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Effect of Inventory Computerization on Procurement Performance of State Service Corporations in Nairobi City County, Kenya

Njimu Ann Nyakio[1*], Dr. Akwalu Ezekiel[2], Rossina Mwikali Kovulo[3]
School of Business and Leadership Studies, St. Paul's University, Kenya
Corresponding email: ann.njimu25@gmail.com

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Abstract

This study aimed to investigate the impact of inventory computerization on the procurement performance of state service corporations in Nairobi City County, Kenya. This study adopted a descriptive research design. The target population comprised chief accountants, procurement managers, and heads of inventory departments from 93 service state corporations in Nairobi City County, Kenya. A sample of 165 respondents was selected through stratified random sampling to ensure balanced representation across the three groups. The sample included 55 chief accountants,55 procurement managers, and 55 heads of inventory departments. Data was collected using structured questionnaires. The data were coded and analyzed using SPSS v28. Data analysis entailed descriptive and inferential statistics. The descriptive statistics included means, frequencies, and standard deviations, while the inferential statistics entailed correlation and regression analysis. The findings revealed that inventory computerization was moderately adopted among service state corporations in Nairobi City County. Most respondents confirmed the use of fully computerized inventory coding systems, which improved stock identification and retrieval. Inventory coding was widely applied and considered effective in stock categorization, while RFID technology was used to track inventory location, though its application remained limited in some organizations. RFID-based automation was also recognized for enhancing inventory security. Cloud-based systems were strongly acknowledged as critical for stock monitoring. In contrast, the adoption of Electronic Data Interchange (EDI) for supplier transactions was relatively low, with many respondents expressing neutrality or disagreement. Correlation and regression analyses confirmed that inventory computerization had a positive and significant effect on procurement performance. It was concluded that inventory computerization positively influences procurement performance by enhancing stock management, accuracy, and security. However, the limited use of technologies such as EDI shows the need for wider adoption of modern systems to maximize these benefits. The study recommends that service state corporations in Nairobi City County enhance the adoption of advanced inventory computerization systems to optimize procurement performance. Beyond existing tools such as inventory coding, RFID, and cloud-based systems, organizations should expand the use of technologies like Electronic Data Interchange (EDI) to improve supplier coordination and streamline transactions. Management should also invest in continuous staff training and allocate sufficient resources to support the full implementation of computerized systems.

Keywords: *Inventory Computerization, Procurement Performance, State Service Corporations, Nairobi City County, Kenya*

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1. Introduction

Procurement performance is crucial in public corporations, as it influences the efficient and transparent delivery of essential public services, thereby ensuring value for taxpayer dollars (Changalima & Mdee, 2023). It promotes adherence to procurement principles such as openness, accountability, and fairness, which are key to safeguarding public trust and minimizing corruption (Doby et al., 2022). Effective procurement performance also demonstrates prudent utilization of public resources (Changalima et al., 2022). Moreover, strong procurement performance enables state corporations to meet service delivery requirements by aligning procurement processes with legal frameworks and policies governing public expenditure (Aulia & Isvara, 2021).

Inventory computerization involves the use of software systems and modern technologies to automate and streamline inventory control processes (Saleem, 2020). It integrates tools such as barcode scanners, RFID technology, and stock control software to enable real-time monitoring of stock volumes (Alabi & Bankole, 2021). Approaches such as cloud-based solutions and mobile applications have also been adopted to support this process (Okenagwa & Obuba, 2024). Inventory computerization enhances procurement by reducing manual errors, streamlining operations, and providing timely insights for informed purchasing decisions (Cherian et al., 2020). It directly improves procurement efficiency and promotes supply-demand alignment by increasing accuracy and reducing lead times (Ali et al., 2024).

Inventory management is important in the performance of public institutions, as it directly influences operational efficiency, market share growth, cost control, and service delivery (Sama & Mdemu, 2024). In state service corporations, procurement performance depends heavily on effective inventory systems that ensure the timely availability of quality goods and services while minimizing losses and wastage. Increasing demand for transparency and accountability in public resource utilization has placed governments and their agencies under pressure to adopt modern practices that improve procurement outcomes, with inventory computerization emerging as one such practice that leverages digital tools to automate stock monitoring, enhance accuracy, and streamline procurement processes (Adam, 2024).

Advancements in technology, such as barcode systems, RFID, cloud-based solutions, and Electronic Data Interchange (EDI), have transformed inventory management in both private and public sectors by improving visibility and strengthening supplier coordination (Holloway, 2024). For state service corporations in Nairobi City County, these technologies hold potential to address persistent procurement challenges, including inefficiencies, inflated costs, and a lack of transparency. However, despite the reforms in Kenya's procurement system, the adoption of inventory computerization remains uneven, raising concerns about its impact on procurement performance (Nyagosia & Nyile, 2025).

Procurement performance refers to the ability to acquire goods and services in line with organizational needs and stakeholder expectations. It measures how procurement activities

achieve objectives such as quality improvement and timely delivery (Panga & Mahuwi, 2020). It also evaluates the alignment of procurement plans with organizational goals, supplier relationship management, risk mitigation, and resource optimization (Changalima et al., 2023; Asa et al., 2023). Key indicators include delivery quality, procurement cycle time, contract compliance, and stakeholder satisfaction.

Procurement performance is evaluated through metrics such as delivery quality, procurement cycle time, contract compliance, and stakeholder satisfaction. Delivery quality measures the extent to which goods or services meet contractual specifications through inspections, audits, and feedback, with poor quality negatively affecting performance (Nguyen, 2021). Procurement cycle time refers to the duration from requisition to delivery, where shorter cycles enhance efficiency and responsiveness (Akturk et al., 2022). Contract compliance assesses adherence to pricing, schedules, and standards, reducing risks and strengthening supplier relationships (Annex, 2022; Adinyira et al., 2022). Stakeholder satisfaction evaluates how procurement meets the needs of internal and external parties, with higher satisfaction fostering trust, collaboration, and organizational success (Nabukenya et al., 2021).

Service state corporations are government-established entities mandated to deliver public services outside the regular civil service framework (Arockiasamy et al., 2022). Nairobi County hosts 93 such corporations, which include executive agencies, independent regulators, public universities, tertiary institutions, and research bodies (Riany, 2021). Executive agencies implement government policies and deliver essential services such as security, infrastructure, and welfare under ministerial oversight (Owalo, 2020). Independent regulatory agencies set standards, monitor compliance, and resolve disputes across various sectors while maintaining autonomy from ministries (Decker, 2023). Research institutions and higher learning institutions focus on education, research, and skills development, aligning with Kenya's Vision 2030 by producing skilled labor and fostering innovation (Obura, 2024).

Despite reforms such as the Public Procurement and Asset Disposal Act (PPADA, 2015), procurement performance in service state corporations remains weak, with persistent challenges including substandard purchases, stalled projects, delays, inflated costs, and wasteful expenditures (Giathi et al., 2021; Office of the Auditor General, 2021). High-profile cases highlight these inefficiencies, including the KEMSA scandal involving KSh 7.8 billion in 2020 (EACC, 2020), poor performance ratings for the Commission for University Education and the Council of Legal Education in 2023 (PSC, 2023), and procurement irregularities at the National Cereals and Produce Board that led to losses of KSh 68 million (Njagi et al., 2024). While existing studies have examined leadership, contract management, and sustainability in public procurement, limited research has explored the effect of inventory management practices on procurement performance. This study addresses this gap by investigating the relationship between inventory computerization and procurement performance in service state corporations in Nairobi City County.

2. Literature Review

2.1 Theoretical review

The Unified Theory of Acceptance and Use of Technology (UTAUT), developed by Venkatesh et al. (2003), explains why individuals and organizations accept and use technology. The theory identifies four constructs: performance expectancy, effort expectancy, social influence, and facilitating conditions that determine adoption. In the context of inventory management,

performance expectancy relates to how computerized systems are expected to improve stock control, reduce errors, and enhance procurement efficiency. Effort expectancy reflects the ease with which staff can operate such systems, while social influence concerns the encouragement from colleagues, managers, and external stakeholders. Facilitating conditions, on the other hand, refer to the availability of infrastructure and resources to support system implementation. Studies applying UTAUT, such as Aboelmaged (2014) on RFID adoption and Chang et al. (2007) on ERP systems, highlight the model's relevance in supply chain and inventory contexts, showing that these constructs significantly affect technology uptake.

Despite its strengths, UTAUT has attracted criticism for its complexity, as the multiple variables and moderators make it difficult to apply, especially in smaller organizations (Bagozzi, 2007). Straub (2009) also argued that it shows initial adoption more than long-term use, which limits its applicability to technologies requiring sustained engagement, such as inventory systems. Nevertheless, Williams et al. (2015) commended UTAUT for integrating earlier acceptance models, while Venkatesh et al. (2012) demonstrated its predictive strength, explaining up to 70% of the variance in adoption. For this study, UTAUT provides a useful lens to understand the adoption of inventory computerization in state service corporations in Nairobi. Performance expectancy aligns with anticipated procurement efficiency, effort expectancy ensures ease of system use, and social influence underscores the role of managerial and peer support, making UTAUT an appropriate framework to link inventory computerization with procurement performance.

2.2 Empirical review

Saleem (2020) investigated automated inventory management systems and their effect on supply chain risk management in Pakistani manufacturing firms. Using a stratified random sample of 52 participants from 26 companies, the study applied Pearson's correlation analysis and found that material requirement planning (β=0.128, p=0.048) and distribution resource planning significantly influenced supply chain risk management. The findings emphasized the benefits of computerized inventory systems in manufacturing but presented a contextual gap, as they may not apply to service corporations.

Mbugi and Lutego (2022) examined the role of inventory management practices in the performance of food and beverage manufacturing enterprises in Mwanza, Tanzania. From a target of 127 employees, 57 were randomly selected, and multiple linear regression revealed that the use of FIFO methods, perpetual inventory systems, and barcode-based computerized databases improved efficiency and reduced costs. The study confirmed a positive relationship between inventory systems and organizational performance but highlighted a contextual gap, as it focused on manufacturing rather than service corporations.

Mukoya and Achuora (2020) explored how electronic inventory management systems affect supermarket operations in Nairobi. A survey of 113 supermarkets, sampled from a population of 154, relied on structured questionnaires and regression analysis. Results showed a strong positive relationship between electronic inventory systems and supermarket performance, indicating that such technologies enhance operational efficiency. However, the study's retail context presents a gap, as the current research targets state service corporations in Nairobi.

Mawonde and Demberere (2022) studied computerized inventory control systems in Zimbabwe's mining sector, sampling 203 companies and applying SEM analysis with AMOS. Their findings revealed that computerized systems reduce stock discrepancies, improve

traceability, and enhance procurement efficiency, which together drive organizational performance. While the study confirms the value of inventory computerization, its focus on mining leaves a contextual gap, which the present study addresses by examining service state corporations.

3. Methodology

This study adopted a descriptive research design, which is appropriate for collecting detailed information on the study variables and enabling generalization of the findings to the wider population of service state corporations. The target population comprised chief accountants, procurement managers, and heads of inventory departments drawn from the 93 service state corporations in Nairobi City County, Kenya. These categories of respondents were deemed appropriate since they are directly engaged in procurement and inventory management operations, which aligned with the study focus. A sample of 165 respondents was selected using stratified random sampling to ensure adequate representation across the three cadres of interest. The sample included 55 chief accountants, 55 procurement managers, and 55 heads of inventory departments. Primary data was collected using structured questionnaires. The data was coded and analyzed using SPSS V28. Data analysis entailed descriptive and inferential statistics. The descriptive statistics included means, frequencies, and standard deviations, while the inferential statistics entailed correlation and regression analysis.

4. Results and Discussion

4.1 Response Rate

The researcher administered 165 questionnaires to the sampled respondents. Of these, 142 were properly completed and free of errors, resulting in a response rate of 86.06%. This rate was considered very good, aligning with Sammut et al. (2021), who suggest that a response rate above 50% is adequate for analysis and reporting, while a rate exceeding 70% is regarded as very good. Accordingly, the achieved response rate of 86.06% was deemed sufficient for making inferences and generalizations from the study findings. Table 1 shows the response rate.

Table 1: Response Rate

Questionnaires	Frequency	Percentage
Properly filled and reverted	142	86.06%
Not returned or had errors, or not filled	23	13.94%
Total	165	100.00%

4.2 Demographic Results of Respondents

Table 2: Demographic Results of Respondents

Variable	Category	Frequency	Percentage
Education Level	Diploma	17	11.97%
	Bachelor's Degree	67	47.18%
	Master's Degree	45	31.69%
	PhD	13	9.15%
Designation	Chief Accountant	49	34.51%
	Procurement Manager	51	35.92%
	Head of Inventory	42	29.58%
Years of Service	Less than 3 years	7	4.93%
	3–5 years	19	13.38%
	6–10 years	56	39.44%
	11–15 years	40	28.17%
	Over 15 years	20	14.08%
Total		142	100%

4.3 Descriptive Results

4.3.1 Descriptive Results for Inventory Computerization

The aim of the study was to establish the effect of inventory computerization on procurement performance of state service corporations in Nairobi City County, Kenya. In the questionnaires, respondents were to show their extent of concurrence with a series of statements related to inventory audit practices within their respective organizations. Responses were captured using a five-point Likert scale, where 1 denoted strong disagreement and 5 denoted strong agreement, with 3 representing a neutral position. The distribution of responses, along with the corresponding percentages, mean scores, and standard deviations, is presented in Table 3.

Table 3: Descriptive Results for Inventory Computerization

	SD	D	N	A	SA	Mean	SD
Our organization has a fully computerized inventory coding system	7.75%	11.27%	6.34%	35.92%	38.73%	3.87	1.26
Our organization uses an automated inventory coding system to enhance stock categorization and retrieval	2.11%	10.56%	8.45%	61.27%	17.61%	3.82	0.92
Our organization has implemented RFID technology for tracking the location of inventory.	9.86%	5.63%	9.15%	42.96%	32.39%	3.82	1.23
Our organization utilizes RFID-based automation to monitor inventory access	1.41%	9.15%	9.15%	59.15%	21.13%	3.89	0.89
Our organization employs a cloud-based inventory system for stock monitoring	2.82%	13.38%	14.08%	22.54%	47.18%	3.98	1.19
Our organization has implemented Electronic Data Interchange (EDI) to streamline inventory transactions with suppliers	16.20%	18.31%	8.45%	38.03%	19.01%	3.25	1.39
Average						3.77	1.15

From the analysis, 74.65% of the respondents confirmed that their organizations have a fully computerized inventory coding system, consistent with the recommendations of Mawonde and Demberere (2022), which stress that automated inventory coding enhances efficiency and traceability. However, 19.02% disagreed, and 6.34% were neutral. The mean score of 3.87 and a standard deviation of 1.26 indicate a generally positive inclination toward inventory coding automation, though the relatively high standard deviation shows some organizations may still rely on manual methods.

Regarding the use of an automated inventory coding system for enhanced stock categorization and retrieval, 78.88% of respondents concurred with the statement, while 12.67% disagreed, and 8.45% were neutral. The mean score of 3.82 with a standard deviation of 0.92 indicates widespread adoption of inventory coding systems, though a minority of organizations may still be transitioning from manual processes.

Additionally, 75.35% of respondents acknowledged that their organizations had implemented Radio Frequency Identification (RFID) technology for tracking inventory location, while 15.49% disagreed, and 9.15% were neutral. The mean score of 3.82 and a standard deviation of 1.23 demonstrate that RFID technology is generally in use, but some organizations may have limited access to this technology due to cost or technical challenges.

The findings also showed that 80.28% of respondents agreed that RFID-based automation is employed to monitor inventory access, in line with the observations of Alabi and Bankole (2021), who argue that RFID ensures secure access control and prevents unauthorized stock movements. However, 10.56% disagreed, and 9.15% remained neutral. A mean score of 3.89

and a standard deviation of 0.89 indicate that RFID for inventory access monitoring is a well-implemented practice among most organizations, with minimal resistance.

In terms of cloud-based inventory systems for stock monitoring, 69.72% of respondents affirmed the existence of such systems in their organizations, while 16.2% disagreed, and 14.08% remained neutral. The mean of 3.98 and a standard deviation of 1.19 reveal that cloud-based solutions are generally adopted, although some organizations may still be using traditional systems.

However, the lowest level of agreement was observed in the use of Electronic Data Interchange (EDI) to streamline inventory transactions with suppliers, where only 57.04% of respondents indicated their organizations used EDI, while 34.51% disagreed, and 8.45% were neutral. The mean of 3.25 and a standard deviation of 1.39 portray that EDI is the least adopted aspect of inventory computerization among the organizations, probably due to the complexity of EDI implementation or the need for compatible systems among suppliers.

The aggregate mean for all statements was 3.77, with a standard deviation of 1.15, indicating a generally positive perception of inventory computerization across the organizations. However, the variations in the standard deviations show that some organizations have achieved a high level of computerization, while others still rely on manual or semi-automated methods.

4.3.2 Descriptive Results for Procurement Performance

The study further sought respondents' perspectives on the procurement performance of their institutions. The perspectives were sought in a Likert scale of 1-5, where the respondents were to show their level of agreement. The results are displayed in Table 4.

Table 4: Descriptive Results for Procurement Performance

	SD	D	N	A	SA	Mean	SD
The services procured in the organization always meet the organization's requirements.	3.52%	6.34%	14.08%	47.89%	28.17%	3.91	1.0
The goods procured in the organization always align with the organizational standards	2.82%	6.34%	7.04%	46.48%	37.32%	4.09	0.97
The average time from requisition to delivery is minimal	9.15%	12.68 %	9.15%	32.39%	36.62%	3.75	1.32
All stakeholders are satisfied with the quality of products delivered through our procurement process	4.93%	16.90 %	7.04%	39.44%	31.69%	3.76	1.21
All procurement transactions are aligned with the organization's approved budget and timelines	7.04%	17.61 %	9.86%	38.03%	27.46%	3.61	1.25
Average						3.82	1.15

The analysis revealed that 76.06% of respondents agreed that the services procured in their organizations always met the organization's requirements, which aligns with the views of Watermeyer (2022), who showed that effective procurement should ensure that acquired services meet predefined specifications. However, 9.86% disagreed, while 14.08% were neutral. The mean score of 3.91 (SD = 1.00) indicates that, generally, organizations achieve service quality standards in their procurement processes, though there may be occasional gaps. This observation is in alignment with

Regarding the alignment of procured goods with organizational standards, 83.8% of respondents agreed, with 9.16% opposing this view and 7.04% being neutral. The high mean score of 4.09 (SD = 0.97) reflects a strong commitment to ensuring that procured goods meet set specifications, indicating effective quality control practices in the procurement process.

The analysis further indicated that 69.01% of the respondents affirmed that the average time from requisition to delivery is minimal in their organizations. On the other hand, 21.83% disagreed, and 9.15% remained neutral. The mean score of 3.75 (SD = 1.32) shows that while most organizations strive for prompt deliveries, there may still be delays in some cases, as indicated by the relatively high standard deviation.

On stakeholder satisfaction with the quality of products delivered through the procurement process, 71.13% of respondents agreed, 21.83% disagreed, and 7.04% were neutral. The mean score of 3.76 (SD = 1.21) implies that although most stakeholders are generally satisfied, there may be occasional dissatisfaction due to quality variations.

Finally, the study revealed that 65.49% of respondents agreed that procurement transactions in their organizations align with approved budgets and timelines, aligning with the Eskandarzadeh et al. (2023), which shows adherence to budgetary and time constraints in procurement. However, 24.65% disagreed, and 9.86% were neutral. The mean score of 3.61 (SD = 1.25) reflects moderate adherence to budgetary and time constraints in procurement processes, indicating that some organizations may occasionally experience budget overruns or delays.

With an overall average mean of 3.82 (SD = 1.15), the results outline that procurement performance among state service corporations in Nairobi City County is generally effective. However, the mean score, which is below the highest possible score of 5.00, implies that there are still areas where procurement performance can be improved. These findings emphasize the need for enhanced quality control, better delivery timelines, and more consistent adherence to budgetary and time constraints to achieve optimal procurement performance.

4.4 Correlation Analysis

This section presents the results of the correlation analysis conducted to establish the nature and strength of the relationship between computerization and procurement performance of state service corporations in Nairobi City County. The Pearson Product-Moment Correlation Coefficient (Pearson's *r*) was used to assess the degree of linear association between the independent variable, inventory computerization, and the dependent variable, procurement performance. A correlation coefficient value ranging from ±0.90 to ±1.00 indicates a very strong relationship, while values between ±0.70 and ±0.89 reflect a strong relationship. A moderate relationship is represented by coefficients between ±0.50 and ±0.69, and a weak relationship falls between ±0.30 and ±0.49. Very weak relationships are identified when the coefficient lies below 0.3.

Table 5: Correlation Analysis

		Performance	Supplier Diversification
Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Computerization	Pearson Correlation	0.775**	.461**
	Sig. (2-tailed)	0.000	0.042

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

From the findings, a stronger positive relationship was established between inventory computerization and procurement performance ($r = 0.775$, $p = 0.000 < 0.05$). This value reflects a strong and statistically significant association, indicating that organizations that have automated their inventory systems tend to achieve better procurement outcomes. These findings are consistent with the study by Mawonde and Demberere (2022), which revealed that

computerized inventory management systems significantly reduce stock discrepancies and improve procurement efficiency

4.5 Regression Analysis

This section displays regression analysis outcomes undertaken to examine the extent to which inventory computerization predicts procurement performance among state service corporations in Nairobi City County. Table 6 contains the model summary, while Table 7 explains its fitness (ANOVA) and Table 8 gives the regression coefficients.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.775a	0.601	0.598	0.44966

a Predictors: (Constant), Computerization

As shown in Table 6, the model summary indicates that inventory computerization has a strong explanatory power on procurement performance among state service corporations in Nairobi City County. The coefficient of determination (R^2) was 0.601, advocating that 60.1% of the variation in procurement performance can be explained by these inventory management practices. The remaining 39.9% is attributed to other factors not covered in this study.

Table 7: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.637	1	42.637	210.875	.000b
	Residual	28.307	140	0.202		
	Total	70.944	141			

a Dependent Variable: Performance
b Predictors: (Constant), Computerization

From the ANOVA results, the model was found to be statistically significant in explaining the influence of inventory management practices on procurement performance, with an F statistic of 210.875, which is considerably higher than the critical F value of 2.44 at a 5% significance level (Fcal = 210.875> Fcrit = 2.44). The corresponding p-value of 0.000 is below the 0.05 threshold, further confirming that the model is reliable. This outcome indicates that the independent variable, inventory computerization, provides a significant explanation for variations in procurement performance among the state service corporations in Nairobi City County.

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Table 8: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.437	0.181		7.953	0.000
	Computerization	0.684	0.047	0.775	14.522	0.000

a Dependent Variable: Performance

From the findings, the constant value ($\alpha = 1.437$) represents the level of procurement performance when all inventory management practices are held at zero. This implies that even without any influence from the identified practices, there is a baseline level of procurement performance in the organizations studied. The regression coefficient for inventory computerization was 0.684 with a p-value of 0.000 ($\beta = 0.775$, $p < 0.05$). This means that inventory computerization has a positive and significant influence on procurement performance. A unit increase in inventory computerization is associated with an improvement in procurement performance by 0.684 units. This outcome aligns with the study by Mukoya and Achuora (2020), which showed a significant positive link between organizational performance and electronic inventory management systems, showing that these systems notably enhance store performance.

Regarding regression analysis, the regression model below was established:

Procurement Performance = 1.437 + 0.684 (Inventory Computerization) + ε

4.6 Discussion of Findings

The study findings indicated that inventory computerization was moderately adopted among state service corporations in Nairobi City County, Kenya. Most of the respondents confirmed that their organizations had a fully computerized inventory coding system, enhancing the accuracy of stock identification and retrieval. Automated inventory coding systems were widely used, with most respondents agreeing on their effectiveness in stock categorization and retrieval. RFID technology was also employed in many organizations to track inventory location, though a notable proportion of respondents remained neutral or disagreed, highlighting limited or inconsistent application. Furthermore, the use of RFID-based automation to monitor inventory access was acknowledged by a majority of respondents, reflecting its significance in enhancing inventory security. Cloud-based inventory systems were recognized as a critical tool for stock monitoring, with a substantial percentage of respondents strongly agreeing with their implementation. However, the adoption of Electronic Data Interchange (EDI) for inventory transactions with suppliers was relatively lower, with a significant number of respondents indicating disagreement or neutrality, highlighting gaps in the use of this technology. Correlation and regression analysis results indicated that inventory computerization had a positive and significant effect on procurement performance of service state corporations in Nairobi City County, Kenya.

5. Conclusion

The study concluded that inventory computerization has a significant positive effect on procurement performance. Organizations that embraced tools such as inventory coding, RFID, and cloud-based systems experienced better stock management, improved accuracy, and enhanced security. At the same time, the limited use of technologies like EDI showed that many organizations still have room to expand their adoption of modern systems to maximize the benefits of computerized inventory in procurement.

6. Recommendations

The study recommends that state service corporations in Nairobi City County strengthen the adoption and integration of advanced inventory computerization systems to optimize procurement performance. While inventory coding, RFID technology, and cloud-based systems have already improved stock management, accuracy, and security, organizations should further expand the use of technologies such as Electronic Data Interchange (EDI) to enhance supplier coordination and streamline inventory transactions. Additionally, management should invest in continuous training for staff to ensure effective utilization of computerized systems and allocate adequate resources to support full implementation.

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