The International Journal of Business Management and Technology, Volume 10 Issue 04 April 2026
ISSN: 2581-3889

Research Article Open Access

Influence of Technology Adoption on Service Delivery in Public Hospitals in Nakuru City in Kenya

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ABSTRACT: *The health care system in the developing countries including Kenya faces many problems, inventory management being one of the majors. Under stocking and overstocking appears to have complicated the situation and made matters worse. This study therefore sought to examine the influence of technology adoption on service delivery in public hospitals in Nakuru city in Kenya. The study was anchored on technology diffusion theory. The research design for this study was a descriptive design. The target population of the study included all the 116 procurement employees in the seventeen public hospitals in Nakuru city in Kenya. The study adopted a census survey where all the 116 employees were taken as the study respondents. The study adopted a questionnaire constructed on a 5-point Likert scale to collect primary data. The study findings showed that technology adoption (r=.482), had a positive and significant relationship with service delivery in public hospitals in Nakuru city in Kenya. The study therefore concluded that inventory management techniques had a significant influence on service delivery in public hospitals in Nakuru city Kenya. The study recommended that the hospitals set up mechanisms to enhance inventory management techniques including technology adoption, in these hospitals. This will be critical in enhancing service delivery in public hospitals.*

Keywords: Technology, Service Delivery, Adoption, Public Hospitals, Automation

I. Introduction

The healthcare industry is under constant pressure due to required standards of service delivery from current demographic development, politics and public to increase service levels and decrease escalating costs. One of the most critical institutions in the healthcare system is the hospital. Hospitals usually consist of different sections (department or unit) like pharmacy, operating rooms, intensive care, emergency unit, infectious diseases, surgery, orthopedics, transfusion, hospital kitchen, and other departments, where patients are provided with services such as control and diagnosis, drug treatment, critical care, operations and other. Due to the large capacity of accommodation units for patients needed, many employees, and many health services provided there, implementing a sustainable logistic concept in hospitals is indispensable. In each department, logistic processes necessary for the overall functioning of the hospital are performed, as stated by Saha and Pradip (2019).

Logistics activities in the hospital are often performed by medical staff, which thus takes up part of their time devoted to patient care. Universal health care is one of the pillars of the United Nations Strategic Development Goals (UNSDGs, 2015). This pillar envisions access to safe, effective quality and affordable essential medicines and vaccines for all by 2030. Nonetheless, the availability of these essential medicines remains poor in many low and middle income countries which have the potential for adverse outcomes for patients resulting from lack of treatment or delayed or discontinued treatment (Ewen et al., 2017).

Various studies focusing on private healthcare facilities have identified a mismatch between demands and supply (Ewen et al. 2017; Ongarora et al. 2019). However, there is hardly sufficient data resulting from statistical analysis of the underlying causes for this mismatch that can be supported by solid evidence. Dincer and Turgay (2023) posit that an institution/organization should design and develop an inventory management system that balances the demand and

supply. Anantadjaya, Nawangwulan, Irhamsyah and Carmelita (2021) indicates that a closer examination of supply chain relationships, particularly those involving product flows, reveals that the heart of these relationships is inventory movement and storage. They further argue that much of the activity involved in managing relationships is based on the purchase transfer, or management of inventory.

Dincer and Turgay (2023) argue that inventory management is important because firms will ensure assets and stock are well managed and accurate demand forecasting is maintained to avoid unplanned procurement processes. According to Ochonogor, Osho, Anoka, Dieli (2022) control of stock includes the supply of administrations and products of the right quality, time and amount. It is a solid means in which organizations guarantee clients fulfillment and association staying in operations by means of minimization of misfortunes. Numerous associations are concerned with the manner by which to oversee stock. Noteworthy connection amongst deals and generation of item is given by stock. It additionally constitutes a bigger rate of production cost.

The biggest organization's critical and most costly resource is stock as indicated by the amount of aggregate capital consumed. Stock is among the biggest speculation made at any level of a firm and in this manner merits a noteworthy variable approach, exceptionally receptive to the style and plans of top administration. Nonetheless, both directors and experts to date in many associations have generally been unsuccessful in persuading top administration to give due consideration that this issue (Teece, 2019). Srour and Azmy (2021) posit that the firm should design and develop an inventory management system that balances the demand and supply.

This is intended to reduce inventory costs, reduce the cycle time and improved sharing of information. Therefore, the firm can effectively manage its inventory and coordinate its supply chain system leading to improved performance. Accurate and updated stock records are crucial for proper inventory management since they are input to calculate future needs. Holding stocks is important to ensure availability of essential items almost all the time. The selection of items to stock should rely on their value to public health and volume of consumption (Kefale & Shebo, 2019). Nowadays, inventory management is assisted with computerized Logistics Management Information System (LMIS) that allows easy recording of all medicines transactions and connects all levels of supply chains (Kefale & Shebo, 2019).

II. Statement of the Problem

The Kenya Health Policy (2014-2030) indicates that the government under the Ministry of Health works closely with public hospitals to ensure that goods and services are delivered on time in order to provide quality health care services to the citizens in Kenya. The County Government is responsible for County health services, pharmacies, and ambulance services, promotion of primary health care, licensing and control of undertakings that sell food to public, cemeteries, funeral parlors and waste disposal (Wahinya, 2020). Despite efforts that the government is putting in place to ensure high quality service delivery, most public hospitals have not delivered the services to the satisfaction of their clients. Kihara and Ngugi (2021) noted that lack of inventory management techniques lead to 30% reductions in essential medicines and 10-20% increase in lead time for medical deliveries. Inventory inaccuracy reduced profits by 10%, in the second case; misplaced items reduced profits by 25% in public hospitals. As a result, public hospitals are unable to provide optimized customer services. Further, Johnson et al. (2025) observed that local evidence points to systemic issues where inventory practices such as demand forecasting, stock control and reporting remain weak resulting in stock out rates above 50%, high wastage due to expiries and average lead times exceeding acceptable levels for key antiretroviral medicines in county public hospitals. Various studies have been done in line with inventory management. A study by Kirimi (2023) examined inventory management practices and public health institutions performance in Nairobi city county, Kenya. Karamshetty et al. (2022) investigated inventory management practices in private health care facilities in Nairobi County. A majority of these studies have addressed the issue of inventory management practices and other issues like organizational performance, sales and operational performance. However, there are hardly sufficient studies on the influence of inventory management techniques in organizations and more so in public institutions. The foregoing necessitates this study to examine the effect of inventory management techniques on service delivery in public hospitals in Nakuru city, Kenya.

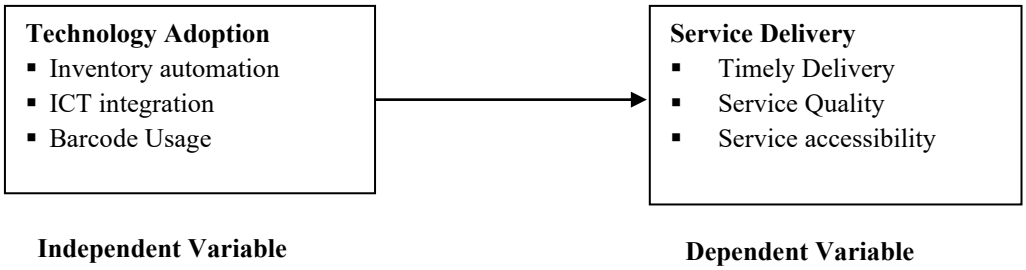
III. Purpose of the Study

The study sought to examine the influence of technology adoption on service delivery in Public hospitals in Nakuru city, Kenya.

IV. Hypothesis of the Study

H_0: Technology adoption has no significant influence on service delivery in public hospitals in Nakuru city.

V. Conceptual Framework



VI. Theoretical Review

6.1 Technology Diffusion Theory

Rogers' (1995) diffusion of innovation theory tries to explain how adoption was made to new ideas as well as to innovations by suggesting in the theory, five innovation attributes through which adoption is effected, which are: "observability, compatibility, trial ability, relative advantage and complexity" (Rogers, 1995). An attribute is said to have a relative advantage when the new innovations is seen to be better than the previous idea that it is replacing. Rogers' theory emphasizes that it is easier to implement innovations that show an improved advantage over that which was there before, making it easier to adopt.

Greenhalgh et al, (2004) adds that users would not adopt innovations that they did not see any relative advantage in them. The ability of an innovation to be easily adopted is that it has to be compatible with a previous idea, meet their experience in the past and fulfill existing values, meaning that there is a higher chance for an innovation to be adopted if it is more compatible. An innovation that is seen to be difficulty to use as well as to understand is said to be complex. New innovations are categorized from the simple to complex ones which define the relevance users find in them, where the ones seen as simple to operate are easily adopted (Greenhalgh et al, 2004).

The ability to experiment with an innovation in least time is called trial ability, and if the user is able to test the item before full implementation saves them resources, energy and precious time and hence becomes easily adopted. The visibility of the innovation's results as seen by adopters is called observability, where the innovation becomes more adoptable if the outcomes are positive. The theory is relevant to this study in explaining the adoption of technology in inventory management in public hospitals in Kenya. Moreover, the extent technology is adopted in public hospitals was seen from the lens of service quality.

VII. Technology Adoption in Inventory Management and Service Delivery

Technological adoption plays a crucial role in revolutionizing inventory management practices, offering numerous benefits and opportunities for optimization within the supply chain (Neumeyer, et al., 2020; Yang, et al., 2021). Technology enables real-time tracking and monitoring of inventory levels, locations, and movements throughout the supply chain. Barcode scanning, RFID (Radio-Frequency Identification), and IoT (Internet of Things) sensors provide accurate and up-to-date information, enhancing visibility into inventory status across warehouses, distribution centers, and transit. Technology streamlines inventory management processes, reducing administrative burdens and operational inefficiencies (Lee, et al., 2022). Automated workflows, inventory control software, and warehouse management systems (WMS) automate tasks such as order processing, picking, packing, and shipping, leading to faster turnaround times and increased productivity.

Malembela, Lianna and Mazana (2024) assessed the factors influencing ICT usage in the healthcare management systems at government hospitals in Tanzania. The study specifically sought to examine the extent to which ICT infrastructure availability, staff awareness on ICT usage, and management support influences ICT usage in healthcare management systems. The study was guided by the Technology Acceptance Model (TAM) and Resource-Based Theory (RBT) and employed a descriptive research design. Systematic sampling was used to select 162 respondents from a target population of 272 staff members. Data was collected through questionnaires and analysed using both descriptive

and inferential statistics. The findings reveal that the availability of necessary hardware and software is significantly and positively related to the effective utilization of ICT in healthcare management systems at Kilwa Road Police Hospital. Additionally, the level of staff awareness was identified as a crucial factor influencing ICT usage. Management support was also found to play a significant role in ICT usage for healthcare management at Kilwa Road Police Hospital in Tanzania.

In their study Mbiriri and Moronge (2018) examined the influence of inventory management systems on service delivery in public hospitals in Nairobi City County in Kenya. The study specifically sought to establish the influence of vendor managed inventory (VMI) systems, enterprise resource planning (ERP) systems, radio frequency identification (RFI) systems and just-in-time systems influence service delivery in public hospitals in Nairobi City County in Kenya. The study used descriptive research design with a target population of 80 public health facilities in Nairobi County. Questionnaires were used as the only primary data collection instrument. The study established that VMI, ERP, RFID and JIT systems were significant in determining service delivery success in public health facilities in Kenya.

In their study, Sama and Mdemu (2024) assessed the effects of inventory management on service delivery in the office of the registrar of political parties. The study employed a cross-section research design and a sample of 44 respondents was selected using a simple randomly sampling technique. Data collection methods included questionnaire and interview. The study finding showed that there is a positive relationship between the inventory management and service delivery. The study concludes that inventory management is an important factor that influence service delivery in Office of Registrar of Political Parties. Therefore, the study recommends that, to improve inventory management on service delivery, the study recommends that, the Office of Registrar of Political Parties could ensure technology adoption regulatory environment, and physical infrastructure and facilities.

A study by Wanjiru and Thogori (2025) assessed inventory management practices and performance of public health facilities in Nairobi City County in Kenya. Specifically, the sought to examine the effect of automated systems, inventory level management and budgeting and just-in-time inventory on performance of public health institutions. A cross-sectional survey research design was adopted for the study applying both the qualitative and quantitative approaches. The target population was the 290 staff of the level four public health facilities where a sample of 180 staff members were selected as the study respondents. Questionnaires were used for primary data collection. The study findings showed that inventory management practices namely automated systems, inventory levels management, inventory budgeting and just-in-time inventory significantly influence the performance of public health facilities in Nairobi City County, Kenya. The study further recommends that public health facilities should implement automated systems to reduce the need for manual inventory tracking and management.

In their study, Feibert and Jacobsen (2019) examined the factors impacting technology adoption in hospital bed logistics in Denmark. The study aimed to refine and expand technology adoption theory for a healthcare logistics setting by combining the technology-organization environment (TOE) framework with a business process management (BPM) perspective. The paper identified and ranked factors impacting the decision to implement instances of technologies in healthcare logistics processes. A multiple case study is carried out at five Danish hospitals to investigate the bed logistics process. A combined technology adoption and BPM lens is applied to gain an understanding of the reasoning behind technology adoption. A set of seventeen factors impacting the adoption of technologies within healthcare logistics were identified. The impact factors perceived as most important to the adoption of technologies in healthcare logistics processes relate to quality, employee work conditions and employee engagement.

VIII. Service Delivery in Public Hospitals

The study on inventory management techniques and service delivery in public hospitals in Uganda: A case study of Pallisa General Hospital was conducted by Jesca Aseno (2024) at Busitema University. Specifically, the study focused on three main inventory management dimensions; inventory analysis, inventory control, and inventory counting techniques and their relationship with key aspects of service delivery such as customer satisfaction, timely service provision, and cost reduction. Using a cross-sectional research design with a quantitative approach, data were collected from 32 respondents out of a population of 35 hospital staff, including senior management, stores, pharmacy, accounts, and outpatient departments, through structured questionnaires. Findings revealed a positive and significant relationship between inventory management techniques and service delivery, indicating that effective inventory analysis, control, and counting enhance operational efficiency and customer satisfaction while reducing costs. The study concluded that improving these inventory practices can greatly strengthen service delivery in public hospitals and

recommended regular staff training on modern inventory management systems and procedures to ensure consistent improvement in healthcare service provision.

A study by Juma and Kihara (2023) examined the determinants of efficient healthcare service delivery among public hospitals in Makueni county referral hospital in Kenya. The study employed a descriptive research design, targeting 132 outpatient department staff at Makueni County Referral Hospital. Stratified sampling and Likert-scale structured questionnaires were used to collect data. The study established that inadequate healthcare infrastructure, storage deficiencies, and the absence of Quality Control Systems significantly hamper efficient healthcare delivery. The study also affirms the crucial role of human capital in efficient healthcare delivery, with staff training, teamwork, and competency directly influencing service efficiency. The study recommends improving medical storage capabilities through efficient inventory management and staff training can ensure the timely availability of essential supplies. Concerning human capital, fostering effective teamwork and collaboration among healthcare staff is critical for streamlined service delivery.

A study by Odanga and Wachiuri (2022) evaluated the determinants of inventory management in public hospitals in Mombasa County in Kenya. The specific objectives were to determine the effects of information technology, material handling, staff competencies, and storage facilities on inventory management. The study adopted a descriptive survey design. The sample size for the study was 41 members of staff from Public Hospitals. The study established that increase in the staff competencies and storage facility results in an increase in effective inventory management. Further, increase in information technology and materials handling results in a decrease in effective inventory management. The study recommended that public hospitals should consider both academic qualification and experience in hiring its staff, automating material handling techniques to enhance the safety of materials, and must ensure maximum security and safety of stores and hospitals at large. Top management in public hospitals must embrace and attain the required standards of knowledge on matters of inventory control and management. The hospital management and leadership must and should embrace the use of technology to enhance most effective and efficient delivery of services to the public.

A study by Bosek, Kiarie, Onyambu and Koross (2016) examined the determinants of effective inventory management in health projects in Homabay County in Kenya. The study adopted a census survey of the 75 respondents. A standardized questionnaire was used to collect primary data. The study established that supplier management, health financing, monitoring and evaluation and information communication and technology were significant in determining effective inventory management of health projects. The study established that supplier management was the most significant factor. The study observed that there is need to ensure that the financing mechanisms, internal control and record keeping are well managed to improve effective inventory management in health projects. Record keeping ensures that all the records pertaining to the inventory management are well kept and updated to avoid stock outs and minimize the costs incurred during storage.

IX. Research Methodology

9.1 Research Design

The researcher adopted a descriptive research design with an exploratory approach which as defined by Creswell and Clark (2017) is an attempt to explore and explain a topic in the dark while creating a fuller picture of the topic. The target population of this study consisted of procurement employees working in public hospitals in Nakuru city. There are seventeen (17) public hospitals in Nakuru city with a total of 116 procurement employees (IHRS, 2025). These formed the target population for the study. Since the population is not large, the study adopted a census where all the procurement employees were taken as the study respondents.

9.2 Data Collection Instruments

The main data collection instrument which was used in this study was a questionnaire which contained close ended questions with the quantitative section of the instrument utilizing a 5-point Likert-type scale format. In order to ensure that the research instrument was valid and reliable, it was taken for piloting with 10% (Hertzog, 2008) (12 respondents) of the sample size in Naivasha Town hospitals. This helped to ascertain whether the results of the pilot study were corresponding with the objectives of the study. The data obtained during the pilot study was not considered during the research.

X. Findings and Discussions

10.1 Response Rate

The number of questionnaires that were administered to all the respondents was 116 questionnaires. A total of 92 questionnaires were properly filled and returned from the public hospital staffs. This represented an overall successful response rate of 79.31%. According to Mugenda and Mugenda (2003), a response rate of 50% or more is adequate.

10.2 Technology Adoption

The study sought to examine the respondents' views in regard to technology adoption in inventory management with respect to public hospitals in Nakuru city. The means and standard deviation values of the respondents' views were computed. The findings from the analysis were as presented in Table 1

Table 1: Descriptive Statistics on Technology Adoption

	N	Min	Max	M	StD
The hospital uses automated systems such as barcodes for inventory tracking	92	2	5	4.10	.826
The use of inventory management systems improves the accuracy of stock records	92	3	5	4.16	.634
The hospital staff are sufficiently trained on the use of inventory management technology	92	3	5	4.33	.595
The use of technology reduces the time utilized in inventory processing	92	3	5	4.26	.552
The use of system generated data helps in making timely inventory decisions	92	2	5	3.99	.845
Automated inventory systems reduce stockouts and overstocking	92	2	5	4.16	.802
The hospital's adoption of technology has improved the overall performance of the hospital	92	1	5	4.05	1.052
Valid N (listwise)	92				

Findings in Table 1 demonstrated that the respondents agreed with all the variables relating to technology adoption in inventory management with an average mean values of 4 (Agree). Respondents agreed (M=4.10, SD=.826) that the hospital uses automated systems such as barcodes for inventory tracking and that the use of inventory management systems improves the accuracy of stock records (M=4.16, SD=.634). Conversely, the respondents agreed (M=4.33, SD=.595) that the hospital staff are sufficiently trained on the use of inventory management technology and that the use of technology reduces the time utilized in inventory processing (M=4.26, SD=.552).

On the other hand, respondents observed (M=3.99, SD= .845) that the use of system generated data helps in making timely inventory decisions while conversely agreeing (M=4.16, SD=.802) that automated inventory systems reduce stock outs and overstocking. Finally, respondents were in agreement (M=4.05, SD=1.052) that the hospital's adoption of technology has improved the overall performance of the hospital. The researcher observed that the respondents had no huge disparities in their views with almost all but one of the items relating to technology adoption returning standard deviation values less than one.

10.3 Service Delivery

Finally, the study sought respondents' views in regard to service delivery in public hospitals in Nakuru City Kenya. The means and standard deviation values were computed and the findings presented in Table 2

Table 2: Descriptive Statistics on Service Delivery

	N	Min	Max	M	StD
Patients in the hospital receive services in a timely manner due to effective inventory management	92	2	5	4.17	.793
The availability of sufficient inventory supports continuous service delivery	92	2	5	4.10	.785
Inventory automation has reduced patient wait time for medication/supplies	92	2	5	4.20	.815
As a result of proper inventory control, there has been improvement in service delivery	92	2	5	4.41	.649
The quality of healthcare service in the hospital has improved due to proper inventory practices	92	2	5	4.21	.719
Efficiency in inventory management has enhanced overall hospital performance	92	2	5	4.13	.744
Valid N (listwise)	92				

The study established that the respondents agreed with all the items relating to service delivery in public hospitals returning mean values above four. Respondents agreed (M=4.17, SD=.793) that patients in their hospital receive services

in a timely manner due to effective inventory management. Conversely, they concurred (M=4.10, SD=.785) that the availability of sufficient inventory supports continuous service delivery. As a result of inventory automation, respondents observed (M=4.20, SD=.815) noted that patients wait time for medication/supplies had reduced in their hospital.

Further on, respondents opined (M=4.41, SD=.649) that as a result of proper inventory control, service delivery had improved in their hospital. Moreover, as observed by the respondents (M=4.21, SD=.719) the quality od healthcare services in their hospital had improved due to proper inventory services. Finally, respondents concurred (M=4.13, SD=.744) that efficiency in inventory management had enhanced the overall performance of public hospitals. Conversely, the researcher observed that there was greater cohesion in respondents' views with most of the items returning standard deviation values less than one.

10.4 Technology Adoption and Service Delivery

The study undertook correlation analysis to examine the relationship between technology adoption and service delivery in public hospitals in Nakuru city in Kenya. The composite mean scores of the independent variable were correlated with the composite mean score of the dependent variable. The finding from the analysis were as presented in Table 3

Table 3: Relationship between Technology adoption and Service Delivery

		Technology Adoption
Service Delivery	Pearson Correlation	.482**
	Sig. (2-tailed)	.006
	N	92

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

The results in Table 3 indicated the presence of a weak, positive but significant (r=0.482, p=.006) relationship between technology adoption and service delivery. As such, technology adoption plays a significant role in determining service delivery efficiency in public hospitals in Nakuru city in Kenya. These findings were in line with Kusenza, Lianna and Mazana (2024) findings that established that the availability of necessary hardware and software is significantly and positively related to the effective utilization of ICT in healthcare management systems. Moreover, Feibert and Jacobsen (2019) established that technology adoption had a significant effect of healthcare logistics hence contributing significantly to healthcare performance.

XI. Conclusion and Recommendations

The study established that technology adoption is significant in determining service delivery. The respondent also affirmed the role of technology adoption in service delivery in public hospitals. As such, the study concluded that technology adoption is significant in determining service delivery in public hospitals in Nakuru City in Kenya. The study noted that technology adoption significantly influence service delivery in public hospitals. As such the study recommends that the management in public hospitals should ensure they enhance the level of technology adoption in inventory management to enhance service delivery. This will be important to ensure that the hospitals incorporate the right automations systems such as barcodes that would improve inventory management and enhance service delivery.

REFERENCES

[1] Anantadjaya, S. P., Nawangwulan, I. M., Irhamsyah, M., & Carmelita, P. W. (2021). Supply chain management, inventory management & financial performance: evidence from manufacturing firms. *Linguistics and Culture Review*, *5*(1), 781-794.

[2] Aseno, J. (2024). *Inventory management techniques and service delivery in public hospitals in Uganda*. (Bachelors Degree), Busitema University.

[3] Bosek, E., Kiarie, D., Onyambu, F. & Koros, S. (2016). Determinants of effective inventory management in health projects in Kenya: A case of Homabay County. *The Strategic Journal of Business and Change Management, 3 (4), 672, 691.*

[4] Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

[5] Dinçer, K. F., & Turgay, S. (2023). Balancing demand and supply: Inventory allocation in FMCG. *Industrial Engineering and Innovation Management*, *6*(10), 41-49.

[6] Ewen, M., Zweekhorst, M., Regeer, B., & Laing, R. (2017). Baseline assessment of WHO's target for both availability and affordability of essential medicines to treat non-communicable diseases. *PloS one*, *12*(2), e0171284.

[7] Feibert, D. C., & Jacobsen, P. (2019). Factors impacting technology adoption in hospital bed logistics. *The International Journal of Logistics Management*, *30*(1), 195-230.

[8] Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: systematic review and recommendations. *The milbank quarterly*, *82*(4), 581-629.

[9] Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. *Research in nursing & health*, *31*(2), 180-191.

[10] Juma, P. M., & Kihara, A. (2023). Determinants of efficient healthcare service delivery among public hospitals in Kenya: A case of Makueni County Referral Hospital. *Journal of Business and Strategic Management*, *8*(6), 83-107.

[11] Karamshetty, V., De Vries, H., Van Wassenhove, N., Dewilde, S., Minnaard, W., Ongarora, D., & Yadav, P. (2022). Inventory management practices in private healthcare facilities in Nairobi County. *Production and Operations Management*, *31*(2), 828-846.

[12] Kefale, A. T., & Shebo, H. H. (2019). Availability of essential medicines and pharmaceutical inventory management practice at health centers of Adama town, Ethiopia. *BMC health services research*, *19*(1), 254.

[13] Kihara P. B. W., Ngugi, K., (2021), Inventory Management System and Performance of Public Hospitals in Kenya, *International Journal of Social Sciences and Information Technology*, *7*(2), 66 – 77.

[14] Kirimi, M. J. (2023). *Inventory Management Practices and Public Health Institutions Performance in Nairobi City County, Kenya* (Doctoral dissertation, Kenyatta University).

[15] Lee, K., Romzi, P., Hanaysha, J., Alzoubi, H., & Alshurideh, M. (2022). Investigating the impact of benefits and challenges of IOT adoption on supply chain performance and organizational performance: An empirical study in Malaysia. *Uncertain Supply Chain Management, 10*(2), 537–550. https://doi.org/https://doi.org/10.5267/j.uscm.2021.11.009

[16] Malembela, K., Lianna, A. Y., & Mazana, M. Y. (2024). Factors influencing ICT usage in the healthcare management system at government hospitals in Tanzania: a case of Kilwa road police hospital. *African Journal of Empirical Research*, *5*(3), 1313-1325.

[17] Mbiriri, E., & Moronge, M. (2018). Influence of Inventory Management Systems on Service Delivery in Public Hospitals in Nairobi City County, Kenya. *Strategic Journal of Business and Change Management*, *5*(2), 1885-1907.

[18] Mugenda O,& Mugenda A.(2003). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi., Kenya: Acts press.

[19] Neumeyer, X., Santos, S. C., & Morris, M. H. (2020). Overcoming barriers to technology adoption when fostering entrepreneurship among the poor: The role of technology and digital literacy. *IEEE Transactionson Engineering Management, 68*(6), 1605–1618. https://doi.org/10.1109/TEM.2020.2989740

[20] Ochonogor, K. N., Osho, G. S., Anoka, C. O. & Dieli, O. J. (2022). The impact of supplier base consolidation on procurement, delivery, and production costs: supply chain operations optimization and vendor consolidation. *International Research in Economics and Finance*, *6*(4), 10.

[21] Odanga, S. W. & Wachiuri, E. (2022). Determinants of Inventory Management in Public Hospitals in Mombasa County, Kenya. *Journal of Procurement & Supply Chain*, *2*(1), 21-37.

[22] Ongarora D, Karumbi J, Minnaard W, Abuga K, Okungu V. Medicine prices, availability, and affordability in private health facilities in low-income settlements in Nairobi County, Kenya. *Pharmacy*. 2019;1–14. doi: 10.3390/pharmacy7020040

[23] Sama, H. K., & Mdemu, R. (2024). Effects of inventory management on service delivery in public sector: A case of Office of Registrar of Political Parties. *International Journal of Business, Economics, and Social Development*, *5*(2), 271-279.

[24] Srour, H., & Azmy, A. (2021). Inventory management and its impact on the firm performance. *World Research of Business Administration Journal*, *1*(1), 45-65.

[25] Teece, D. J. (2019). A capability theory of the firm: an economics and (strategic) management perspective. *New zealand economic papers*, *53*(1), 1-43.

[26] Wahinya, G. N. (2020). *Effect of Governace on Performance of County Governments in Kenya*.

[27] Wanjiru, E. M., & Thogori , M. N. (2025). Inventory Management Practices and Performance of Public Health Facilities in Nairobi City County, Kenya. International Journal of Social Science and Humanities Research (IJSSHR) ISSN 2959-7056 (o); 2959-7048 (p), 3(1), 126–144.

[28] Yang, M., Fu, M., & Zhang, Z. (2021). The adoption of digital technologies in supply chains: Drivers, process and impact. *Technological Forecasting and Social Change, 169*. https://doi.org/https://doi.org/10.1016/j.techfore.2021.120795