variations in ICT capacity types. The impact of ICT on productivity varies depending on the type of ICT. Additionally, it was discovered that the impact of ICT differs significantly between the industrial and service industries. The findings support prior research in that there is a distinction between ICT use in the manufacturing and service sectors. As a result of not using primary data, the study did not take into account the presumptions that led to the secondary data.

Kimani (2015) used an online survey to get information from 311 of the potential 438 employees of Population Services Kenya (PSK) for his study on the impact of information technology on organizational efficiency. According to the report, ICT has a significant impact on how well an organization performs across the board. According to the study, adoption and effective use of ICT increased donor financing, improved collaboration between PSK and other partners, and the organization's ability to precisely complete, monitor, and evaluate strategic objectives. ICT use is supposedly generally stated to help increase an organization's performance. The results are therefore consistent with what is already known about how ICT affects organizational effectiveness. Some stakeholders who are impacted by PSK's services, such as the government, PSK's project participants, suppliers, sponsors, and partners, were left out of the study. Furthermore, as it was a case study, no general conclusions can be drawn from it.

Odhiambo (2013) investigated ICT usage in high schools in the Kenyan Homa-Bay region of Rachuonyo South. A questionnaire was given to 320 students, 24 teachers, and 8 high school heads who were randomly selected for the study. The study showed that ICT was a very effective tool for teaching and learning. Students who are often exposed to ICT skills have new perspectives on education and ICT, and ICT has improved the productivity and efficacy of teachers in their work. The results confirm what is already known about how ICT improves service delivery efficiency and effectiveness. The study only examined a portion of the education industry and did not focus on all parties involved in secondary education, such as parents, educators, and organizations in charge of administering exams.

Suby et al. (2013) did a literature review on the role of information technology in total quality management to improve organizational performance. Scholarly papers published in this field were found using online research sources. Other available sources, such as journals and periodicals, were also searched. 50 of the papers searched were found to be appropriate for performing a full literature review. An in-depth assessment of the literature indicates three categories of publications on the role of IT in TQM: research papers, empirical studies, and case studies. The papers were classified based on the tools and techniques employed, the period of publication, the geography, and the methodology. The most papers were published in Asia, followed by Europe. Empirical studies using Software Packages for Social Science (SPSS), Structural Equation Modeling (SEM), and Electronic Data Interchange (EDI) were discovered to be the most common methodology. Data analysis shows a rising trend in the volume of publications on TQM and IT/IS (Information System) during the last 15 years. The current analysis is intended to assist understand how TQM Literature has grown over time and to point the way forward for future research in this prospective field.

Staff Perception Towards Total Quality Management

Research indicates that when employees have a good attitude toward Total Quality Management (TQM) methods, operational performance significantly improves. Studies conducted, for instance, in the hotel and healthcare sectors have shown that organizational processes and results significantly increase when workers view TQM procedures as helpful and beneficial (Olaleye et al., 2023).

KTDA Tea processing companies in Kericho County were the subject of a study by Chebet, Sang, and Chapkwony (2020) to determine the impact of supplier relationship management strategies on financial performance. Systems theory, resource dependency theory, and strategic choice theory were all applied in the study. The study used a descriptive survey approach. 700 respondents across departments were the projected total. 210 respondents from the supply chain's varied operations made up the sample size. Structured questionnaires were employed as the data gathering tool for KTDA business personnel. Supply chain practitioners and research professionals from the procurement or supply departments validated the findings. The study's findings demonstrated the importance of mutual relationships in order for a company to engage in competitive business, cut costs, permit the sharing of risks and information flow, be flexible in managing change, and make efficient use of resources. The study found that the financial performance of the tea processing companies in Kenya's Kericho County is significantly impacted by supply chain management techniques.

Mwashegwa and Nondi's (2019) study's major goal was to determine how supplier relationship management affected organizational performance. The following research goals served as the study's guidelines: to ascertain the impact of adversarial supplier relationships, partnership supplier relationships, supplier development relationships, and electronic sourcing relationships on Kenya Pipeline Company Limited's procurement performance. The following theories were applied to the study: the theory of constraints, the theory of organizational buying behavior, and the resource-based approach theory. Descriptive and inferential research design techniques were used in the study. 410 Kenya Pipeline Company limited personnel from various departments made up the study's target population. Using Slovin's formula, a sample size of 123 people from the target demographic was determined. Additionally, the study used a quantitative research design. In order to determine the outcomes, the study used both primary and secondary data to collect information from the respondents. A questionnaire was used to obtain the data. To ensure the validity and dependability of the study's outcomes, the researcher used 10% pilot testing. Descriptive statistics and inferential statistics, particularly regression analysis and Pearson correlation, were used in the data analysis and interpretation process. The statistical packaging social sciences version 22 was used to examine the data. Data were presented using frequency distribution tables. According to the data, there was a highly significant association between the independent variables hostile supplier, partnership, supplier development, and electronic sourcing and procurement performance. It is clear from the study's findings that competitive suppliers, partnerships, supplier development, and electronic resources are important factors in determining how well a company does in its procurement. According to the survey, working with our suppliers helps the company build long-lasting partnerships.

In a study published in 2015, Tangus et al sought to determine how supplier relationship management strategies affected the performance of manufacturing companies in Kisumu County. In 31 manufacturing companies, 82 procurement employees were asked to rate their companies' effectiveness in terms of supplier development, supplier segmentation, and information exchange. In order to evaluate the relationships between the relevant variables, both descriptive and inferential methods of analysis were applied. According to a bivariate research, improving the three supplier relationship management techniques was linked to higher performance levels. Only information sharing was connected to greater performance on the multivariate analysis. Supplier segmentation and development were not noteworthy. Increased information exchange with suppliers, which accounted for 37.8% of performance in manufacturing firms, would, according to the study's findings, greatly boost performance.

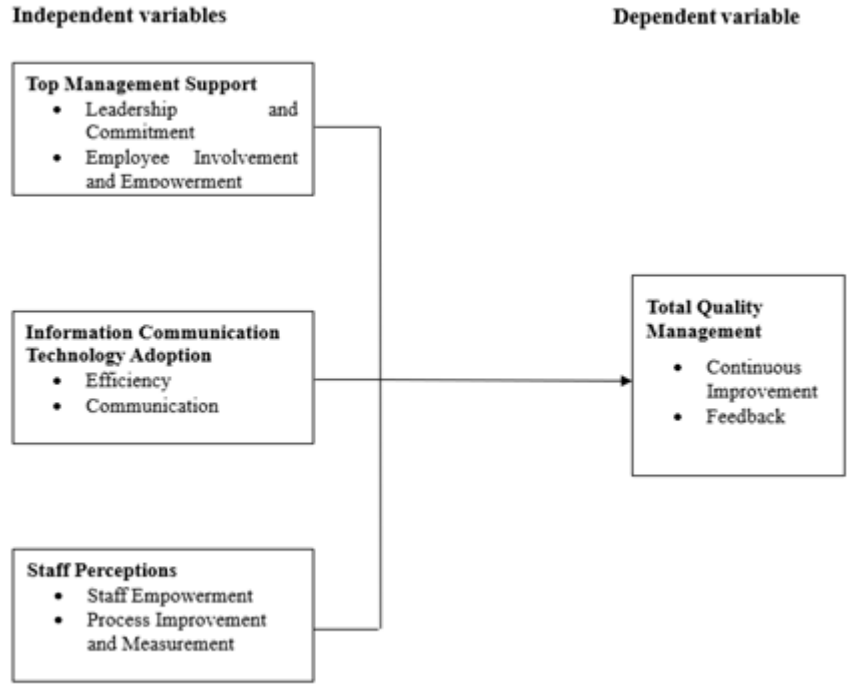
The activities involved in strategically planning and managing the interactions with supply chain stakeholders in an organization that provides goods, services, and information to a company in order to meet customer needs are covered in Wachira's (2013) descriptive study on supplier relationship management (SRM). According to the report, successful negotiations with major suppliers pave the way for supply chain performance that is crucial for overall organization performance. SRM, in its broadest sense, emphasizes the development of intimate, cooperative, long-term relationships with important suppliers in order to improve the performance of organizational supply chains. Wachira (2013) elaborated in his descriptive study that SRM aims to cultivate and develop cooperative relationships with strategic suppliers who can deliver goods at higher levels of invention and with overall competitive advantage that cannot be gained by operating independently or through a reactive, transactional pre-arrangement. SRM is a strategic tool for enhancing relationships with suppliers, but he also draws the conclusion that businesses face a number of obstacles when putting sustainable supply chains in place.

Wangeci (2013) investigated supplier relationship management and supply chain performance in Kenya's alcoholic beverage industry. The study's specific objectives were to determine the extent of SRM in the alcoholic beverage industry, the impact of SRM on supply chain performance in the alcoholic beverage industry in Kenya, and the challenges faced in implementing SRM in the alcoholic beverage industry in Kenya. To describe the influence of SRM on organizational performance, the study used a descriptive design. Procurement workers from the alcoholic beverage industry were the target group and sample. The associations between the variables were determined using regression analysis. According to the report, organizations in the alcohol beverage industry are shifting toward collaborative relationships with their suppliers in order to improve supply chain performance. That SRM is heavily reliant on four important factors.

Mwirigi (2011) tried to identify the importance of supply chain relationships in the success of small enterprises in Kenya in his study. The study's target demographic was small businesses that were FAULU Kenya loan clients. The study analyzed numerous relationships to better understand the role of supply chain relationships among respondent organizations. According to the findings of the study, supply chain interactions are important to the growth of small businesses. They contribute to the growth and profitability of these companies in a variety of ways. According to the findings of this study, a strong sustainable relationship between a company and its consumers on the one hand, and its suppliers on the other, has an impact on the rate of development in transactions and profitability. The study indicated that the process of establishing supply chain partnerships should be done in a more systematic manner in order to improve its function in the growth of small businesses.

Conceptual Framework

Figure 2.1 Conceptual Framework



Source: Author (2025)

Figure 1: Conceptual Framework
Source:(Researcher, 2025)

III. Research Methodology

Research Design

The researcher used descriptive research design. Descriptive research design was used because of the following reasons, as proposed by Saunders (2016): Allows research on sensitive issues; It often produces findings that are applicable to real-life scenarios; Saves time and resources compared to experimental setups that require controlled environments and longer durations; Enables researchers to study large populations and obtain representative samples; The design allows exploration of variables that cannot be manipulated, like genetic factors, socioeconomic status, or past experiences.

Target Population

According to Sekaran (2012), the term "population" refers to a well-defined group of the people, things, and events being studied in order to generalize the findings. A target population, according to Kootsra (2013), is the group of people to which a researcher wishes to apply the results of a study. The target population of the study was made up of staff working in the different departments. There were three main departments. They included Paramilitary training with 120 staff, Band with 80 staff and Administration with 15 staff. The target population for the study came to 215.

Data Collection Instrument

According to Rumsey (2012), data collecting tools are any equipment or techniques used to gather information for study. Through the distribution of questionnaires to participants, the research study aims to gather first-hand information. Additionally, he contends that the surveys offer a high level of data uniformity and adoption of generalized information among any community. In a descriptive study, where it is necessary to swiftly and readily collect information from subjects in a non-threatening method, they are helpful. A closed-ended questionnaire with a Likert scale was used in the study. The use of closed-ended questions was made since they offer options to the answers that respondents chose, making them quicker and easier to analyze.

The study's respondents received the questionnaire from the researcher. To ensure that all questionnaires distributed to respondents were received, the researcher took care and control. Drop and pick later was used to give the questionnaire. The researcher made use of contacts to make sure the surveys were filled out thoroughly and that the most questionnaires are returned for examination.

Pilot Test

For the first test, the researcher administered the questionnaires to eight respondents who were randomly picked among the procurement staffs in Muranga county government. The rule of the thumb is that 10% of the sample should constitute the pilot test, (Cooper & Schilder, 2014). Questionnaire validity was provided through adequate coverage of the topic under investigation as per the expert advice. The construct validity was ascertained by defining clearly the variables to be measured. The results from reliability indicated that all the variables had Cronbach alpha coefficient values greater than 0.7. Thus, the study instruments met the required reliability threshold and thus were considered reliable for data collection.

Data Analysis

In order to better understand them and be able to communicate them to others, data analysis can be thought of as the methodical searching and organizing of interview transcripts, field notes, data, and other materials gathered from the field (Kootsra, 2013). The surveys were examined for accuracy in recording the responses and completeness after the raw data had been gathered. The Statistical Package for Social Sciences (SPSS) version 25.0 was used to code the data and analyze it. The results were displayed in frequency distribution tables, which keep track of the frequency of each score or response. To portray the results in a visual fashion, tables, pie charts, and percentages were used. The link between the dependent and independent variables was determined using regression analysis.

IV. Findings And Analysis

Top Management Support

Respondents were required to show the extent of their agreement or disagreement with statements about Top Management Support. The findings are presented in Table 1.

Table 1: Top Management Support

	N	SA	A	U	D	SD	Mean	Std Dev
Top management demonstrates a strong commitment to quality improvement.	90	29 (32.2%)	32 (35.6%)	15 (16.7%)	7 (7.8%)	7 (7.8%)	3.77	1.209
The organization's leaders actively participate in quality initiatives and promote a culture of continuous improvement.	90	30 (33.3%)	28 (31.1%)	10 (11.1%)	19 (21.1%)	3 (3.3%)	3.70	1.231
Top management provides adequate resources and support for quality improvement efforts.	90	22 (24.4%)	29 (32.2%)	18 (20.0%)	9 (10.0%)	12 (13.3%)	3.44	1.325

Employees are actively involved in quality improvement activities and decision-making processes	90	25 (27.8%)	23 (25.6%)	15 (16.7%)	20 (22.2%)	7 (7.8%)	3.43	1.316
The organization encourages innovation and creativity among its employees to drive continuous improvement.	90	36 (40.0%)	26 (28.9%)	15 (16.7%)	10 (11.1%)	3 (3.3%)	3.91	1.148
Employees are provided with the necessary training and resources to perform their jobs effectively and contribute to quality improvement efforts.	90	31 (34.4%)	22 (24.4%)	17 (18.9%)	12 (13.3%)	8 (8.9%)	3.62	1.320
Management allocates sufficient time for TQM practices	90	20 (22.2%)	25 (27.8%)	20 (22.2%)	19 (21.1%)	6 (6.7%)	3.38	1.232
Management allocates sufficient funding for TQM practices	90	19 (21.1%)	22 (24.4%)	22 (24.4%)	16 (17.8%)	11 (12.2%)	3.24	1.310
Management allocates sufficient personnel for TQM practices	90	22 (24.4%)	23 (25.6%)	22 (24.4%)	16 (17.8%)	7 (7.8%)	3.41	1.253

Source: Research Data (2025)

According to Table 1, all statements concerning top management support had an agreement rate of 45.5% or above. Disagreement rates for the statements was 30.0% or less.

Information Communication Technology Adoption

Respondents were required to show the extent of their agreement or disagreement with statements about Information Communication Technology Adoption. The findings are presented in Table 2.

Table 2: Information Communication Technology Adoption

	N	SA	A	U	D	SD	Mean	Std Dev
Information Communication Technology (ICT) has improved the efficiency of our quality management processes	90	36 (40.0%)	32 (35.6%)	14 (15.6%)	5 (5.6%)	3 (3.3%)	4.03	1.043
The use of ICT tools and software has enhanced our ability to collect and analyze quality-related data	90	26 (28.9%)	41 (45.6%)	15 (16.7%)	5 (5.6%)	3 (3.3%)	3.91	.990
ICT has facilitated better communication and collaboration among quality teams and departments	90	34 (37.8%)	30 (33.3%)	17 (18.9%)	4 (4.4%)	5 (5.6%)	3.93	1.120
The organization's ICT infrastructure adequately supports our Total Quality Management initiatives	90	27 (30.0%)	30 (33.3%)	19 (21.1%)	11 (12.2%)	3 (3.3%)	3.74	1.117
ICT has enabled real-time monitoring of quality metrics and key performance indicators (KPIs)	90	24 (26.7%)	27 (30.0%)	30 (33.3%)	7 (7.8%)	2 (2.2%)	3.71	1.019
The implementation of ICT tools has led to faster and more effective problem-solving in quality management	90	32 (35.6%)	36 (40.0%)	16 (17.8%)	3 (3.3%)	3 (3.3%)	4.01	.989
NYS staff are adequately trained to use ICT tools related to TQM	90	18 (20.0%)	17 (18.9%)	22 (24.4%)	17 (18.9%)	16 (17.6%)	3.04	1.381

ICT tools are accessible to all relevant departments at NYS	90	20 (22.2%)	23 (25.6%)	14 (15.6%)	20 (22.2%)	13 (14.4%)	3.19	1.389
ICT tools are accessible to all relevant personnel at NYS	90	21 (23.3%)	20 (22.2%)	11 (12.2%)	18 (20.0%)	20 (22.2%)	3.04	1.506

Source: Research Data (2025)

As per Table 2, all statements concerning ICT adoption had an agreement rate of 38.9% or above. Disagreement rates for the statements were 36.6% or less.

Staff Perception

Respondents were required to show the extent of their agreement or disagreement with statements about Staff Perception. The findings are presented in Table 3.

Table 3: Staff Perception

	N	SA	A	U	D	SD	Mean	Std Dev
Employees are actively involved in quality improvement activities and decision-making processes.	90	23 (25.6%)	26 (28.9%)	13 (14.4%)	11 (12.2%)	17 (18.9%)	3.30	1.457
The organization encourages innovation and creativity among its employees to drive continuous improvement.	90	31 (34.4%)	27 (30.0%)	20 (22.2%)	4 (4.4%)	8 (8.9%)	3.77	1.227
Employees are provided with the necessary training and resources to perform their jobs effectively and contribute to quality improvement efforts	90	25 (27.8%)	30 (33.3%)	17 (18.9%)	11 (12.2%)	7 (7.8%)	3.61	1.233
The organization has established formal processes for identifying and correcting quality issues.	90	22 (24.4%)	23 (25.6%)	18 (20.0%)	18 (20.0%)	9 (10.0%)	3.34	1.317
Quality performance metrics are regularly monitored, measured, and analyzed to drive improvement.	90	20 (22.2%)	32 (35.6%)	18 (20.0%)	14 (15.6%)	6 (6.7%)	3.84	3.428
Continuous improvement is ingrained in the organization's culture, with a focus on eliminating waste and optimizing processes.	90	19 (21.1%)	29 (32.2%)	20 (22.2%)	16 (17.8%)	6 (6.7%)	3.43	1.200
NYS staff members understand the principles of TQM	90	21 (23.3%)	21 (23.3%)	21 (23.3%)	17 (18.9%)	10 (6.7%)	3.29	1.318
NYS staff members understand the objectives of TQM	90	19 (21.1%)	24 (26.7%)	24 (26.7%)	17 (18.9%)	6 (6.7%)	3.37	1.203
There are regular training programs or workshops on TQM for NYS staff	90	22 (24.4%)	16 (17.8%)	17 (18.9%)	25 (27.8%)	10 (11.1%)	3.17	1.368

Source: Research Data (2025)

Table 3 reveal that all statements concerning staff perception had an agreement rate of 42.2% or above.

Total Quality Management

Respondents were required to show the extent of their agreement or disagreement with statements about Total Quality Management. The findings are presented in Table 4.

Table 4: Total Quality Management

	N	SA	A	U	D	SD	Mean	Std Dev
TQM principles and practices are well understood and communicated across all levels of the organization	90	16 (17.8%)	26 (28.9%)	24 (26.7%)	13 (14.4%)	11 (12.2%)	3.26	1.259
There is strong commitment and support from top management for implementing TQM initiatives	90	17 (18.9%)	24 (26.7%)	24 (26.7%)	20 (22.2%)	5 (5.6%)	3.31	1.177
Employees are actively involved in continuous improvement efforts and are encouraged to provide suggestions for quality enhancements	90	27 (30.0%)	26 (28.9%)	20 (22.2%)	8 (8.9%)	9 (10.0%)	3.60	1.279
Our organization collects and analyzes data to measure performance and identify areas for improvement	90	18 (20.0%)	32 (35.6%)	13 (14.4%)	17 (18.9%)	10 (11.1%)	3.34	1.300
TQM is integrated into various processes, from product development to customer service	90	17 (18.9%)	22 (24.4%)	32 (35.6%)	11 (12.2%)	8 (8.9%)	3.32	1.179
Customer feedback is taken into account to drive improvements in our products/services	90	17 (18.9%)	21 (23.3%)	22 (24.4%)	19 (21.1%)	11 (12.2%)	3.16	1.297

Source: Research Data (2025)

Table 4 show that most respondents agrees with statements on Total Quality Management.

Regression Analysis

Multivariate regression analysis was utilised to assess the significance of the relationship between the dependent variable and all the independent variables pooled together. This analysis was utilised to assess how the independent variables collectively affected the dependent variable. The results are presented in the model summary in Table 5.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.814[a]	.662	.651	3.529
a. Predictors: (Constant), Staff Perception, Top Management Support, ICT Adoption				

Source: Research Data (2025)

The results on Table 5 showed that the value obtained for R, which is the model correlation coefficient was r = 0.814 which was higher than any zero order value in the table. This implied that the model improved when more variables were incorporated when trying to evaluate TQM practices. The r square value of, r = 0.662, implied that the multiple linear regression model could explain 66.2% of the variations in the TQM practices. This means that top management support, ICT adoption and staff perception explain 66.2% of the variations in TQM practices.

Table 6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2101.743	3	700.581	56.243	.000[b]
	Residual	1071.246	86	12.456		
	Total	3172.989	89			
a. Dependent Variable: Total Quality Management						
b. Predictors: (Constant), Staff Perception, Top Management Support, ICT Adoption						

Source: Research Data (2025)

According to results on Table 6, the F calculated value of 56.243 meant that the overall model was significant and could, thus be made use of to draw conclusions on the population parameters. This was supported by the ρ-value (0.000) being lower that the significance level (0.05).

Findings from the model coefficients were as indicated in Table 7.

Table 7: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.405	1.589		2.142	.035
	Top Management Support	.056	.075	.086	.747	.457
	ICT Adoption	-.016	.087	-.022	-.187	.852
	Staff Perception	.498	.086	.760	5.800	.000
a. Dependent Variable: Total Quality Management						

Source: Research Data (2025)

The findings on Table 7 indicates that top management support and staff perception were positively related while ICT adoption was negatively related to TQM practices. At 5% level of significance and 95% confidence level, top management support had a 0.457 level of significance, ICT adoption showed a 0.852 level of significant and staff perception showed a 0.000 level of significant. The most significant factor was ICT adoption, followed by top management support and finally staff perception.

V. Summary, Conclusions And Recommendations

Summary of the findings

The general objective of the study was to make an assessment into select factors affecting implementation of total quality management practices at the National Youth Service paramilitary college, Gilgil.

The first objective was to explore the effect of top management support on TQM Practices at the NYS paramilitary college, Gilgil. All statements concerning top management support had an agreement rate of 45.5% or above. Disagreement rates for the statements was 30.0% or less.

The second objective was to examine the effect of Information Communication Technology adoption on Total Quality Management at the NYS paramilitary college, Gilgil. All statements concerning ICT adoption had an agreement rate of 38.9% or above. Disagreement rates for the statements was 36.6% or less.

The third and final objective was to determine how staff perceptions affect Total Quality Management practices at the NYS paramilitary college, Gilgil. All statements concerning staff perception had an agreement rate of 42.2% or above. Disagreement rates for the statements was 38.9% or less.

Conclusions of the Study

The research study concluded there was a significant positive correlation between top management support and TQM practices. There was also a significant negative relationship between ICT adoption and TQM practices. Finally, there was a positive insignificant relationship between staff perception and TQM practices.

Recommendations

From the findings of the research study, this study recommends the following:

i. The management of the NYS should endeavour to give all the necessary support needed for best practices as far as TQM is concerned. The support includes but not limited to allocation of financial resources, assignment of human resources, technical support and other advice that might be necessary.
ii. ICT adoption and TQM practices have an inverse and significant relationship. The research study therefore recommends that the management of NYS should adopt ICT that have the desired outcome rather than just all that is available. This will help enjoy the positive results of ICT and reduce the unwanted outcomes.
iii. The study found out that staff perception had a positive but insignificant correlation with TQM practices. NYS management should ensure that staff are well informed and involved in any changes concerning TQM that are to be made. This will create good staff perception, therefore leading to desired outcome with regards to TQM practices.

References

[1] Andreanne, L. & Swaminathan, S. (2015). Innovation Theories: Relevance And Implications For Developing Country Innovation. Discussion Paper 743.
[2] Bertalanffy, L. Von. (1968). General System Theory: Foundations, Development, Applications. New York: George Braziller.
[3] Capra, F., & Luisi, P. L. (2014). The Systems View Of Life: A Unifying Vision. Cambridge University Press.
[4] Goldstein, S. (2006). Use Of Structural Equation Modelling In Operations Management Research: Looking Back And Forward. Journal Of Operations Management, 24.
[5] Hambrick, D. C. (2007). Upper Echelons Theory: An Update. Academy Of Management Review, 32(2), 334–343.
[6] Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization As A Reflection Of Its Top Managers. Academy Of Management Review, 9(2), 193–206.

[7] Holland, J. H. (2006). Studying Complex Adaptive Systems. Journal Of Systems Science And Complexity, 19(1), 1–8. Https://Doi.Org/10.1007/S11424-006-0001-Z
[8] Jackson, M. C. (2000). Systems Approaches To Management. New York: Kluwer Academic/Plenum.
[9] Kootsra (2013) Exploratory Factor Analysis: Theory And Application. Procurement Journal, 22(12), 33-35.
[10] Ludwig, V. (1969). General System Theory; Foundation, Development And Applications. George Braziller, Inc One Park Avenue New York. Management: The Case Of Best Value Supply Chains. Journal Of Operations Management, 25(2).
[11] Mbugua, S. K., & Gitonga, R. K. (2015). An Assessment Of Total Quality Management Practices In Public Secondary Schools In Nyandarua County, Kenya. International Journal Of Social Sciences And Humanities, 4(2), 180-191.
[12] Meadows, D. H. (2008). Thinking In Systems: A Primer. White River Junction, VT: Chelsea Green Publishing.
[13] Midgley, G. (2000). Systemic Intervention: Philosophy, Methodology, And Practice. New York: Kluwer Academic/Plenum Publishers.
[14] Okello, D. O., & Oloko, M. (2018). The Role Of Organizational Culture In The Implementation Of Total Quality Management: A Case Of Kenya Defense Forces. International Journal Of Business And Management, 13(5), 191-199.
[15] Optimod. (2023). Total Quality Management (TQM): Driving Success With A Transformative Approach. Retrieved From Https://Optimod.Net/Blogs/Total-Quality-Management-Tqm-Driving-Success-Transformative-Approach
[16] Rumsey, D. (2012). Research Methods. (2nd Ed.). New Jersey: Pearson Publishers.
[17] Saunders, M., Lewis, P., & Thornhill, A. (2016). Research Methods For Business Students (7th Ed.). Pearson Education.
[18] Sekaran U (2012). Research Method For Business. A Skill Building Approach. United Kingdom. John Wiley & Sons, Inc.
[19] Sigei, J. K., & Kipyego, A. (2018). The Influence Of Leadership Commitment On Total Quality Management In Kenya Defense Forces. International Journal Of Economics, Commerce And Management, 6(2), 44-54.
[20] Skyttner, L. (2005). General Systems Theory: Problems, Perspectives, Practice (2nd Ed.). Singapore: World Scientific Publishing.
[21] Venkatesh, V., Thong, J., & Xu, X. (2012). Consumer Acceptance And Use Of Information Technology: Extending The Unified Theory Of Acceptance And Use Of Technology. MIS Quarterly, 36(1), 157–178.
[22] Yusqlim, H. (2016). Total Quality Management Practice's Effects On Quality Performance And Innovation Performance In Manufacturing Firms: The Mediating Role Of Innovation. Journal Of Industrial Engineering And Management, 9(3), 653-673.