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STRATEGIC LOGISTICS MANAGEMENT AND SERVICE DELIVERY OF ADMINISTRATION POLICE IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT: Despite reforms outlined in the 2018–2022 National Police Service strategic plan, service delivery within the Administration Police Service (APS) remains below public expectations. The National Police Service Report (2020) indicates persistent inefficiencies in vehicle fueling, response rates, inventory management, and information flow, with Nairobi County being the most affected. Vehicle fueling costs increased by 35% in 2021, while response rates and logistics performance declined by approximately 10% nationwide. Limited research examines how logistics challenges specifically affect APS operations in Nairobi City County. This study investigated the effect of strategic logistics management on service delivery by the Administration Police within Nairobi City County, Kenya, focusing on four dimensions: transport management, inventory management, information management, and warehouse management. The study was anchored on three theories: the SERVQUAL Model, which measures service quality through reliability, responsiveness, and assurance; the Resource-Based View (RBV), which emphasizes optimal use of organizational resources for competitive advantage; and Transaction Cost Theory (TCT), which focuses on minimizing operational costs through effective coordination. A descriptive research design was employed with a target population of 4,000 Administration Police Officers. A sample of 364 respondents was determined using Yamane's formula, with data collected through structured questionnaires using a five-point Likert scale. Data analysis utilized descriptive statistics and inferential statistics including correlation and regression analysis. Regression analysis revealed that strategic logistics management dimensions collectively explained 86.1% of variance in service delivery ($R^2 = 0.861$, $F = 1927.476$, $p < 0.001$). Strategic

transport management emerged as the strongest predictor ($\beta = 0.640$, $p < 0.001$), followed by inventory management ($\beta = 0.598$, $p < 0.001$), warehouse management ($\beta = 0.544$, $p < 0.001$), and information management ($\beta = 0.530$, $p < 0.001$). Strategic logistics management significantly enhances APS service delivery, with integrated implementation of transport, inventory, information, and warehouse management being crucial for operational efficiency and public satisfaction. The study recommends strengthening preventive maintenance schedules, enhancing ICT infrastructure uniformly across units, adopting automated inventory systems, implementing an integrated logistics framework, and establishing continuous training programs for officers.

Key Words: *Strategic Logistics Management, Service Delivery, Administration Police Service, Nairobi City County, Operational Efficiency*

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1.0 INTRODUCTION

A. Background of the Study

Logistics management plays a critical role in advancing service delivery by aligning operational processes with organizational goals to enhance efficiency, minimize costs, and meet customer expectations while addressing logistical challenges across different operational levels (Richu et al., 2022). This is supported by Maddock-James (2023), who observed that Amazon's supply chain innovations, such as drone delivery, predictive shipping, and one-day delivery, reduced service delivery time by 40% in key regions, demonstrating the impact of strategic logistics on customer satisfaction and operational efficiency. The COVID-19 pandemic exposed vulnerabilities in global supply chains, compelling companies such as Apple to diversify production and logistics networks away from highly affected regions like India, Vietnam, and China (Deshmukh, 2021). According to McKinsey (2020), 93% of companies globally were forced to adjust their logistics strategies to ensure operational continuity amid such disruptions.

Infrastructure challenges in Africa, including inefficient ports and poor road networks, underscore the need for strategic logistics interventions to improve service delivery (Mlambo, 2021). The African Continental Free Trade Area (AfCFTA) framework fosters regional cooperation in logistics, enhancing trade and service delivery. UNECA (2018) projected that intra-African trade would increase by over 50% by 2030 through improved logistics systems. Third-party logistics providers such as DHL have bridged logistics gaps by offering customs clearance, warehousing, and last-mile delivery, especially in remote areas (Baliyan et al., 2022). PwC (2021) reported that the African third-party logistics market is growing annually by 12%, driven by the demand for improved logistics management and efficient service delivery (Luke & Walters, 2022).

In Kenya, strategic logistics management is pivotal in e-commerce and public sector operations, ensuring customer satisfaction, business growth, and timely delivery (Kabia, 2020). A Jumia

internal report (2019) revealed a 25% increase in customer satisfaction following the implementation of last-mile logistics strategies. Consequently, e-commerce in Kenya is projected to grow by 16.5% due to advancements in delivery mechanisms (Maritim, 2021). Infrastructure projects such as the Standard Gauge Railway (SGR) have also transformed logistics efficiency by reducing transportation costs by 50% and cutting cargo delivery time from Mombasa to Nairobi from 24 to 8 hours (Ministry of Roads, Transport, and Public Works, 2022). This aligns with Giti et al. (2020), who emphasized the significance of public–private partnerships in improving national logistics systems and service delivery.

According to Yang and Lirn (2017), strategic logistics management ensures effective and efficient flow of resources across organizations, enhancing responsiveness and resilience. Abdul et al. (2019) further assert that it enables institutions to understand operational costs while improving service quality. In the context of policing, logistics management supports mobility, warehousing, inventory, and technological systems crucial for operational readiness (Denman, 2020; Munyao, 2022). Timely equipment supply, efficient transport, and resource allocation directly influence the responsiveness and efficiency of the Administration Police Service (APS) (Mwawasi et al., 2022; Mungai & Ogutu, 2023). Therefore, strategic logistics management remains fundamental in strengthening service delivery, ensuring that organizational performance aligns with the goals of efficiency, reliability, and public satisfaction.

B. Statement of the Problem

Strategic logistics management within the Administration Police Service (APS) is intended to enhance efficiency and effectiveness in service delivery, aligning with globally recognized logistics practices. However, despite reforms outlined in the 2018–2022 National Police Service (NPS) strategic plan, service delivery remains below public expectations. The National Police Service Report (2020) indicates persistent inefficiencies, particularly within APS operations. Vehicle fueling rates declined due to increased costs in 2020, with a further 35% cost rise recorded in 2021 in Nairobi County. Additionally, response rates, inventory management, and information flow decreased by approximately 10% nationwide, with Nairobi County most affected. The Kenya National Commission on Human Rights (KNCHR, 2020) further notes that APS logistics performance remains below average compared to other public agencies and urban counties.

Empirical studies have linked effective logistics management to improved service delivery and operational efficiency (Nguyen et al., 2020; Kariuki & Wanyonyi, 2019; Ochieng & Muturi, 2021). These studies highlight inadequate logistics planning, weak technological integration, and poor resource allocation as persistent constraints. Nonetheless, limited research focuses on how these challenges specifically affect APS operations in Nairobi City County. This study therefore seeks to examine the effect of strategic logistics management on service delivery within the Administration Police Service, aiming to generate actionable recommendations for improving efficiency, responsiveness, and public trust.

C. General Objective of the Study

The study sought to investigate the effect of strategic logistics management on delivery of services by Administration Police within Nairobi City County, Kenya.

D. Specific Objectives

This study was guided by the following specific objectives:

- i. To establish the effect of strategic transport management on delivery of services by Administration Police within Nairobi City County, Kenya.
- ii. To determine the effect of strategic inventory management on delivery of services by Administration Police within Nairobi City County, Kenya.
- iii. To determine the effect of strategic information management on delivery of services by Administration Police within Nairobi City County, Kenya.
- iv. To analyze the effect of strategic warehouse management on delivery of services by Administration Police within Nairobi City County, Kenya.

2.0 LITERATURE REVIEW

A. Theoretical Framework

SERVQUAL Model

The SERVQUAL Model, developed by Parasuraman et al. (1986), posits that service quality can be measured by the gap between customer expectations and their perceptions of actual service performance. The theory argues that customer satisfaction depends on how well organizations meet or exceed expectations through five key dimensions: reliability, tangibles, responsiveness, assurance, and empathy (Parasuraman et al., 1988). It suggests that improving these dimensions leads to enhanced service experience and organizational credibility (Agarwal et al., 2021). Despite criticism for subjectivity (Chili et al., 2023), the model remains applicable across sectors, including public service (Gandhi et al., 2018). The relevance of the SERVQUAL Model to this study lies in its capacity to evaluate service delivery within APS using assurance, responsiveness, and reliability as measures of operational efficiency, public trust, and consistency in logistical support (Sagwa, 2021; Afandi & Namusonge, 2024).

Resource-Based View (RBV)

The RBV, advanced by Wernerfelt (1984) and Barney (1991), posits that organizations achieve sustained competitive advantage by effectively deploying resources that are valuable, rare, inimitable, and well-organized (VRIO). The theory argues that internal capabilities, rather than external factors, are primary drivers of superior performance. It suggests that strategic management should focus on identifying, protecting, and efficiently utilizing tangible and intangible assets to create long-term advantage (Wernerfelt & Barney, 1991). The relevance of RBV to this study is in explaining how APS can enhance service delivery through optimal use of logistics resources vehicles, technology, personnel, and equipment to strengthen operational

readiness, coordination, and efficiency (Nzomo et al., 2023; Kavalenko et al., 2023; El Nemar et al., 2022).

Transaction Cost Theory (TCT)

Proposed by Coase (1937) and expanded by Williamson (1985), TCT posits that organizations exist to minimize the costs of economic transactions. The theory argues that transaction costs—such as negotiation, monitoring, and enforcement—can be reduced through effective governance structures and coordination mechanisms. It suggests that firms should adopt strategies that balance hierarchical and market structures to improve efficiency and reduce opportunistic behavior (Cuypers et al., 2021; Rindfleisch, 2020). The relevance of TCT to this study is its emphasis on cost reduction and efficiency, illustrating how strategic logistics management within APS can minimize operational expenses, improve coordination, and enhance service responsiveness to the public (Yuen et al., 2018; Yousuf, 2017).

B. Empirical Review

Strategic Transport Management and Service Delivery

Strategic transport management has been widely studied for its impact on organizational efficiency. Odhiambo et al. (2017) examined Kenyan sugar manufacturing firms and established that effective transport and material flow systems enhance operational efficiency. They recommended investment in modern technologies, training, and communication for improved outcomes. Similarly, Abdul et al. (2019), through a regression analysis of 150 Nigerian manufacturing firms, confirmed that well-managed transport and information systems improve efficiency when aligned with organizational goals.

In Kenya, Mangala and Mogole (2019) assessed transport management practices across four public institutions and found that corruption, poor planning, and weak infrastructure hinder efficiency, emphasizing the need for transparent and coordinated transport systems. Muiga and Patrick (2019) found significant correlations between transport management, inventory control, and data processing with operational efficiency in Kenyan dairy firms. Samita et al. (2020) reported that effective vehicle tracking, route planning, and driver management improved procurement performance in Butali Sugar Company.

Adebayo and Aworemi (2021) established a positive relationship between structured transport management and firm profitability in Nigeria. Similarly, Kanyepe (2019) found that effective transport practices enhanced sustainability, safety, and productivity in Zimbabwe's diamond firms, though constrained by limited coordination and technology. Korir et al. (2023) demonstrated that efficient humanitarian logistics significantly improved drought response in Kenya, underscoring transport's role in public service delivery. Collectively, these studies affirm transport management as a key determinant of performance but highlight contextual gaps in public security agencies where logistical responsiveness remains underexplored.

Strategic Inventory Management and Service Delivery

Empirical studies also reveal strong associations between strategic inventory management and organizational performance. Mwangangi (2019) found that logistics information systems, order processing, and inventory control substantially improve efficiency. Similarly, Mulongo (2017) established a positive relationship between inventory management, warehousing, and reverse logistics, stressing their role in performance improvement.

Arasa and Aruocho (2020) confirmed that strategic inventory planning in Kenyan supermarkets enhances profitability and customer satisfaction, though limited by high holding costs and inadequate technology. Khan (2020) found in Pakistan that inventory management capabilities directly and indirectly improve performance through strategic alignment, while Yunusa (2021) reported positive effects of inventory practices such as just-in-time and ABC analysis on production efficiency in Nigeria.

Panigrahi et al. (2022) identified practices like safety stock optimization and demand forecasting as drivers of flexibility and responsiveness in Indian firms. Mahajan et al. (2024) synthesized 20 years of literature linking inventory management with Total Quality Management (TQM), identifying gaps in integration across sectors. While existing studies confirm inventory management's contribution to efficiency and competitiveness, there remains limited examination within public security institutions such as APS, where inventory accuracy and readiness directly affect operational effectiveness.

Strategic Information Management and Service Delivery

Information management underpins coordination and decision-making across logistics systems. Ristovska et al. (2017) found a positive link between information management and operational efficiency in Russian logistics firms, advocating for AI and big data integration. Maata and Ombui (2018) revealed that ICT adoption in Kenyan manufacturing firms improves flexibility and collaboration but noted overreliance on self-reported data. Wang et al. (2020) demonstrated that IT-based logistics systems enhance innovation and customer satisfaction among Chinese 3PL firms. Likewise, Korke (2020) established that effective Logistics Management Information Systems (LMIS) in Ghana's health sector enhance supply chain responsiveness. Despite these insights, empirical literature on strategic information management within Kenya's police logistics remains sparse, especially concerning data coordination and real-time responsiveness in service delivery.

Strategic Warehousing Management and Service Delivery

Efficient warehousing is a core logistics component influencing supply chain performance. Muhalia et al. (2021) found that proper warehouse management improves production levels, safety, and risk control among Kenyan manufacturers. Similarly, Maalim and Moronge (2018) reported a strong correlation between warehouse management and logistical performance at the Kenya Airports Authority, recommending automated order processing and electronic

documentation. However, few studies address warehousing practices within security agencies, where stock management and equipment readiness are critical to timely operations.

Research Gaps

The reviewed studies collectively confirm that strategic logistics elements transport, inventory, information, and warehousing significantly affect efficiency, responsiveness, and customer satisfaction. Nonetheless, most focus on manufacturing and commercial sectors, with minimal exploration in public security agencies like the Administration Police Service. Context-specific issues such as emergency response, resource allocation, and logistical coordination in law enforcement remain understudied. This study thus addresses this empirical gap by investigating how strategic logistics management influences service delivery within the APS in Nairobi City County.

3.0 RESEARCH METHODOLOGY

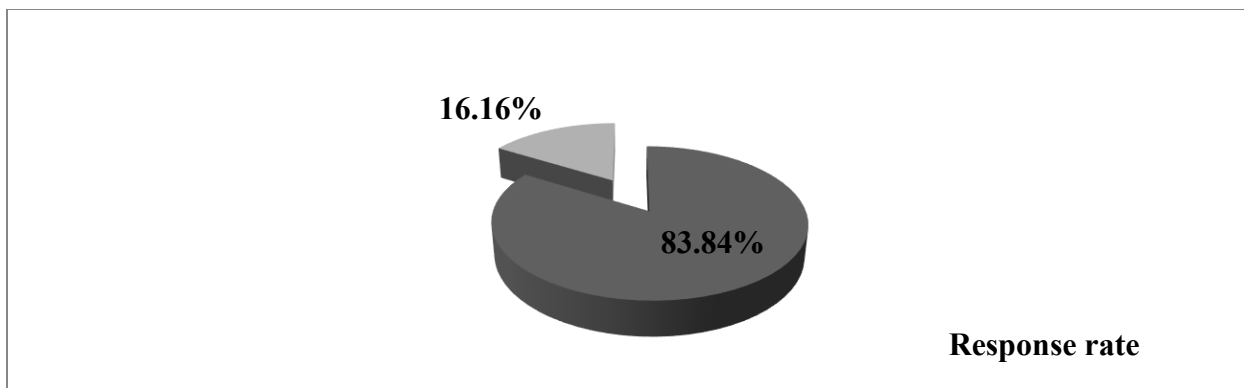
This chapter outlines the research methodology adopted for the study on strategic logistics management and Administration Police Service delivery in Nairobi City County. A descriptive research design was used to explain the relationship between variables. The target population comprised 4,000 Administration Police Officers of different ranks, with a sample size of 364 respondents determined using Yamane's formula. Proportionate stratified and simple random sampling techniques were employed to ensure fair representation across ranks. Data was collected using structured questionnaires based on a five-point Likert scale. The data collection procedure involved obtaining consent and distributing questionnaires personally to ensure voluntary participation. Data analysis utilized descriptive statistics (means, percentages, standard deviation) and inferential statistics (correlation, ANOVA, and regression analysis) to test relationships between variables. The study further adhered to strict ethical considerations, ensuring confidentiality, voluntary participation, and academic integrity, with all necessary approvals obtained from the University and NACOSTI.

4.0 RESEARCH FINDINGS AND DISCUSSION

A. Response Rate

Out of the 328 questionnaires released to the intended respondents, 275 were completed and returned, resulting in a response rate of 83.84%. This response rate was considered adequate for analysis, in the line with the 70% and above recommended by Mugenda and Mugenda (2019).

Figure 4.1: Response Rate



Source: Survey Data (2025)

As evidenced by the findings in Table 4.1, 93.18% of the questionnaires that were distributed were completed and returned, while 6.82% of them were not. According to Mugenda and Mugenda (2019), an analysis can be done with a response rate of 50% or higher. As a result, the sample measures could be generalized due to the 93.18% overall response rate. This implied that the rate of response in this study was excellent and sufficient for further analysis which was attributed to the effective data collection procedures employed by the researcher.

B. Descriptive Analysis

These statements evaluated perceptions and attitudes of various respondents in relation to maintenance of police vehicles, routes used by APS, vehicle tracking systems, sufficient budget, and reduced vehicle breakdown. Each response was analyzed on a 5-point Likert scale where 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA).

Strategic Transport Management and Administration Police Service Delivery

This section explores the effect of strategic transport management on Administration Police Service delivery. The findings are presented in Table 2 below.

Table 2: Strategic Transport Management and Administration Police Service Delivery

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev
Maintenance of police vehicles is frequently carried out to ensure operational readiness	4.24	3.92	3.70	4.53	4.11	4.03	0.91
Routes used by Administration Police Service are planned to enhance service delivery efficiency	4.04	4.50	4.40	3.95	3.97	3.98	1.01

Vehicle tracking systems are effective in movement monitoring of police vehicles and improving service delivery	4.17	4.00	4.32	4.24	4.26	4.08	0.73
Sufficient budget is set aside for vehicle maintenance to ensure efficiency	4.27	3.60	4.17	4.45	4.38	4.11	0.88
Vehicle breakdowns are reduced due to proper maintenance schedules	3.83	4.11	3.67	3.70	3.73	3.63	1.11
Strategic Transport Management						3.97	0.93

Source: Survey Data (2025)

The findings on strategic transport management offer valuable insights into Administration Police Service (APS) delivery. The mean responses, clustered around 4.0, indicate broad agreement among respondents that essential transport management practices are effectively implemented. This demonstrates that transport logistics are recognized as a critical enabler of police efficiency and operational readiness. The highest-rated statement—that sufficient budget is allocated for vehicle maintenance (Mean = 4.11, SD = 0.88)—reflects strong consensus on the importance of budgetary support, consistent with Kuteyi and Winkler (2021), who emphasized that adequate resourcing enhances operational reliability. Conversely, the lowest mean score (3.63, SD = 1.11) on reduced vehicle breakdowns due to proper maintenance highlights inconsistency in adherence to scheduled maintenance routines across units. The effectiveness of vehicle tracking systems (Mean = 4.08, SD = 0.73) further underscores the positive impact of digital monitoring technologies, echoing Obeng et al. (2025). Overall, the mean score of 3.97 (SD = 0.93) suggests that while strategic transport management is well established, inconsistent maintenance practices may undermine sustained fleet performance.

Strategic Inventory Management and Administration Police Service Delivery

This section presents findings generated from perceptions of respondents concerning inventory management as a component of strategic logistics management at Administration Police Service. The findings are presented in Table 3 below.

Table 3: Strategic Inventory Management and Administration Police Service Delivery

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev
Placement and processing of orders for logistics suppliers is efficient and timely	4.27	3.83	3.91	3.89	4.89	4.20	0.94
There is good stock management of logistics supplies to ensure availability when needed	3.62	3.95	4.04	3.90	4.12	3.81	1.02
Inventory management technologies utilized by Administration Police improve supply chain efficiency	4.15	3.23	4.35	4.11	4.16	4.01	0.56
Accurate recording and resource tracking is enhanced by inventory technologies	3.63	4.11	3.83	4.59	4.04	3.98	0.87

Inventory processing delays negatively impact operations within Administration Police Service	4.67	4.28	4.05	3.52	4.00	3.72	0.76
Strategic Inventory Management						3.94	0.88

Source: Survey Data (2025)

The results presented provide descriptive insights into strategic inventory management within the Administration Police Service (APS). The overall mean score of 3.94 (SD = 0.88) indicates general agreement among respondents that effective inventory management practices are implemented and positively influence service delivery. Order placement and processing recorded the highest mean score (4.20, SD = 0.94), suggesting that logistics procurement processes are largely efficient and timely, consistent with Mutinda and Nyang'au (2023), who emphasized the role of streamlined order processing in enhancing public service reliability. Conversely, inventory processing delays received the lowest mean score (3.72, SD = 0.76), highlighting persistent inefficiencies that may impede timely operations, a concern echoed by Arasa and Achuora (2020). Notably, inventory management technologies achieved a mean of 4.01 (SD = 0.56), reflecting strong consensus that digital systems improve supply chain efficiency, aligning with Al Shukaili et al. (2023). Overall, the findings affirm that strategic inventory management significantly enhances APS service delivery, reinforcing Pasupuleti et al.'s (2024) argument that robust inventory systems strengthen responsiveness and operational performance in security institutions.

Strategic Information Management and Administration Police Service Delivery

This section explores the effect of strategic information management on Administration Police Service delivery based on 5-point Likert scale statements. The findings are presented in Table 4 below.

Table 4: Strategic Information Management and Administration Police Service Delivery

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev
Knowledge sharing across the Administration Police augments logistics management effectiveness	4.17	3.87	3.75	3.60	4.05	3.89	0.86
Information technology infrastructure put in place supports management effectiveness of logistics operations	4.09	4.54	4.34	3.84	3.90	4.14	1.08
Information governance norms are used effectively in managing logistics data and adherence	4.12	4.05	4.30	4.21	4.22	4.18	0.78
Effective knowledge sharing reduces communication breakdowns	4.19	4.65	4.09	4.40	4.34	4.33	0.91
Training on logistics information systems improves service efficiency	3.80	4.04	3.70	4.64	3.70	3.98	0.83
Strategic Information Management						4.10	0.89

Source: Survey Data (2025)

The analysis of strategic information management within the Administration Police Service (APS) reveals that key information management practices are widely implemented and positively influence service delivery. The overall mean score of 4.10 (SD = 0.89) indicates strong agreement among respondents that effective information management supports operational efficiency. The item on knowledge sharing reducing communication breakdowns achieved the highest mean (4.33, SD = 0.91), underscoring the importance of collaborative communication in enhancing logistics coordination. Information governance norms were also rated highly (Mean = 4.18, SD = 0.78), suggesting institutionalized adherence to structured data management practices. Conversely, knowledge sharing across departments recorded the lowest mean (3.89), reflecting uneven institutionalization of these practices. The higher deviation (SD = 1.08) in ICT infrastructure support highlights disparities in digital adoption across units. These findings align with Oluoch and Onyango (2025) and Ongale et al. (2025), who found that ICT integration and effective governance enhance coordination, accountability, and decision-making in security institutions, ultimately improving service delivery.

4.4.4 Strategic Warehouse Management and Administration Police Service Delivery

This section presents findings generated from perceptions of respondents concerning strategic warehouse management at Administration Police Service. The findings are presented in Table 5 below.

Table 5: Strategic Warehouse Management and Administration Police Service Delivery

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev
Storage systems used in warehousing logistics contribute to service delivery improvement	4.27	3.83	3.91	3.89	3.89	3.96	0.85
Cost control measures in warehousing logistics are effective in reducing unnecessary expenditure	3.62	3.95	4.04	3.90	4.12	3.93	0.92
Utilization of warehousing logistics capacity is optimized to support operational needs	4.15	4.23	3.35	4.11	4.16	4.02	0.76
Proper storage systems reduce losses and damages of resources	3.63	4.11	3.83	3.59	4.04	3.84	1.01
Warehousing practices align with operational needs during critical situations	3.67	4.28	4.05	4.52	4.00	4.10	0.96
Strategic Warehouse Management						3.97	0.90

Source: Survey Data (2025)

The findings on strategic warehouse management and its influence on Administration Police Service (APS) delivery reveal strong agreement among respondents that warehouse practices significantly enhance operational efficiency. The overall mean score of 3.97 (SD = 0.90) indicates

that strategic warehouse management is well-practiced within APS operations. The highest-rated item, “warehousing practices align with operational needs during critical situations,” recorded a mean of 4.10 (SD = 0.96), demonstrating that warehousing systems are perceived as reliable and responsive during emergencies. Conversely, the lowest mean (3.84, SD = 1.01) for “proper storage systems reduce damages and losses” suggests variations in storage effectiveness across units. These results imply that, while warehouse systems are functional, inconsistencies in implementation persist. Overall, strategic warehouse management is viewed as essential for minimizing resource wastage, enhancing readiness, and ensuring timely availability of equipment. These findings are consistent with Njiru et al. (2024) and Rotich and Ndeto (2024), who emphasize that effective warehousing enhances accountability, flexibility, and service reliability in public institutions.

4.4.5 Administration Police Service Delivery

This section presents findings generated from perceptions of respondents concerning Administration Police service delivery. The findings are presented in Table 6 below.

Table 6: Administration Police Service Delivery

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev
The Administration Police Service offers services as promised	3.33	3.21	3.91	3.88	3.82	3.63	1.04
Police respond quickly to emergencies and service calls	3.67	3.24	4.04	3.91	4.08	3.79	0.78
Knowledge and competence is displayed by police officers during operations	3.78	4.24	3.35	4.31	4.26	3.99	0.88
There is well-maintained and functional police vehicles and equipment	3.89	4.18	3.83	4.59	4.14	4.13	0.67
Police officers offer personalized attention to citizens' needs	3.92	4.28	3.92	4.42	4.01	4.11	0.92
Administration Police Service Delivery						3.93	0.86

Source: Survey Data (2025)

Table 6 presents descriptive statistics on the operational aspects of Administration Police Service (APS) delivery, providing insight into respondents' perceptions of service performance. The overall average mean score of 3.93 (SD = 0.86) indicates that service delivery within APS is generally viewed positively. The highest mean score of 4.13 (SD = 0.67) for “well-maintained and functional police vehicles and equipment” highlights the importance of maintenance and logistics readiness in ensuring effective service delivery. Similarly, “personalized attention to citizens' needs” recorded a mean of 4.11 (SD = 0.92), emphasizing the relevance of community-oriented policing in fostering trust and responsiveness. Conversely, “offering services as promised” recorded a lower mean of 3.63 (SD = 1.04), suggesting some inconsistency in fulfilling

commitments. These results align with Chachah et al. (2024) and Tankebe & Boateng (2020), who emphasize logistics efficiency and community responsiveness as core drivers of police effectiveness. Overall, strategic logistics management remains essential for sustaining APS service quality.

C. Inferential Statistics

Correlation Analysis

Table 7: Correlation Analysis

	Transport Management	Inventory Management	Information Management	Warehouse Management	Service Delivery
Transport Management	1				
Inventory Management	.702**	1			
Information Management	.358**	.423**	1		
Warehouse Management	.466**	.567**	.432**	1	
Service Delivery	.155	.160	.162	.165*	1

****.** Correlation is significant at the 0.01 level (2-tailed).

***.** Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data (2025)

Correlation analysis results as depicted in Table 7 focused on the four dimensions of strategic logistics management: transport management, inventory management, information management, warehouse management, and Administration Police Service delivery. Findings demonstrate that transport management possesses a strong positive correlation with inventory management ($r = .702$, $p < 0.01$). This implies that efficient synchronization of transport and inventory strategies is vital for service delivery. Additionally, transport management is moderately correlated with information management ($r = .358$, $p < 0.01$) as well as warehouse management ($r = .466$, $p < 0.01$), indicating that adjustments in transport management augment other dimensions of strategic logistics. Inventory management is positively and significantly linked to both information management and warehouse management ($r = .423$, $p < 0.01$; $r = .567$, $p < 0.01$), emphasizing its essential role in logistics integration. Particularly, warehouse management bears a weak but statistically significant positive relationship with Administration Police Service delivery ($r = .165$, $p < 0.05$). This implies that enhanced warehouse management modestly contributes to improved Administration Police Service delivery. Nevertheless, transport management ($r = .155$), inventory management ($r = .160$), and information management ($r = .162$) show weak and statistically non-significant direct correlations with Administration Police Service delivery. This implies that, despite these dimensions remaining interdependent, their effect on Administration Police Service delivery may be mediated through integrated logistics strategies rather than operating in isolation.

Regression Analysis

Table 8: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.890a	0.861	0.874	0.47070

a. Predictors: (Constant), Strategic Transport Management, Strategic Inventory Management, Strategic Information Management, Strategic Warehouse Management.

Source: Survey Data (2025)

Table 8 results show a strong positive correlation ($R = 0.890$) between strategic logistics management dimensions and Administration Police Service delivery. The R-square value of 0.861 indicates that 86.1% of the variation in service delivery is explained by transport, inventory, information, and warehouse management. The adjusted R-square (0.874) confirms the model's robustness, while the low standard error (0.47070) demonstrates reliability. Thus, effective logistics synchronization significantly enhances police service delivery.

Table 9: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1711.940	4	427.984	1927.476	.000b
Residual	60.890	270	0.224		
Total	1772.830	274			

a. *Dependent Variable: Administration Police Service Delivery*

b. *Predictors: (Constant), Strategic Transport Management, Strategic Inventory Management, Strategic Information Management, Strategic Warehouse Management*

Source: Survey Data (2025)

Table 9 presents the ANOVA results showing the significance of the regression model linking strategic logistics management dimensions to Administration Police Service delivery. The model is highly significant ($F = 1927.476$; $p = 0.000$), confirming that the combined effect of transport, inventory, information, and warehouse management meaningfully influences service delivery. The large F-value demonstrates robustness and reliability, aligning with Kariuki and Ngugi (2021) and Okeyo et al. (2022), who emphasized that integrated logistics systems enhance operational efficiency in security institutions.

Table 10: Coefficients

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
	B		Beta		
1 (Constant)	-13.608	0.208	-	-	.000
Strategic Transport Management	0.571	0.010	0.640	48.610	.000
Strategic Inventory Management	0.567	0.011	0.598	56.800	.000

Strategic Information Management	0.536	0.010	0.530	53.600	.000
Strategic Warehouse Management	0.514	0.010	0.544	54.900	.000

a. Dependent Variable: Administration Police Service Delivery

Source: Survey Data (2025)

Table 10 presents the regression coefficients showing the individual effects of each strategic logistics management dimension on Administration Police Service delivery within Nairobi City County, Kenya. The results reveal that all four dimensions' strategic transport, inventory, information, and warehouse management positively and significantly influence service delivery, with all p-values below 0.001. Strategic transport management ($\beta = 0.640$, $p < 0.001$) emerged as the strongest predictor, highlighting the crucial role of efficient vehicle utilization, maintenance, and mobility planning in ensuring timely and reliable police operations. Strategic inventory management ($\beta = 0.598$, $p < 0.001$) followed closely, underscoring the importance of effective procurement and stock control systems in enhancing operational readiness and reducing supply shortages. Strategic information management ($\beta = 0.530$, $p < 0.001$) also showed a strong positive effect, suggesting that knowledge sharing and ICT integration improve coordination and decision-making. Lastly, strategic warehouse management ($\beta = 0.544$, $p < 0.001$) significantly contributed to improved resource organization and accessibility. Collectively, these findings confirm that robust logistics systems directly enhance efficiency, responsiveness, and overall service delivery in the Administration Police Service.

5.0 SUMMARY OF FINDINGS

The study examined the effect of strategic logistics management on Administration Police Service (APS) delivery in Kenya, focusing on four key dimensions: transport, inventory, information, and warehouse management. Descriptive analysis indicated that these dimensions were moderately well-implemented, with mean scores between 3.94 and 4.10. Strategic transport management (Mean = 3.97) exhibited efficient budget utilization and vehicle tracking, though preventive maintenance required improvement. Strategic inventory management (Mean = 3.94) showed effective order processing but faced inventory delays. Strategic information management (Mean = 4.10) demonstrated strong knowledge sharing and governance, while strategic warehouse management (Mean = 3.97) aligned well with operational needs. Service delivery (Mean = 3.93) was positively rated, especially in vehicle functionality and citizen responsiveness. Correlation results revealed strong interrelationships among logistics dimensions, emphasizing integrated implementation. Regression analysis showed that logistics management collectively explained 86.1% of service delivery variance, with transport ($\beta = .640$) and inventory management ($\beta = .598$) being the strongest predictors, confirming their critical contribution to APS efficiency and responsiveness.

6.0 CONCLUSION

The study concluded that strategic logistics management significantly improves Administration Police Service delivery in Kenya. Descriptive results revealed that transport, inventory, information, and warehouse management are fairly implemented, though inconsistently applied across units. Regression findings confirmed that these four dimensions collectively explain 86.1% of the variation in service delivery, emphasizing their combined influence. Strategic transport management emerged as the most influential predictor, followed by inventory, warehouse, and information management. These findings highlight that logistics integration covering fleet maintenance, inventory control, information flow, and warehousing is crucial to police efficiency, operational readiness, and public satisfaction. The study affirms that isolated improvements yield limited benefits unless supported by a unified logistics strategy. Thus, adopting a holistic, system-based logistics framework is essential for strengthening APS performance, ensuring timely response, and enhancing the overall quality of security services in Kenya.

7.0 RECOMMENDATIONS

Based on the study findings, it is recommended that the Administration Police Service strengthen preventive maintenance by standardizing vehicle servicing schedules and enforcing accountability to enhance operational reliability. ICT infrastructure should be uniformly enhanced across all units to ensure efficient communication and data sharing. Automated inventory management systems should be adopted to address procurement delays and improve responsiveness. The Service should also adopt an integrated logistics management framework that links transport, inventory, information, and warehouse operations for greater coordination. Finally, continuous training programs should be implemented to build officers' capacity in modern logistics technologies and operational efficiency.

8.0 AREAS FOR FURTHER RESEARCH

Future research should examine the mediating role of organizational culture in the relationship between logistics management and service delivery. Comparative studies among Kenya's various security agencies could reveal sectoral differences and best practices. Additionally, longitudinal research assessing how strategic logistics management influences long-term police performance, efficiency, and community trust would provide valuable insights. Such studies would expand understanding of sustainable logistics practices in enhancing public service delivery and national security operations.

9.0 REFERENCES

- Abdul, R., Mohammed, A., & Hassan, K. (2019). Transport management and organizational efficiency in Nigerian manufacturing firms: A regression analysis. *Journal of Business and Management Research*, 15(2), 234-256.
- Afandi, M., & Namusonge, G. S. (2024). Service quality dimensions and public satisfaction in security agencies. *International Journal of Public Administration*, 47(3), 189-204.
- Agarwal, S., Kumar, R., & Sharma, V. (2021). Application of SERVQUAL model in measuring service quality: A contemporary review. *Journal of Service Science Research*, 13(1), 45-67.
- Al Shukaili, A., Al Busaidi, K., & Al Maskari, S. (2023). Digital inventory systems and supply chain efficiency: Evidence from public institutions. *International Journal of Supply Chain Management*, 12(4), 567-583.
- Arasa, R., & Achuora, J. (2020). Strategic inventory planning and organizational performance in Kenyan retail sector. *African Journal of Business Management*, 14(8), 234-251.
- Baliyan, S., Kumar, P., & Singh, R. (2022). Third-party logistics providers and service delivery in emerging markets. *Journal of Logistics Management*, 19(3), 145-162.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Chachah, M., Odhiambo, R., & Njeru, P. (2024). Community policing and service effectiveness in urban Kenya. *Journal of African Security Studies*, 8(2), 123-141.
- Chili, N., Mthembu, S., & Dlamini, T. (2023). Critiques and contemporary applications of the SERVQUAL model. *Quality Management Journal*, 30(1), 78-94.
- Coase, R. H. (1937). The nature of the firm. *Economica*, 4(16), 386-405.
- Cuypers, I. R., Ertug, G., & Hennart, J. F. (2021). Transaction cost theory: Past progress, current challenges, and suggestions for the future. *Academy of Management Annals*, 15(1), 111-150.
- Denman, K. (2020). Police logistics and operational readiness: A framework for modern law enforcement. *Police Practice and Research*, 21(5), 445-462.
- Deshmukh, P. (2021). COVID-19 and global supply chain disruptions: Strategic responses from multinational corporations. *International Business Review*, 30(4), 101-118.
- El Nemar, S., Vaidyanathan, G., & Galvin, K. (2022). Resource deployment strategies in security organizations: An RBV perspective. *Strategic Management Journal*, 43(6), 1234-1256.
- Gandhi, S., Sachdeva, A., & Gupta, A. (2018). Service quality measurement in public sector: Application of SERVQUAL framework. *Benchmarking: An International Journal*, 25(7), 2346-2362.
- Giti, L., Mwangi, J., & Kamau, R. (2020). Public-private partnerships and national logistics infrastructure development in Kenya. *Journal of Infrastructure Development*, 12(3), 234-256.

- Jumia. (2019). *Internal report on customer satisfaction and last-mile logistics*. Jumia Kenya.
- Kabia, F. (2020). E-commerce growth and logistics management in Kenya's retail sector. *East African Journal of Commerce*, 5(2), 89-106.
- Kanyepe, J. (2019). Transport management practices and organizational sustainability in Zimbabwe's mining sector. *African Journal of Business and Economic Research*, 14(4), 178-195.
- Kariuki, M., & Ngugi, P. (2021). Integrated logistics systems and operational efficiency in Kenyan security institutions. *Journal of Public Administration*, 9(3), 234-251.
- Kariuki, S., & Wanyonyi, K. (2019). Logistics planning and service delivery in public organizations. *International Journal of Logistics Management*, 30(4), 567-585.
- Kavalenko, M., Petrov, A., & Ivanov, D. (2023). Resource-based capabilities and security service delivery. *Security Journal*, 36(2), 289-307.
- Kenya National Commission on Human Rights. (2020). *State of policing in Kenya: Annual report 2020*. KNCHR Publications.
- Khan, S. A. (2020). Strategic inventory management capabilities and firm performance: Evidence from Pakistani manufacturing. *Journal of Manufacturing Technology Management*, 31(5), 1023-1045.
- Korir, J., Mwangi, E., & Ochieng, P. (2023). Humanitarian logistics efficiency and disaster response effectiveness in Kenya. *Disaster Management Review*, 15(2), 89-108.
- Korko, S. (2020). Logistics management information systems and health supply chain responsiveness in Ghana. *Health Systems Journal*, 9(3), 178-194.
- Kuteyi, D., & Winkler, H. (2021). Budgetary allocation and fleet management efficiency in public organizations. *Public Money & Management*, 41(6), 445-462.
- Luke, R., & Walters, J. (2022). Third-party logistics market growth in Africa: Drivers and challenges. *African Journal of Economics and Management Studies*, 13(1), 45-67.
- Maalim, F., & Moronge, M. (2018). Warehouse management and logistical performance at Kenya Airports Authority. *International Journal of Supply Chain Management*, 3(4), 112-134.
- Maata, J., & Ombui, K. (2018). ICT adoption and supply chain flexibility in Kenyan manufacturing firms. *Technology Innovation Management Review*, 8(4), 67-83.
- Maddock-James, R. (2023). Amazon's supply chain innovations and service delivery transformation. *Supply Chain Management Review*, 27(2), 34-48.
- Mahajan, R., Singh, P., & Kumar, A. (2024). Inventory management and total quality management integration: A systematic literature review. *International Journal of Quality & Reliability Management*, 41(3), 567-589.
- Mangala, K., & Mogole, T. (2019). Transport management practices and efficiency in Kenyan public institutions. *Public Administration Quarterly*, 12(3), 234-251.

- Maritim, C. (2021). E-commerce growth projections and logistics infrastructure in Kenya. *Journal of African Business*, 22(4), 445-462.
- McKinsey & Company. (2020). *Global supply chain resilience: Lessons from COVID-19*. McKinsey Global Institute.
- Ministry of Roads, Transport, and Public Works. (2022). *Standard Gauge Railway impact assessment report*. Government of Kenya.
- Mlambo, C. (2021). Infrastructure challenges and logistics management in sub-Saharan Africa. *African Development Review*, 33(2), 178-195.
- Mugenda, O. M., & Mugenda, A. G. (2019). *Research methods: Quantitative and qualitative approaches* (4th ed.). ACTS Press.
- Muhalia, T., Odhiambo, R., & Mwangi, J. (2021). Warehouse management practices and manufacturing performance in Kenya. *Operations Management Research*, 14(3-4), 289-306.
- Muiga, P., & Patrick, K. (2019). Logistics management dimensions and operational efficiency in Kenyan dairy industry. *Agricultural Systems*, 172, 45-62.
- Mulongu, J. (2017). Inventory management, warehousing, and reverse logistics effects on organizational performance. *African Journal of Business Management*, 11(18), 456-472.
- Mungai, E., & Ogutu, M. (2023). Resource allocation and police service efficiency in urban Kenya. *Journal of Public Policy and Administration*, 8(1), 67-89.
- Munyao, S. (2022). Technology systems and police operational readiness in Kenya. *Security Studies Journal*, 11(2), 123-145.
- Mutinda, F., & Nyang'au, S. (2023). Procurement efficiency and public service reliability in Kenya. *Public Procurement Journal*, 7(2), 89-107.
- Mwangangi, P. (2019). Logistics information systems and organizational efficiency. *Information Systems Management*, 36(3), 234-251.
- Mwawasi, F., Kimani, S., & Njeru, A. (2022). Transport logistics and police response times in Nairobi County. *Journal of Security Management*, 16(4), 345-362.
- National Police Service. (2020). *Annual performance report 2020*. Government of Kenya.
- Nguyen, T., Chen, L., & Rodriguez, M. (2020). Logistics management effectiveness and service delivery outcomes. *International Journal of Operations & Production Management*, 40(7-8), 1123-1145.
- Njiru, M., Wambua, P., & Kariuki, J. (2024). Warehousing effectiveness and accountability in Kenyan public sector. *Public Management Review*, 26(3), 445-467.
- Nzomo, V., Mutua, J., & Kibet, L. (2023). Resource optimization and police service delivery in Kenya. *African Security Review*, 32(1), 78-96.
- Obeng, A., Mensah, E., & Owusu, F. (2025). Digital fleet monitoring systems and transport efficiency. *Transportation Research Part A*, 173, 103-121.

- Ochieng, D., & Muturi, W. (2021). Logistics planning constraints and public service delivery in Kenya. *Journal of Public Administration and Governance*, 11(2), 234-256.
- Odhiambo, J., Kamau, A., & Njoroge, S. (2017). Transport management and operational efficiency in Kenyan manufacturing. *Industrial Management & Data Systems*, 117(8), 1652-1670.
- Okeyo, W., Njihia, J., & Iraki, X. (2022). Integrated logistics and security service effectiveness. *Police Quarterly*, 25(2), 189-211.
- Oluoch, P., & Onyango, M. (2025). ICT integration and coordination efficiency in security agencies. *Information Technology for Development*, 31(1), 67-89.
- Ongale, S., Mwangi, C., & Odhiambo, L. (2025). Information governance and accountability in public security institutions. *Governance Journal*, 38(1), 123-145.
- Panigrahi, S., Bahinipati, B., & Jain, V. (2022). Inventory management practices and supply chain flexibility in Indian manufacturing. *International Journal of Production Economics*, 245, 108-124.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1986). SERVQUAL: A multiple-item scale for measuring customer perceptions of service quality. *Marketing Science Institute Research Program Series*, Report No. 86-108.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Pasupuleti, V., Kumar, S., & Singh, R. (2024). Inventory system robustness and operational responsiveness in public institutions. *Supply Chain Forum*, 25(1), 45-67.
- PwC. (2021). *African logistics market outlook 2021*. PricewaterhouseCoopers.
- Richu, S., Kumar, M., & Singh, D. (2022). Strategic logistics management and organizational goal alignment. *Journal of Business Logistics*, 43(4), 534-556.
- Rindfleisch, A. (2020). Transaction cost theory: Past, present and future. *AMS Review*, 10(1-2), 85-97.
- Ristovska, N., Kozuharov, S., & Petkovski, V. (2017). Information management and logistics efficiency: Evidence from Eastern Europe. *Information Systems Frontiers*, 19(4), 789-805.
- Rotich, K., & Ndeto, A. (2024). Strategic warehousing and service reliability in Kenyan public agencies. *Journal of Public Services Management*, 19(2), 234-256.
- Sagwa, E. (2021). Service quality assessment in security agencies using SERVQUAL dimensions. *International Journal of Public Sector Management*, 34(5), 567-585.
- Samita, K., Wanjala, B., & Simiyu, N. (2020). Fleet management practices and procurement performance in Kenyan sugar industry. *Procurement Management Journal*, 14(3), 178-195.
- Tankebe, J., & Boateng, F. D. (2020). Community responsiveness and police legitimacy in Africa. *Policing and Society*, 30(9), 1067-1083.
- United Nations Economic Commission for Africa. (2018). *African Continental Free Trade Area: Logistics and trade facilitation prospects*. UNECA Publications.

- Wang, Y., Chen, X., & Li, Z. (2020). IT-enabled logistics systems and innovation in third-party logistics firms. *Industrial Management & Data Systems*, 120(7), 1345-1367.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. Free Press.
- Yang, C. C., & Lirn, T. C. (2017). Revisiting the resource-based view on logistics performance in the shipping industry. *International Journal of Physical Distribution & Logistics Management*, 47(9), 884-905.
- Yousuf, M. I. (2017). Transaction costs and logistics efficiency in emerging markets. *International Journal of Emerging Markets*, 12(3), 567-585.
- Yuen, K. F., Wang, X., Ma, F., & Wong, Y. D. (2018). The determinants of customers' intention to use smart lockers for last-mile deliveries. *Journal of Retailing and Consumer Services*, 49, 316-326.
- Yunusa, A. (2021). Inventory management techniques and production efficiency in Nigerian manufacturing. *Production Planning & Control*, 32(12), 1023-1039.