Logistics Management and Service Delivery in Humanitarian Organisations in Kenya: A Case Study of Kenya Red Cross Society

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Abstract:-The goal was to assess the effects of supplier management and information management on the KRCS's service delivery. Goal-Setting Theory is the main theory, supported by resource-based view and institutional theory. The study targeted a population of 300 individuals using a descriptive research approach. A total of 171 individuals were chosen for the sample size using stratified random sampling. Data was acquired by means of surveys. Basic statistics were used to assess the quantitative data, and SPSS version 27 was used for data analysis. Tables were used to display the data. Inferential statistics were used to illustrate the link between the variables. Throughout the course of the study, the research investigation was guided by a few ethical criteria. The R2 values for the relationship between supplier management and service delivery were 0.642, indicating a positive association, and 0.499, suggesting that changes in supplier management may account for 49.9% of the variation in service delivery. fundamental correlation between service delivery and information management (R = 0.595), with an R2 value of 0.431, while the DV was service delivery. To ensure successful logistics management and service delivery, KRCS should improve supplier management and service delivery, which is necessary, and that they can balance organizational goals and priorities with the supplier's perspective on challenges. This will improve the efficiency and effectiveness of the processes that the KRCS and communities in need of support use. KRCS service delivery can be increased by using auto- technologies. Independent variable technologies are welcomed since they will make product marking more accurate and efficient, which will improve operations.

Keywords:- Supplier Management, Information Management, Service Delivery And Logistic Management.

I. INTRODUCTION

➢ *Background of Study*

Companies employ a range of business development strategies to improve the calibre of services they offer. Logistics and supply chain management are often regarded as crucial elements that provide companies a competitive edge. Despite the rise in popularity of supply chain management and logistics since the early 1980s, these fields still lack conceptual understanding. Several authors have emphasized the importance of providing supply chain management with precise definitions and conceptual frameworks (Kumar & Prashar, 2024). Logistics management directly affects a company's bottom line and is critical to the success of its operations. In order to meet consumer needs while making a profit, logisticians organize, implement, and oversee the physical flow of raw materials and completed commodities from the place of origin to the site of use (Kisinga, Mchopa, & Mwagike, 2024). It is basically a process of planning and an information-gathering exercise. Therefore, it is an integrated process that maximizes the movement of supplies and materials from the organization and its operations to the client. It includes the synchronization of a number of professional tasks, including forecasting, warehousing, planning, controlling, managing, directing, and coordinating (Neerajaa, Mehtab & Chandanic, 2021).

Logistics management, according to the CSCMP (2019), is the part of supply chain management responsible for planning, executing, and controlling the forward, reverse, and storage flow of products, services, and related data between the point of origin and the point of consumption in order to meet consumer needs. Transporting items into a facility, storing, handling, and relocating them is the more practical, hands-on portion of the supply chain that is known as logistics management (LM). The long term is the focus of SCM, while LM is more concerned with short-term processes. According to Stock and Lambert (2021), the main goal of logistics management is to reduce total costs while maintaining the customer service goal. Total costs are made up of the costs associated with transportation, warehousing, processing, information, quantity, and inventory. A company's commercial and marketing goals can be substantially aided by having an efficient logistics system. It adds time and place utilities to the offering, which helps increase customer satisfaction.

Research on logistics management has been carried out in the US. In order to determine and offer a useful pattern for improving the performance of logistic management, Bagherpasandi, Salehi, Hajiha, and Hejazi (2024) employed qualitative research. They conclude that two of the most important and successful elements in the logistic management that this study mainly highlighted are organizational productivity and SC inadequacies. Furthermore, based on

previously published research, The results indicate that an advantageous influence on logistic management is likely to come from industry SC. A study by Elia, Ghiani, Manni, and Margherita (2024) in the European Union looked at a system to support the administrative and technological concerns associated with anomaly identification within an e-commerce company's reverse logistics process. In order to facilitate a more intelligent and effective administration of reverse logistics, the paper proposes an algorithm and a system that are based on a series of proactive steps and ongoing, automatic monitoring of returned items. Numerous key performance indicators are used to describe improvements.

The obstacles and opportunities for humanitarian logistics in the DRC, and South Sudan were studied by Grigoli, Silva Júnior, and Pedra (2024). Consequently, six shared difficulties were found when executing humanitarian logistics throughout the missions. Every problem exposed a logistical weakness, and each mission's case study provided a suitable remedy based on best practices. These restrictions include the fact that the logistical analysis used a case study consisting of only three UN-mandated countries, and that the system's shortcomings during the observed period are already being addressed with the implementation of the UN Global Logistic Cluster's 2016–2021 strategy. Mangala and Moronge (2019) investigate how Kenyan oil marketing enterprises perform in relation to logistics management. With a correlation coefficient of 0.799, the regression analysis shown a relationship between the dependent and DVs.

➤ *Service Delivery*

The product industries, customer service takes emerged as a differentiator, and many businesses today deal with well-informed and picky customers thanks to IT advancements. The 18th century saw the beginning of the global movement toward higher-supplier management as companies came to understand that superior products alone could not sustain a competitive edge. Numerous scholars acknowledge that providing high-supplier management may offer a company a sustainable edge over its competitors. In both industrial and service businesses, the calibre of the services provided. In the increasingly fierce battle for consumers in today's customer-centered world, service quality, customer happiness, and customer value have emerged as the primary priorities of manufacturing and service firms (Wang et al., 2014). As a result, enhancing service quality is becoming more and more important to many firms.

➤ *Logistics Management*

As a crucial component of supply chain management, logistics management plans the flow of cash, information, and products from the procurement of raw materials to customer delivery (Singh et al., 2019). The optimization of corporate efficiency, customer satisfaction, and competitiveness can be achieved by the implementation of effective logistics techniques, which include warehouse, transportation, inventory, packaging, and information management (Githinji & Wachiuri, 2023). In order to satisfy societal expectations from nonprofit marking organizations like KRCS, logistics operations are essential. Effective logistics management affects costs, product quality, and

market responsiveness, making it essential for the success of any firm. Logistics operations must be as efficient as possible, which calls for careful consideration when choosing where to locate warehouses, prompt procurement, and continuous inventory level monitoring. Logistics management is essential for enhancing competitiveness in the global market, according to Wambua and Omwenga (2017). It has evolved from a cost-cutting strategy to a critical component of success (Roman, Parlina, & Veronika, 2023). According to Shi, Arthanari, Liu, and Yang (2019), transportation management guarantees that goods are delivered at the appropriate location. Coordination of the flow of goods and services from the point of origin to the necessary destination in the supply chain is facilitated by information management (Worku, 2018). Inventory control makes sure that a business has the necessary products on hand in the proper amounts and grades to protect against unforeseen shifts in customer demand (Kumar, Nallusamy & Ramakrishnan, 2018).

➤ *Supplier Management*

A firm may effectively Select its vendors and haggle for the most affordable prices on the products and services it needs to buy by using the supplier management process. In order to dedicate enough time to each supplier relationship, SRM managers should be in charge of no more than three, according to Mwanzia (2019). Employees engaged in SRM operations will possess a strong set of interpersonal, technical, and commercial abilities. It is crucial to have project management experience, market understanding, analytical skills, and business acumen. However, building solid and reliable workplace relationships requires "softer" abilities like listening, communicating, influencing, and managing change. SRM managers balance their own organizational objectives and priorities with their understanding of the business and strategic goals of their suppliers, allowing them to evaluate situations from the supplier's perspective.

➤ *Information Management*

Information flow between various organizational roles is examined by information management. Information must be shared promptly throughout different organizational departments in order to improve performance (Ristovska et al., 2020). An organization's performance is determined by its ability to adapt promptly and efficiently to the ever-changing needs and preferences of its customers, which is ensured by information management (Anunciação, Rosa, Costa & Oliveira, 2021). The foundation of cooperation in the company's logistic management operations is information management. Information management, according to Voronkova, Kurochkina, Firova, and Bikezina (2019), examines sales data, client order status, delivery schedules, capacity, and inventory levels inside a company. Information management is linked to increased resource flexibility.

II. STATEMENT OF THE PROBLEM

Logistics management methods encompass a range of activities that are critical to the overall functioning of the institution, including order processing, inventory control, warehousing, packaging, shipping, and information management (Solomon, 2018). Companies can successfully respond to client demands and manage demand uncertainty by implementing logistics management methods (Solomon, 2020). The presence of ineffective logistic management procedures within the company has a negative impact on the competitive standing of the company, as evidenced by a decline in revenue creation (Atz, 2019). The climate in which KRCS operates is extremely unstable and unpredictable, with many unprepared for calamities such as fires, floods, protests, and accidents (Mua & Anyieni, 2019). In addition to providing services, logistics management presents additional difficulties. For example, excessive inventory buildup might result in tied-up capital, which represents a loss of opportunity (Makori, Magutu, Omai & Akello, 2019). Therefore, urgent policy guidance is required to solve the difficulties KRCS encounter, which will have a negative impact on the distribution and administration of donated items and resources (Mwakio & Awuor, 2018).

There are various scenarios in which empirical studies on logistic management techniques occur. For example, Helm (2019) studied competitive advantage and sustainable logistics in the United States of America. According to the report, a company's capacity to maintain sustainability in logistics might give them a competitive edge. Ristovska, Kozuharov, and Petkovski (2019) examined the impact of logistic management methods on the performance of firms in Macedonia. It has been demonstrated that having enough inventory, managing information, warehousing, shipping, and storage lowers expenses for the company. Karim, Mohamed, Alaa, and Mohi (2018) used data from Egyptian freight companies to conduct research on logistics and how it relates to competitive advantage. Found that logistics support a company's ability to compete. There are gaps in the literature because these studies were carried out in other developed nations and concentrated on competitive advantage rather than service delivery.

Using data from oil marketing organizations, Mangala and Moronge (2019) conducted a study locally in Kenya on the impact of logistic management practices on firm performance. They concluded that, in order to reap the greatest benefits, businesses must have well-coordinated transportation systems in place. In order to evaluate the relationship between logistic management practices and operational efficiency, Mukolwe and Wanyoike (2019) used the case of Mumias Sugar Ltd. They found that automating warehousing tasks, managing transportation, and physically distributing products all improve business performance and lower costs. It is evident from the examined studies that some were carried out in other developed nations, while other investigations were carried out in manufacturing enterprises rather than service firms. Not exclusively on service delivery, but also on operational performance, competitive advantage, and operational efficiency, were the subjects of other

research. Due to these conceptual and contextual inadequacies, the current study addressed the following research topic in an effort to close those gaps: How does KRCS's logistical management impact the provision of services? The current study, which examined the relationship between logistics management and service delivery in Kenya, aimed to fill the knowledge gap that resulted from this.

➢ *Objectives*

- To assess the effect of supplier management on service delivery at the KRCS.
- To evaluate the effect of information management on service delivery at the KRCS.

III. THEORETICAL LITERATURE REVIEW

The section analyses how it applies to the study. Goal-Setting Theory was anchor theory which is backed by institutional theory and a resource-based view.

➢ *Goal-Setting Theory*

Dr. Edwin Locke developed this theory during his 1950s research, building on Kurt Lewin's (1968) seminal study on degrees of ambition (Locke & Latham, 2010). Two main tenets of goal-setting theory are that individuals have adaptive reactions to certain outcomes, both favourable and unfavourable, and that individuals are conscious of the anxieties that arise from their interactions with others and the relationships that lead to the different outcomes (Amit & Livnat, 2008). There are two expectations that motivate people to perform, in this theory. Determine the probability that an endeavour will consistently yield the desired performance as the first stage in creating goals. The second goal-setting approach focuses mostly on the potential that a specific performance yielded the desired results. The worker won't feel inspired to complete a certain task even if their efforts go unnoticed.

Motivation is the foundation of the goal-setting theory, which explains why behaviour happens at a workstation. Incentives from outside sources are viewed as motivators that drive behaviour rather than intrinsic motivators when conduct is driven by internal factors (Ferris, 2007). In the study, assurance, accountability, and maturity are required. Setting an organization's goals transforms the process of managing it according to its objectives. Since they know what is expected of them, employees can then set their own goals. The study accepts this theory because it has a good correlation with an organizational performance measure. It also promotes the identification of needs and the defining of quality. As the intended result of an action or activity, someone intentionally seeks to achieve or get something. Setting targets necessitates the deliberate act of choosing performance standards in order to accomplish the intended results (Latham, 2010). According to this goal-setting technique, motivation originates from the desire and intention to reach a goal. Individuals or organizations are usually urged to put in more effort or alter their approach if they discover that their current performance is not yielding the intended outcomes (Locke & Latham, 2010). According to Locke and Latham (2010), people who

are pursuing particular goals don't seem content until the goal has been accomplished.

The hardest goal lines are used as a standard for measuring levels of satisfaction and dissatisfaction since they are challenging to fulfill within the organization's time limits. Establishing objectives to evaluate one's own performance suggests that in order to foster an atmosphere that enables one to realize one's own potential, objectives should ensure that basic needs—such as a secure place of employment and a living wage—are satisfied (Ferris, 2007). Ferris (2007) claims that goal-setting is a combination of decision-theory theories that aid in the understanding of motivation and the effectiveness of organizations. The variables supported by this theory in this study include the variables supported by this hypothesis in this study include supplier management, information management, and service delivery.

➢ *Resource-Based View Theory*
Penrose developed this theory in 1959, but Wernerfelt's work in 1984 contributed to its increased recognition as a useful framework for studying service delivery (Kozlenkova, et al, 2014). According to Wernerfelt, the real factors influencing a company's service delivery and profitability are its internal resources. Generally speaking, "RBV" refers to perspective that values resources. According to Kozlenkova, Samaha, and Palmatier (2014), Penrose's research from that year is responsible for this early comprehension of the resource-based view. Resources are organized to give the impression that the business already has them as internal resources. Jay Barney advanced the benefits of the RBV viewpoint, and his work has since gained popularity. He described the essential features of internal resources and how they relate to competitive advantages. According to Kozlenkova et al. (2014), a company has a competitive advantage if it can outperform its closest rival in a particular market in terms of economic worth.

Gills, Combs, and Ketchen (2014) state that the corporation's competencies are different from its ability to use corporate resources, which are stocks of instantly useable components that the firm possesses. The RBV theory includes the characteristics and types of resources that produce an edge, improved service delivery, and competitive advantage (Gillis, et al, 2014). Any business that wants to turn its organizational strategy into a long-term financial gain needs to have a diverse set of resources. How a company can beat its rivals is made clear by the RBV. When putting its strategy into practice, the RBV theory prioritizes the organization's internal resources. Supporters of the RBV theory like Jensen et al. (2016) assert that repurposing existing resources is preferable to trying to acquire new resources or talents for every opportunity in order to improve business performance. These resources are divided into two groups. In order to optimize profits, the theory states that a business must determine where to deploy its unique resources. Additionally, RBV argues that supplier management is a crucial service delivery indicator that improves a business's ability to compete and provide services as well as establish and maintain a financial gain (Hitt, et al., 2016).

Theory is limited by its only focus on the internal environment as a way to maximize a company's superior service delivery, even though core resources are important drivers of service delivery (Gillis, Combs, & Ketchen, 2014). The RBV's competitive advantage and service delivery are impacted by its external environment. The truth is that external variables affect a firm's service delivery in the market equally. External elements that impact a business's operations in the market include taxes, sectoral policies, rules and regulations, and compliance standards. External resources must also be considered when analyzing factors that may impact the strategies it employs. According to theory, it is essential to take into account a firm's internal resources as well as external aspects while researching tactics that result in superior service delivery (Hitt, et al., 2016). Theory was selected as an additional concept despite its shortcomings. The RBV remains a fundamental principle that explains how a company can use its resources to improve service delivery , additionally, the study's factors that this hypothesis supports include supplier management, information management, and service delivery.

➢ *Institutional Theory*
Goguen and Burstall came up with this concept in 1984. The method places a strong emphasis on the environment of the organization as a crucial component in determining its structure and behaviours. Even when it may not want to, changes in the business environment may force a company to modernize or create new plans that must be implemented. The concept has centred on how organizational environment influences commercial activities and organizational structure.

As per Gauthier's (2013) idea, organizations tend to become similar due to the pressure of authenticity. This suggests that businesses offering similar products are more likely to follow their market leaders. A framework for analysing how businesses engage with their workers and other pertinent stakeholders, as well as how technology might help these interactions grow over time, is provided by the theory of institutions. The theory can still be useful for contemporary organizational strategies, procedures, and structures in addition to policies.

The relationships that organizations have with different stakeholders in their environment might influence their decision-making about the career advancement of their personnel in certain competitive and unstable environments. Institutional theory holds that logical goals are not the main driving force behind organizational decisions. The concept is applied in the study to explain how organizational technology-based social norms and rules that affect service delivery might change an organization. Applying this theory to the crucial domains of policy, planning, and process creation for firms and demonstrating how they get embedded in the organization's interactions with its environment, which impacts its functioning, will be the focus of this research. Additionally, the theory will be applied in the study. In addition, the study's variables supporting this idea include information management, supplier management and service delivery.

IV. EMPIRICAL LITERATURE REVIEW

A. Supplier Management and Service Delivery

From the standpoint of sustainable supply chain performance, Meena, Katiyar, and Kumar (2023) looked at supplier selection and management. The planning, manufacturing, delivery, sustainability, and customer service aspects are taken into account by the writers when assessing and choosing providers. An overview of pertinent literature was conducted, a framework that encapsulated the main supply chain operations was created, and appropriate metrics were determined. An actual case study of an Indian automaker serves as an illustration of the suggested methodology. Meena, Katiyar, and Kumar (2023) found that when an automotive firm is choosing component suppliers, the following factors are desired in decreasing order: delivery, customer service, production, planning, and sustainability. When evaluating suppliers, the most crucial factor to take into account is how they will affect manufacturing and planning. It's interesting to see that when choosing suppliers, issues with delivery and sustainability are given the least consideration. Rather than purchase cost, operational efficiency metrics are included in the top five criteria. This research contributes a valuable perspective to the literature that explains the relationship between purchasing strategy and corporate strategy by proposing and demonstrating a framework for supplier selection that harmonizes supply chain activities of the SCOR model, sustainability, and customer service. An automobile case study offers special and insightful managerial insights for supply chain and purchasing performance and the study provides contextual gap that requires local examination (Meena, Katiyar, & Kumar, 2023).

Heikkilä and Jääskeläinen (2019) looked at What benefits do buying and supply management (PSM) strategies offer a focal company's business clients? examining value delivery across three supply chain tiers, i.e., from suppliers to the focal firm and then, using value chain logic, to the focal company's customers. The research is conducted as a qualitative study through interviews with four main businesses that are involved in business-to-business transactions. A total of thirty-two managers and directors are interviewed in relation to purchasing, business units, product/service development, and sales and marketing. The study reveals the traits and interactions between cross-functional and supplier-oriented PSM practices in the production of customer value. The research indicates that integrating purchasing with other focal organization functions is the best method to increase supply flexibility and satisfy customer preferences. The findings suggest tactics that might work well in the scenarios being studied. This study contributes to the corpus of knowledge in supply chain management by highlighting the benefits that customers of a focal firm obtain from the purchasing function.. By concentrating on PSM practices, it furthers the conversation in the supply chain management literature about the interaction processes that create customer value in business relationships (Jääskeläinen & Heikkilä, 2019).

Schikora, Guiffrida, Soto-Ferrari, and Bhattacharyya (2023) looked at a multinomial modelling technique to evaluate supplier performance in order to align buyers and suppliers. As a result, there is a lack of a comprehensive modelling strategy that emphasizes establishing lasting relationships. Evaluating suppliers that replicates alignment, which is a crucial component of effective supply chains and fosters long-term supplier relationships, and analytically compares supplier delivery performance to cost realization. In order to improve compliance with business resource planning standards. Buyer-supplier alignment is supported by prescriptive analytics that uses optimization of the suggested mathematical model and simulation for rival suppliers, but it also makes it possible to create an effective frontier toward supply base optimization. When evaluating suppliers, the most crucial factor to take into account is how they will affect manufacturing and planning. It's interesting to see that when choosing suppliers, issues with delivery and sustainability are given the least consideration. Rather than purchase cost, operational efficiency metrics are included in the top five criteria. This research contributes a valuable perspective to the literature that explains the relationship between purchasing strategy and corporate strategy by proposing and demonstrating. Global supply chains are vulnerable to business continuity at times of systemic disturbances like the COVID pandemic. To improve business continuity, supplier assessment models should emphasize long-term relationship modelling rather than contractually-based, short-term penalty-based modelling. The model presented in this study presents an intriguing divergence from conventional modelling techniques in this genre and is based on alignment, which is a fundamental component of successful supply chain integration (Bhattacharyya, Guiffrida, Soto-Ferrari, & Schikora, 2023).

B. Information Management and Service Delivery

Rotaru, Ganbold, and Matsui (2021) looked at impact of supply chain integration made possible by information technology on the operational performance. The goal of the study is to evaluate how IT capability supports SCI and how SCI affects a operational performance of the organization with regard to product-mix flexibility, customer service, inventory level, production cost, and quality and delivery. the relationship between characteristics of IT competence, SCI, and operational success is theoretically explored. All things considered, data consistency is proven to negatively impact internal integration. the results point to the positive relationship between IT competence and SCI. The findings also show that all operational performance metrics are positively and significantly impacted by SCI, particularly customer integration. Future efforts aiming at enhancing SCI through particular IT capabilities are informed by the findings. Managers are recommended to take into account how diverse IT capabilities—such as data consistency capability, supply chain apps, and cross-functional applications—impact supply chain integration when launching such projects. Because some variables have a varied or even opposing influence on IT capacity, SCI, and operational performance in particular business contexts, (Rotaru, Ganbold, & Matsui, 2021). the study adds empirically highlighting the significance of multidimensional

representation and analysis of these attributes that provides a contextual gap that was examined using KRCS as case.

Gammelgaard and Nowicka (2024) looked into how supply chain management was affected by cloud computing. The conceptual analysis and literature review served as the foundation for this conceptual paper. Supply chain (SC) competitiveness is mostly enabled by digital technologies nowadays. CC capabilities provide structural flexibility and responsiveness to support competitive SC challenges. A digital ecosystem and CC-based Internet platform can facilitate "information cross-docking" amongst SC stakeholders By enlisting the joint efforts of all stakeholders, Platform-based supply chains, or SCs for short, will mark a turning point in the development of supply chain management, or SCM 3.0. Since holistically managed SCs in cyberspace are currently uncommon in practice, further research is needed to gather empirical data on how digital technologies affect SC competitiveness. The principle of CC's ability to provide SCs with structural flexibility through simple, instantaneous resource and capacity reconfiguration is presented in this study. Along with cost savings and increased flexibility, CC provides a disruptive new business model option that might completely change the way we think about supply chain management (Gammelgaard & Nowicka, 2024).

Using an online logistics bidding platform, Yu and Ma (2024) looked into the identification of business information by deep learning by examining the tender documents. This article suggests an original LSTM model for identifying key elements in logistic tender documents by integrating a CRF layer and a variant contextual feature representation. The pretrained BERT model is used as input by the proposed model to supplement the contextual feature representation, in place of conventional word embedding. The information included in words and characters is then efficiently used with the Lattice-LSTM model to prevent erroneous segmentation. Next, the Chinese logistics tender Entity Corpus verifies the suggested model. Furthermore, compared to other popular NER models. The manuscript suggests a workable paradigm for logistic tender NER. Through the implementation and optimization of BERT in the downstream job using limited data, the experiment results demonstrate that the model outperforms other current models. ., .This is the first research to take identified companies out of Chinese logistics contract specifications. (2) This study establishes a model program for processing authentic logistic tender documents online. and a real logistic tender corpus is constructed for practical application. The methodology, according to the authors, will help logistics organizations recognize the constantly shifting market trends and convert unstructured documents to organized data so they can make strategic logistic decisions (Yu & Ma, 2024).
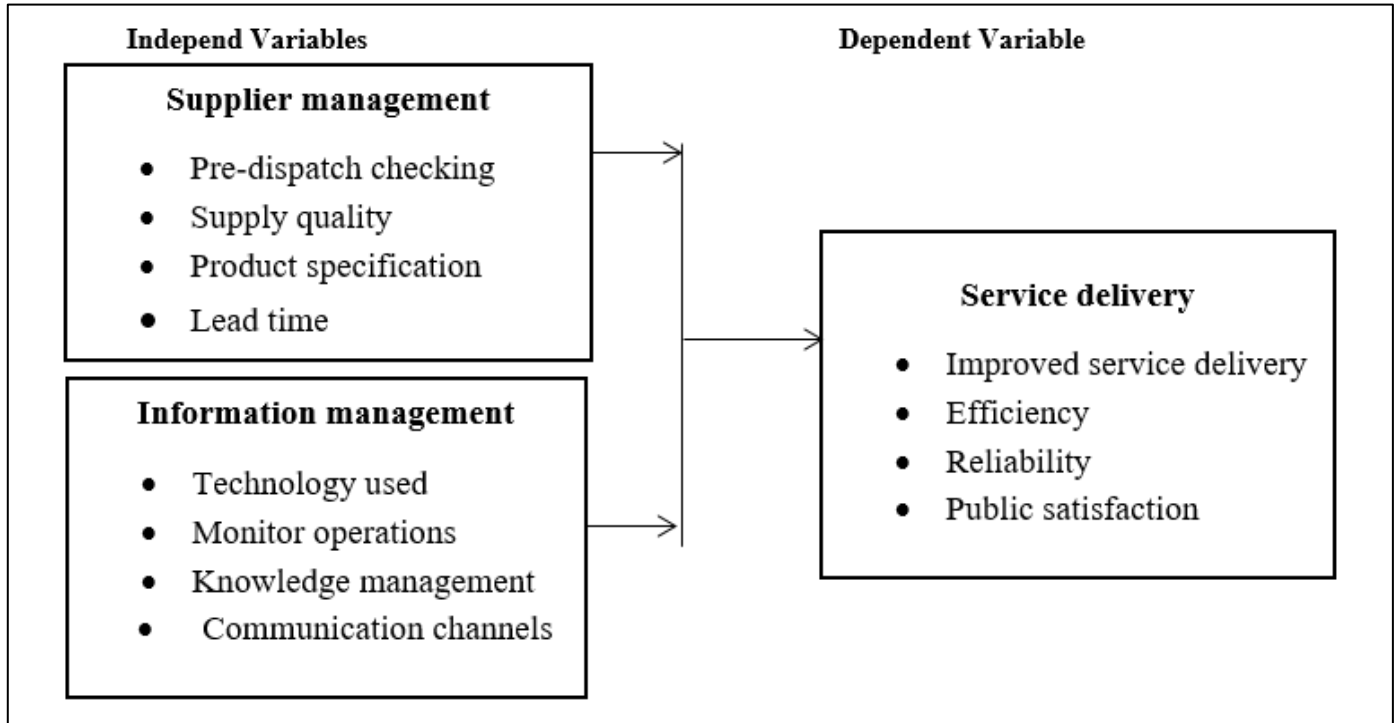
V. CONCEPTUAL FRAMEWORK

Fig 1: Conceptual Framework

A. Research Design

Bickman and Rog (2018) define a research design as the way the study purpose and technique are organised; thus, it is the theoretical framework that is utilised to carry out the research inquiry. Since it guarantees that the data collected delivers appropriate answers to the study objectives, this design is the ideal one. The design was descriptive. The design was used to describe the characteristics of the population or investigate a problem. One benefit of this approach is that it might assist researchers in organising and

conducting their studies that provide in-depth understanding of the people, locations, or specific problem (Bickman & Rog, 2018). Converting research questions into a project is the primary objective of research design.

B. Target Population

Target population is defined by Cooper and Schindler (2018) as the entire group of variables that one intends to generalize from the findings. Saunders, et al (2018), define population as the whole assembly of factors that the study conclusion should be generalized. As demonstrated in Table 1, population. The population was drawn from the headquarters in South C

Table 1: Target Population

Category	Number	Percentage
Top Management	10	3
Middle-level Managers	70	23
Non-management staff	220	74
Total	300	100

(HRD, KRCS 2024)

C. Sample and Sampling Technique

For the study, stratified random sampling was employed, which was determined by Creswell and Creswell (2018) to be impartial and provide an equal opportunity for selection for every member of the population. According to Kothari and Garg (2015), a sample is a division that is used to reflect the characteristics of the population by reflecting a large unit. Saunders, Lewis, and Thornhill (2018) recommended that the study sample size be random in order to eliminate biases, and that 1–10% of the target population is considered an appropriate size. Cooper and Schindler (2018) agreed. The Cochran formula is used to determine the sample size, which is 260 at the 5% significance level.

$$n = \frac{N}{[1 + N(e)^2]}$$

Where; n – sample size N – Population size e – Level of significance n $= 300 / 1 + 300(0.05)^2 = 171$ Therefore the sample was 171 respondents

D. Research Instruments

The questionnaire served as the study's main method for gathering data. Ten employees of all levels were chosen at random from KRCS Machakos branch was part of the pilot. The reason is because the KRCS Marchakos branch has similar characteristics and there results were not included in the final study. Cooper and Schindler (2018) stated that to avoid biases, the research pilot size should be random, and 1-10% of the sample size is considered an appropriate size. The process's purpose is to determine whether the responses from the instruments will offer the required feedback. It is the measure's accuracy that determines validity. The purpose is to find and fix any errors in the research tool before the sample group uses it. This was done during the instrument's piloting period (Saunders, Lewis, & Thornhill, 2018). The process's purpose is to determine whether the responses from the instruments provided the required input that helps the study achieve its goals as outlined in the methodology (Cooper & Schindler, 2018). Content validity with assistance of supervisor and field specialists was adopted. Face validity

will also be used in the study. Face validity is significant since it makes determining the general validity of a test or method straightforward. It's a quick, simple, and straightforward way for determining if a new statistic is beneficial at first look (Cooper & Schindler, 2018). Reliability is about the consistency of a measure. Saunders, et al (2018), dependability is defined as the ratio by which study questionnaires are tested for consistency. The study's reliability was assessed using the 0.7 Cronbach Alpha coefficient.

E. Data Analysis and Presentation

Kothari and Garg (2015) discuss the process of using research data-gathering techniques to sort and organize raw data in order to obtain pertinent information, quantitative data using SPSS version 27 was analysed. Before generalizing the conclusions, the field's uncoded raw data was processed. Descriptive statistics was used for analysis and tables was used to display results. The link between the research variables was shown using inferential statistics. A two-tailed, 5% level of significance correlation conducted. To evaluate the significance model, analysis of variance was employed. It was compared between the computed and tabulated f statistics. It was determined whether the entire model is significant using 0.05 as P-value. The multiple linear regression models are as follows

$$Y = \beta^0 + \beta^1 X^1 + \beta^2 X^2 + \beta^3 X^3 + \beta^4 X^4 + \varepsilon$$

Where:
Y= Service delivery at KRCS
(Bi; i=1, 2, 3, 4) =
Xi for; X^1= Supplier management : X^2= Information management ;

Ethical consideration, according to Bickman and Rog (2018), is the use of ethics during the course of a research study. All prospective replies were asked for their permission in advance. The privacy of the information provided in survey replies will also be upheld. Respondent participation in the data gathering exercise was entirely optional. Additionally, there were no personal, insulting, or derogatory terms or questions on the research questionnaire.

VI. FINDINGS AND RECOMMENDATIONS

A total of 171 questionnaires were distributed to the sample population. The findings show that 137 surveys were completed, representing an 80% response rate, while 20% were left unanswered. A large number of people responded to the research study, as supported by Kothari and Garg (2015); the response was excellent, and 137 valid questionnaires were used to examine the data. pilot study was carried out before any data was collected to assess and improve the questionnaire's usability and clarity. The tool's Cronbach's alpha > 0.7, meaning it was deemed acceptable and sufficiently dependable for measurement. All inquiries were approved since they were deemed reliable, as supported by Cooper and Schindler (2018). It is necessary for respondents to specify their gender. Men made up the majority of respondents; there were more men than women.

Thirty percent of respondents were in the age group of 36 to 40. The age range of 25% of participants was 31 to 35. Thirteen percent of the population was in the 26–30 age group, and sixteen percent was in the 40–45 age group. Ten percent of people were over 46, while seven percent were between the ages of 18 and 25. The majority of the employees are young and vivacious, and the responses reflect a good distribution of ages. Bachelor's degree holders made up the majority of responders (49%) and master's degree holders (30%) were next in line, college attendees (9%), and doctorate holders (12%). This implies that the respondents'

highest educational attainment was enough for deciphering and evaluating the research questions. Respondents were asked to answer questions regarding their past employment experience with the institution. Thirteen percent had worked for the company for eleven to fifteen years, while forty-two percent had been there for six to ten years, and 4% for over sixteen years. Most had been employed by KRCS for over five years, so they were familiar with its working dynamics.

A. Correlation Analysis

The relationship between warehouse management, information management, supplier management, transport management, and service delivery were determined using correlation analysis Pearson's correlation and the mean score for every independent variables were determined using SPSS. An asterisk (*) indicates a correlation that was conducted at either the 0.05 or 0.01 significant levels, or both. In order to ascertain whether the variables have a substantial link, the p-value must be compared to the significance criterion. A significance level of 0.05 (alpha, for short). A correlation coefficient of 0.05 means that there is a 5% chance of assuming a relationship when none exists. The degree of deviation of the correlation coefficient from zero is indicated by its p-value. Statistical significance is attained when the association's p-value is less than or equal to 0.05. If the p-value is greater than 0.05, or the significant threshold, the association is not considered statistically significant. Table 2 displays the correlation's findings.

Table 2: Correlation Matrix

		Service delivery	Supplier management	Information management
Service delivery	Pearson Correlation	1.000		
	Sig. (2-tailed)			
Supplier management	Pearson Correlation	.765**	1.000	
	Sig. (2-tailed)	0.000		
Information management	Pearson Correlation	.522**	.314**	1.000
	Sig. (2-tailed)	0.000	0.000	

Table 2 shows the strong correlation (r = 0.765, p = 0.000.05) between KRCS's supplier management and service delivery. This suggested that as supplier management had a positive and significant impact, an improvement would result in better price delivery at KRCS. The data indicates that there is a significant positive correlation between information

management and service delivery at KRCS (r = 0.522, p = 0.00<0.05). Additionally, it was implied that since information management had a positive and substantial influence, enhancing it would enhance KRCS's ability to provide services.

Table 3: Model Summary for Supplier management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.642 [a]	.499	.395	.60906

a. Predictors: (Constant), Supplier Management

Table 3 illustrates the relationship between the predictor component, supplier management, and the DV, service delivery. There is a high positive correlation between supplier management and service delivery, as indicated by R = 0.642 and R^2 = 0.499, which suggest that changes in supplier management may account for 49.9% of delivery variation. Other factors impact KRCS service delivery to the tune of 50.1%.

Table 4: ANOVA[a] Results for Supplier Management

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	26.578	1	26.578	75.042	.000[b]
1	Residual	42.902	136	.375		
	Total	69.480	137			

a. DV: Service Delivery
b. Predictors: (Constant), Supplier management

Supplier management has a considerable impact on service delivery, as seen by the F = 75.042 values in Table 4, demonstrating both the model's good fit to the data and the importance of supplier management in KRCS service delivery. Based on a significance level of 000, regression model properly predicts the DV when the value is less than 0.05.

Table 5: Regression Coefficients[a] for Supplier Management

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.095	.431		3.309	.001	.439	1.751
Supplier management	.688	.079	.632	8.668	.000	.531	.845

a. DV: Service Delivery

Table 5 shows how the supplier management of the KRCS significantly improves service delivery. The data demonstrate a strong correlation between service delivery and supplier management; p = 0.01 (0.05). Increasing the supplier management method's mean index should enhance service delivery by 68.8%, or.688 units, as the strategy's value is significant (t = 8.668, p.05). The following is the regression model that explains the findings in Table 5. Supplier management for service delivery is equal to 1.095 + 0.688. The model demonstrates and clarifies how the supplier management affects KRCS service delivery.

Table 6: Model Summary for Information management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.595[a]	.431	.325	.6427

a. Predictors: (Constant), Information Management

In a regression analysis, the information management, the predictor component, and the DV were service delivery. Regression analysis results indicate a basic link between information management and service delivery (R = 0.595, R^2 = 0.431), with a change in information management of one unit potentially accounting for 43.1% of the variance in service delivery. A overview of the findings is given in Table 6.

Table 7: ANOVA[a] Results for Information management

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	24.411	1	24.411	56.864	.000[b]
1	Residual	46.628	136	.484		
	Total	70.039	137			

a. DV: Service Delivery
b. Predictors: (Constant), Information Management

The model adequately captures the data and demonstrates that KRCS information management has a big impact on service delivery. F = 56.864 indicates that information management has a significant impact on service delivery. Table 7 indicates that at a significance level of.000, or less than 0.05, the regression model accurately predicts the DV.

Table 8: Regression Coefficients[a] for Information Management

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0%Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.739	.545		2.873	.000	.669	1.069
Information management	.644	.186	.476	8.412	.000	.547	.823

a. DV: Service Delivery

KRCS's use of information management has significantly enhanced service delivery. The results show a significant correlation (p 0.05 P = 0.01) between information management and service delivery. Given this, the information management technique's values are statistically significant (t = 7.480), indicating that service delivery should improve if the information management mean index is raised by.644 points. Regression analysis using service delivery as an example yields the following equation: 1.739 + 0.644 (information management). The model demonstrates how KRCS's service delivery is positively impacted by information management.

B. Overall Multivariate Analysis

Table 9: Model Summary Multivariate Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.648 [a]	.568	.452	.58289

a. Predictors: (Constant), Information Management, Supplier Management

b.

Regression analysis was used to predict service delivery . Table 9 shows that there is a positive correlation between R = 0.648 and R2 =.568, indicating that altering any one of the predictor factors may account for 56.8% of the variation in organizational.

Table 10: ANOVA[a] Results for Model Summary

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.678	2	8.169	24.210	.000 b
	Residual	37.118	135	.337		
	Total	69.796	137			

a. DV: Service delivery

b. Predictors: (Constant), information management and supplier management

The results of F = 24.210 show that the quality management system has a significant influence on KRCS service delivery and that the model well describes the data. These numbers demonstrate that each predictor variable affects service delivery in a way that is statistically significant. Table 10 shows that the DV is significantly predicted by the entire regression model at the significance level of 0.000, or less than 0.05.

Table 11: Regression Coefficients[a] for Multivariate Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.675	.367		1.504	.136	.176	1.281
Supplier management	.479	.118	.329	3.027	.003	.123	.592
Information management	.428	.114	.274	2.697	.008	.081	.532

a. DV: Service Delivery

The results of the study demonstrate that predictor factors greatly enhance KRCS service performance. P = 0.01) and (p = 0.05) The data demonstrates a clear connection between efficient service delivery. Thus, the mean index of predictive dynamics should be increasing service delivery since the predictor variable values are statistically significant at p.05. The results are summarized in Table 11. The model demonstrated that supplier management and information management had the largest effects on the service delivery at the least effective strategy for enhancing service delivery is KRCS transport management . As a result, the regression model for the study is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 +$$
Where:
Y= Service delivery
$(B_i; i=1, 2, 3,4)$ = various coefficients for the independent variable
X_i for; X1= Supplier management
X2= Information management

Service delivery = .675 + .479 (Supplier management) + .428 (Information management)

VII. CONCLUSION

The predictor factors have a positive and significant impact on KRCS service delivery. The results show a strong correlation between service delivery and logistics management. Consequently, as P <.05. indicates statistical significance for the values of the predictor variables. an increase in their mean index should improve service delivery. Supplier management and service delivery are significantly positively correlated, according to the regression analysis, and shifts in supplier management can be linked to variations in service delivery. The results show that logistic management significantly affects KRCS service delivery and that the regression model accurately accounts for logistics management techniques. Service delivery is greatly impacted by supplier management.

The results of regression analysis indicate a robust positive correlation between information management and service delivery, implying that differences in information management could be the root cause of disparities in service delivery. The study's findings demonstrate that KRCS information management significantly affects service delivery, demonstrating that the regression model appropriately takes logistics management strategies into account and that information management is crucial to the process of providing services.

RECOMMENDATIONS

The research study makes the following improvements and recommendations to KRCS's board of directors and management: To ensure successful logistics management and service delivery, KRCS should improve supplier management and service delivery, which is necessary, and that they can balance organizational goals and priorities with the supplier's perspective on challenges. This will improve the efficiency and effectiveness of the processes that the KRCS and communities in need of support use. KRCS service delivery can be increased by using auto-ID technologies. ID technologies are welcomed since they will make product marking more accurate and efficient, which will improve operations. The results showed how logistics management procedures impacted the provision of KRCS services. Information management, warehouse management, supplier management, and transportation management were some of these procedures. Over time, new difficulties impacting logistics management on service delivery are expected to arise as a result of global supply chain management trends. It is important to recognize these issues, particularly any impediments, and develop strategies to address them. This is only going to be feasible if logistics management research keeps going. Therefore, the current study should be extended in the future to investigate how additional logistics management methods, like order processing and ICT, among others, affect KRCS service delivery. By adding more moderators to the postulated linkages, more variables in the model might be explained.

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