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MANAGEMENT OF DIGITAL PAYMENT AND SERVICE DELIVERY IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

Devolution in Kenya, enshrined in the 2010 Constitution, was a transformative step aimed at promoting equitable distribution of resources and improving service delivery across the country. Nairobi City County, being the largest urban center and the capital of Kenya, plays a critical role in driving the country's economic growth. It is the leading county in revenue collection, contributing approximately 20% of Kenya's GDP. According to a 2021 report by the Ethics and Anti-Corruption Commission (EACC), corruption costs the county billions annually, with as much as 30% of the revenue lost to fraud and mismanagement. The management of digital payments plays a pivotal role in enhancing service delivery. However, several challenges hinder the efficiency and effectiveness of service delivery, which directly impacts the overall experience of citizens. The general objective of the study is to examine the influence of management of digital payments on service delivery in Nairobi City County. Specifically, the study sought to establish the influence of technical skills on service delivery in Nairobi City County, and to evaluate the influence of policy and regulations on service delivery in Nairobi City County. This study was anchored on Human Capital Theory, and Institutional Theory. Descriptive research design was used in this study. The target population comprised of 130 staff of the county government drawn from various departments such as ICT, Finance, Procurement, Enforcement, Administration and Inspectorate. The study used Yamane formulae (Yamane 1967) to determine the appropriate sample size for this study. Therefore, the sample size of the study was 98 respondents. Stratified and random sampling was used to select sampled employee of 98 staff from the target population in each strata. This study relied on primary data which was collected through use of structured questionnaire. Pilot test was conducted to test validity and reliability of the questionnaire. Data obtained from the field was coded, cleaned, and entered into the computer for analysis using the SPSS version 25. Data analysis was done through use of descriptive and inferential statistics. Descriptive statistical included frequency, percentages, mean and standard deviation. Inferential statistical analysis to be used was multiple regression and correlation analysis. The significant of each independent variable was tested at a confidence level of 95%. Data was represented in simple easy to understand tables, figures and other statistical representation tools where applicable. The study concludes that technical skills have a positive and significant effect on service delivery in Nairobi City County, Kenya. The study also concludes that policy and regulations have a positive and significant effect on service delivery in Nairobi City County, Kenya. Based on the findings, the study recommends that Nairobi County government should invest in and expand the use of automated digital platforms for service delivery, particularly in areas such as healthcare, waste management, and traffic management. Implementing automated systems can significantly streamline administrative processes, reduce human error, and enhance transparency.

Key Words: Management of Digital Payments, Service Delivery, Technical Skills, Policy and Regulations

Background of the study

Governments play a central role in ensuring the effective delivery of services to citizens, which is essential for social and economic development (Brar, & Trivedi, 2022). They are responsible for providing public goods and services such as healthcare, education, security, infrastructure, and sanitation, which are crucial for improving the quality of life and fostering economic growth (Gtahima, & Njoroge, 2021). Governments establish policies, allocate resources, and implement programs aimed at addressing the needs of the population, especially vulnerable groups. Through regulatory frameworks, governments ensure service providers meet established standards, maintaining fairness, equity, and efficiency. Devolution, which involves transferring authority and responsibilities from central to local governments, enhances service delivery by bringing governance closer to the people (Kankindi, & Munene, 2022). In countries that have adopted devolution, such as Kenya, local governments are better positioned to understand and address the unique needs of their communities. Devolution promotes participatory governance, enabling citizens to have a voice in decision-making processes and ensuring accountability in resource allocation and service provision (Kazaara, & Musiimenta, 2024).

County governments play a critical role in delivering essential services to local communities. In a devolved system of governance, they are tasked with managing and executing functions that directly impact citizens' quality of life, including healthcare, education, infrastructure, water, sanitation, and agricultural support (Kimatu, Bunyasi, & Asoyong, 2023). By operating closer to the people, county governments are better equipped to address specific regional needs and priorities. This proximity fosters a more participatory approach to governance, where citizens can engage directly with county officials to articulate their concerns and preferences. Counties are also responsible for implementing national policies at the local level while customizing these initiatives to fit their unique socio-economic and environmental conditions (Kimonye, & Muchelule, 2024). Effective service delivery by county governments depends on several factors, including adequate funding, proper planning, and transparent resource management. Counties receive revenue from the central government through equitable share allocations, local taxation, and other sources such as grants. These resources are then directed toward programs and projects aimed at improving livelihoods and spurring regional development. Furthermore, county governments are tasked with ensuring equitable access to services, particularly for marginalized and underserved populations, and fostering economic growth through local initiatives (Harelimana, 2022). However, challenges such as inadequate infrastructure, corruption, and capacity gaps often hinder the efficient delivery of services, necessitating improved accountability and intergovernmental coordination (Kankindi, & Munene, 2022).

Tax collection is one of the primary sources of revenue for county governments, enabling them to fulfill their mandate of providing services to citizens and promoting regional development. Under devolved systems of governance, counties are empowered to generate revenue through local taxes, fees, and charges, as outlined in legal frameworks such as the Constitution of Kenya (2010) (Kimatu, Bunyasi, & Asoyong, 2023). Some of the common taxes and levies collected by county governments include property rates, business permits, entertainment taxes, parking fees, and market stall fees. These revenues are crucial in funding essential services such as healthcare, infrastructure development, water supply, and education at the local level (Kimonye, & Muchelule, 2024). The success of tax collection depends on several factors, including effective systems for tax assessment, enforcement, and compliance. County governments are tasked with ensuring that tax collection processes are efficient, transparent, and inclusive to encourage compliance and reduce evasion (Kiprono, Okemwa, & Kanyeki, 2020). To achieve this, many counties are adopting digital tax collection platforms, which not only streamline the payment process but also minimize revenue leakage caused by manual systems. However, challenges such as inadequate public awareness, corruption, weak enforcement mechanisms, and resistance from taxpayers can hinder the collection of taxes, leading to budgetary constraints and reduced service delivery (Li, *et al*, 2023).

Management of digital payments refers to the strategic and operational processes involved in overseeing electronic financial transactions. It includes the use of technologies such as mobile wallets, online banking, and digital payment platforms to facilitate secure, efficient, and seamless transfers of money between individuals, businesses, and institutions (Kazaara & Musiimenta, 2024). Effective management of digital payments involves ensuring compliance with regulations, safeguarding against fraud, optimizing transaction speeds, and improving user experience. It also includes monitoring and analyzing payment data to enhance system reliability, reduce operational costs, and promote widespread adoption of digital payment methods (Takon, *et al*, 2020). The management of digital payments is essential for the growth of e-commerce, financial inclusion, and the overall digital economy.

Technical skills are vital in managing digital payment systems effectively. Professionals need expertise in areas such as cybersecurity, software development, data analytics, and financial technology (FinTech) to design, maintain, and secure these systems. Additionally, the regulatory landscape for digital payments is becoming increasingly complex, with policies concerning data protection, anti-money laundering (AML), and consumer rights. Governments and financial bodies implement and enforce these regulations to ensure transparency, fairness, and security within the digital payment ecosystem. Compliance with these regulations is essential for organizations to operate legally and protect users from fraud and financial risks (Chepkoech, Gichana & Agong, 2022). This study aimed to examine the influence of management of digital payments on service delivery in Nairobi City County.

Statement of the Problem

Devolution in Kenya, enshrined in the 2010 Constitution, was a transformative step aimed at promoting equitable distribution of resources and improving service delivery across the country (Kimatu, Bunyasi, & Asoyong, 2023). Through the establishment of 47 county governments, the Constitution sought to bring governance closer to the people, ensuring that essential services such as healthcare, water, infrastructure, and waste management were effectively managed at the local level (Kankindi, & Munene, 2022). Devolution empowered counties to generate their own revenue and address the unique developmental needs of their regions. However, despite the promise of devolution, challenges such as inefficiencies in governance, resource mismanagement, and poor accountability have impeded the achievement of its goals, particularly in service delivery (Gtahima, & Njoroge, 2021).

Nairobi City County, being the largest urban center and the capital of Kenya, plays a critical role in driving the country's economic growth. It is the leading county in revenue collection, contributing approximately 20% of Kenya's GDP and generating billions annually through business permits, parking fees, property rates, and other levies (KNBS, 2023). In the 2022/2023 fiscal year, Nairobi County projected to collect over KES 19 billion in local revenue. Despite this, Nairobi faces significant challenges in service delivery, including poor waste management, inadequate public infrastructure, and poor healthcare services. A large portion of revenue collected in the county remains unaccounted for due to systemic corruption, revenue leakages, and inefficient manual payment systems. According to a 2021 report by the Ethics and Anti-Corruption Commission (EACC), corruption costs the county billions annually, with as much as 30% of the revenue lost to fraud and mismanagement (EACC, 2021).

The effective implementation and management of digital payment systems present a viable solution to the challenges facing Nairobi County in revenue collection and service delivery. Digital payment systems offer transparency, efficiency, and accountability by reducing cash-based transactions, which are prone to corruption and leakages. Studies indicate that counties that have adopted digital payments have experienced significant improvements in revenue collection and accountability (Wachira, & Kandiri, 2024). For instance, the Nairobi Revenue

System (NRS), launched in 2020, increased daily parking revenue from KES 10 million to KES 20 million within months of its implementation. By fully integrating and managing digital payment systems for county services, Nairobi County can significantly enhance its revenue collection, reduce corruption, and channel resources toward improving essential services, ensuring that the goals of devolution are realized (Njenga, & Litondo, & Mwabu, 2021).

Various studies have been conducted in different parts of the world on management of digital payments and service delivery. For instance, Wamuyu, Ambrose and Musau (2022) researched on digital payments and financial inclusion among the youth. Kimatu, Bunyasi and Asoyong (2023) assessed on the effects of digital payments on financial performance of commercial banks and Gathima and Njoroge (2021) investigated on the relationship between digital payments and organization performance in public sector. However, none of these studies focused on technical skills, and policy and regulations on service delivery in Nairobi City County. To fill the highlighted gaps, the current study seeks to examine the influence of management of digital payments (technical skills, and policy and regulations) on service delivery in Nairobi City County.

Objectives of the Study

The general objective of the study is to examine the influence of management of digital payments on service delivery in Nairobi City County, Kenya

study is guided by the following specific objectives

i. To establish the influence of technical skills on service delivery in Nairobi City County, Kenya
ii. To evaluate the influence of policy and regulations on service delivery in Nairobi City County, Kenya

LITERATURE REVIEW

Theoretical Framework

Human Capital Theory

Human Capital Theory (HCT) is an economic framework that views individuals' skills, knowledge, and experiences as forms of capital that can enhance their productivity and economic value. Developed by Gary Becker and Theodore Schultzin the 1960s, the theory posits that investments in education, training, and health can lead to improved individual and societal outcomes (Cukier, 2020). According to HCT, just as physical capital—like machinery or buildings—can generate economic returns, so too can human capital yield benefits in the form of higher wages, improved job performance, and increased innovation. At the core of Human Capital Theory is the idea that education and training are crucial investments. Individuals who pursue higher education or vocational training are thought to increase their skills and competencies, making them more attractive to employers (Lubua, 2022). This investment is not without costs, as it often involves financial expenditure and opportunity costs in terms of time and foregone income. However, proponents of HCT argue that the long-term benefits—such as higher lifetime earnings and enhanced job stability—justify these investments. The theory emphasizes the importance of continuous learning and skill development in an increasingly complex and competitive job market (Nkere, 2020).

Additionally, Human Capital Theory has implications beyond individual economic outcomes; it also addresses broader societal impacts. A well-educated workforce is associated with increased productivity, innovation, and economic growth at the national level (Kiprono, Okemwa & Kanyeki, 2020). The theory suggests that governments and organizations should invest in education and training to foster human capital development, ultimately benefiting society as a whole. This perspective encourages policies aimed at improving access to quality education and professional development opportunities, highlighting the role of human capital in driving economic progress and social mobility (Maina, 2020).

Human Capital Theory (HCT) is underpinned by several key assumptions that shape its framework and application. One primary assumption is that individuals act rationally in their pursuit of education and skill development, believing that these investments will lead to higher future earnings. This rational actor model suggests that people weigh the costs of education—such as tuition fees and lost wages—against the expected benefits of increased income (Murgor, 2020). Additionally, HCT assumes a direct correlation between education and productivity, positing that more educated individuals are inherently more productive workers. This assumption implies that educational credentials are reliable indicators of a person’s capability and value in the labor market (Cukier, 2020).

However, Human Capital Theory has faced a number of critiques that question its validity and applicability. One major criticism is that it tends to oversimplify the relationship between education and economic outcomes (Lubua, 2022). Critics argue that HCT neglects other important factors influencing labor market success, such as social networks, job availability, and individual motivation. Furthermore, the theory often overlooks structural barriers that affect access to education and training, such as socioeconomic status, race, and gender. These factors can significantly influence an individual’s ability to invest in their human capital and may lead to disparities in economic returns (Nkere, 2020). Another critique is the theory’s emphasis on quantifiable outcomes, often measured through increased earnings. While economic returns are an important consideration, HCT does not fully account for the qualitative aspects of education, such as critical thinking, creativity, and social skills, which are increasingly important in today’s economy. Additionally, the theory may imply that all forms of education are equally beneficial, which can overlook the relevance and applicability of specific skills in different job markets. This can lead to mismatches between educational outcomes and labor market demands (Kiprono, Okemwa & Kanyeki, 2020). This theory was used to establish the influence of technical skills on service delivery in Nairobi City County.

Institutional Theory

Institutional Theory developed by John Meyer and Brian Rowan in the 1970s, within the context of organizational studies and sociology, examines how institutions—both formal (such as laws, regulations, and norms) and informal (such as customs, traditions, and cultural values)—shape organizational behavior, practices, and structures (Eliassen & From, 2020). At its core, Institutional Theory suggests that organizations are not only influenced by economic factors or market forces but are also deeply embedded within broader social and institutional contexts. These institutional contexts provide guidelines, norms, and expectations that influence how organizations operate, make decisions, and respond to external pressures (Likangaga, Kumburu & Panga, 2022). One key concept within Institutional Theory is institutional isomorphism, which describes the tendency of organizations within a field or industry to become more similar over time. This occurs through three main mechanisms: coercive isomorphism (pressure from external entities such as governments, regulatory bodies, or powerful stakeholders), mimetic isomorphism (imitation of successful practices or behaviors observed in other organizations), and normative isomorphism (adoption of norms and values considered legitimate within the institutional environment) (Okojie, 2020). These forces can lead to convergence in organizational structures, practices, and strategies, even among organizations that are otherwise competing in the same industry. Furthermore, Institutional Theory emphasizes the role of legitimacy in organizational survival and success. Legitimacy refers to the perception that an organization's actions, structures, and practices are appropriate, acceptable, and in line with societal expectations and norms (Ngugi, Kiprono & Muhindi, 2022). Organizations strive to gain and maintain legitimacy because it enhances their credibility, reduces uncertainty among stakeholders, and facilitates access to resources and support. Legitimacy can be achieved by conforming to institutional expectations, aligning with prevailing norms, and demonstrating social responsibility (Chewa, Minja & Njoroge, 2022).

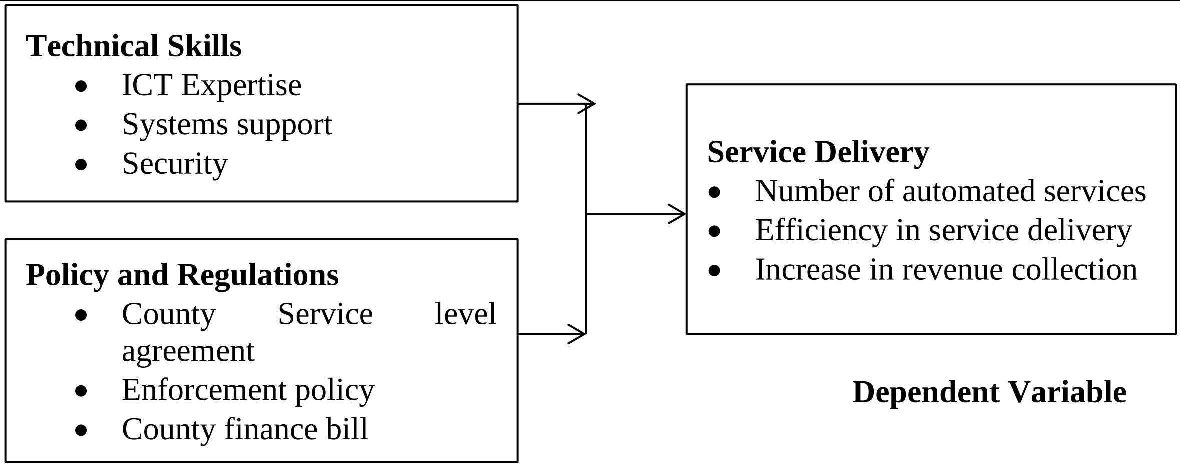
Institutional Theory in organizational studies is based on several core assumptions that underpin its analysis of how institutions shape organizational behavior and practices. One key assumption is that institutions—both formal (such as laws, regulations, and rules) and informal (such as cultural norms, values, and beliefs)—are influential in defining and constraining the actions of organizations (Lundenyo & Shitseswa, 2024). These institutions provide a framework of legitimacy and expectations within which organizations operate, influencing their strategies, decision-making processes, and overall organizational structures. Institutional Theory posits that organizations seek to conform to these institutional pressures to gain legitimacy, support, and acceptance from their external environment (Eliassen & From, 2020). Another assumption is the concept of institutional isomorphism, which suggests that organizations within the same field or industry tend to become more similar to one another over time. This convergence occurs through mechanisms such as coercive isomorphism (pressure from external authorities or stakeholders), mimetic isomorphism (imitation of successful practices observed in other organizations), and normative isomorphism (adherence to norms and values deemed legitimate). These forces lead to organizational homogenization and the adoption of practices that are perceived as legitimate within the institutional environment (Likangaga, Kumburu & Panga, 2022).

Critiques of Institutional Theory highlight several concerns and limitations. One critique is that the theory may oversimplify the complexity of organizational behavior by emphasizing conformity and stability over innovation and strategic decision-making. Critics argue that while institutions exert significant influence on organizations, they may not fully determine organizational outcomes (Okojie, 2020). Organizations also have agency and can actively shape and reinterpret institutional norms or challenge existing practices to foster innovation and change. Another critique is that Institutional Theory may overlook variations in how organizations respond to institutional pressures based on factors such as industry dynamics, organizational capabilities, and leadership strategies. Not all organizations may conform uniformly to institutional expectations; some may strategically resist or reinterpret institutional pressures to differentiate themselves or gain competitive advantage (Ngugi, Kiprono & Muhindi, 2022).

Furthermore, Institutional Theory has been criticized for its static view of institutions and limited consideration of how institutions themselves evolve and change over time. Institutions are not static entities but can evolve through social, political, and economic processes. The theory's focus on institutional stability may overlook the dynamic nature of institutional environments and the potential for institutional change (Lundenyo & Shitseswa, 2024). This theory was used to evaluate the influence of policy and regulations on service delivery in Nairobi City County.

Conceptual Framework

A conceptual framework model is used to examine the influence of management of digital payments on service delivery in Nairobi City County. The research independent variables were technical skills, policy and regulation framework which are assumed to affect performance on service delivery by the County to citizens.



Independent Variables

Figure 2. 1: Conceptual Framework

Technical Skills

Technical skills refer to the specific knowledge and expertise required to perform tasks involving specialized technologies, tools, or techniques within a particular field or industry. These skills typically involve proficiency in areas such as programming, software development, data analysis, network management, engineering, or operating machinery (Maina, 2020). Technical skills are often learned through education, training, or hands-on experience and are essential for carrying out complex tasks that require precise, technical knowledge. In today's digital world, technical skills are increasingly in demand, as they enable individuals to work with advanced technologies, solve problems, and contribute to the development and maintenance of systems, applications, and processes that drive innovation and efficiency in various industries (Murgor, 2020). ICT (Information and Communications Technology) expertise refers to the specialized knowledge and skills required to effectively manage, utilize, and support technologies related to information processing, data storage, telecommunications, and networking. Professionals with ICT expertise are proficient in areas such as software development, database management, system administration, network design, cybersecurity, cloud computing, and emerging technologies like artificial intelligence and blockchain (Cukier, 2020). This expertise is vital for businesses, governments, and organizations as they rely on ICT systems for communication, data management, and operational efficiency. As technology continues to evolve, individuals with ICT expertise play a critical role in developing innovative solutions, ensuring system functionality, and adapting to technological changes in a rapidly advancing digital landscape (Lubua, 2022).

Systems support involves the maintenance, troubleshooting, and optimization of IT systems and infrastructure to ensure their smooth operation. It encompasses a wide range of activities such as hardware and software installation, configuration, updates, and regular monitoring to prevent system failures. Systems support teams are responsible for diagnosing technical issues, providing solutions, and offering technical assistance to end-users (Nkere, 2020). Additionally, they help in the backup and recovery of data, ensuring the security and integrity of systems, and offering user training. The goal of systems support is to minimize downtime, improve system performance, and ensure that the technological resources of an organization are functioning efficiently and securely. In a dynamic IT environment, systems support professionals must stay up-to-date with new technologies and best practices to offer proactive and effective assistance (Kiprono, Okemwa & Kanyeki, 2020). Security in the context of information technology refers to the protection of digital systems, networks, and data from unauthorized access, breaches, theft, or damage. This includes a range of strategies, tools, and protocols designed to safeguard IT infrastructure and information assets (Maina, 2020). Cybersecurity, one of the primary domains of IT security, involves using encryption, firewalls, access controls, and multi-factor authentication to prevent cyberattacks such as hacking, malware, phishing, and ransomware. Beyond the digital realm, physical security also plays a role in safeguarding hardware and data storage systems. Security is an ongoing process that involves regular audits, vulnerability assessments, and the implementation of security policies to mitigate risks and comply with regulations. As cyber threats become more sophisticated, the importance of robust security measures has grown, making it a critical component for both individuals and organizations to protect their sensitive information and maintain trust (Murgor, 2020).

Policy and Regulations

Policy and Regulations are essential elements of governance that guide the behavior and operations of individuals, organizations, and institutions within a society or industry. Policy refers to a set of principles, rules, or guidelines developed by governments, organizations, or institutions to address specific issues or achieve certain objectives (Eliassen & From, 2020). It outlines the direction or approach that should be taken to address a particular challenge, whether it's related to health, education, economic development, environmental protection, or technology. Policies are typically broad in nature and can be strategic or tactical in their scope. They are often shaped by political, social, or economic considerations and aim to influence decisions and actions at various levels—local, national, or global (Likangaga, Kumburu & Panga, 2022). Regulations are more specific rules or standards that are enacted to enforce and implement policies. They are formalized legal requirements that govern specific practices, behaviors, or activities within an industry or sector. Regulations are often created by government agencies or regulatory bodies and are designed to ensure compliance with laws and policies. For example, environmental regulations set standards for pollution control, while financial regulations establish rules for banking practices to ensure stability and consumer protection. Regulations are often enforced through inspections, penalties, or other enforcement mechanisms and play a crucial role in maintaining order, fairness, and safety within society (Okojie, 2020).

A County Service Level Agreement (SLA) is a formal contract between a county government and service providers (either public or private entities) that outlines the expected standards and terms of service delivery. This agreement specifies the level of service that will be provided, including timelines, quality expectations, performance metrics, and the responsibilities of both parties (Ngugi, Kiprono & Muhindi, 2022). SLAs are essential in ensuring that the county receives the agreed-upon services, such as healthcare, waste management, education, or infrastructure development, at the agreed-upon standards. The SLA also typically includes penalties or remedies in case the service provider fails to meet the specified performance standards. The goal of the County SLA is to enhance accountability, transparency, and efficiency in service delivery, ensuring that resources are used effectively to meet the needs of county residents. Additionally, these agreements foster good governance by ensuring that both the county government and service providers are clear on their obligations (Lundenyo & Shitseswa, 2024).

An Enforcement Policy is a framework or set of guidelines that defines how laws, regulations, or agreements are to be enforced within a particular jurisdiction, such as a county or region. This policy establishes the procedures, responsibilities, and authority of enforcement bodies or agencies to ensure compliance with rules and regulations (Eliassen & From, 2020). The enforcement policy outlines how violations of laws, rules, or contractual agreements will be detected, addressed, and penalized. It may cover a variety of areas such as environmental protection, public health, zoning regulations, or business licensing. By ensuring that violations are met with consistent, transparent, and fair enforcement actions, such a policy helps maintain order, protects public interest, and ensures that businesses, individuals, and other entities follow the laws. An effective enforcement policy also helps build public trust in governance, as it ensures that rules are applied equitably and that violators face appropriate consequences for non-compliance (Likangaga, Kumburu & Panga, 2022).

A County Finance Bill is a legislative document introduced at the county level, outlining the financial plans and budgetary allocations for the county government for a particular fiscal year. The bill typically covers revenue generation methods, such as taxes, grants, and loans, and specifies how these funds will be allocated to various sectors, such as healthcare, infrastructure, education, security, and social services (Okojie, 2020). It is an essential tool for managing public funds and ensuring that the county's resources are distributed effectively to meet the needs of its residents. The County Finance Bill also plays a key role in establishing the legal basis for taxation, setting tax rates, and defining any new financial regulations. Once passed, the bill gives legal authority to the county government to collect taxes and manage its expenditures according to the priorities set out in the bill. The bill is typically debated and scrutinized by county assemblies, and it provides an important opportunity for public participation, ensuring that the financial priorities reflect the needs and aspirations of the local population (Ngugi, Kiprono & Muhindi, 2022).

Empirical Review

Technical Skills and Service Delivery

Cukier (2020) conducted a study on the effect of constructing the IT Skills Shortage in Canada: The Implications of Institutional Discourse and Practices for the Participation of Women Building on previous work, this paper explores systemic barriers to women in information technology professions by focusing on the ways in which institutional practices reinforce a definition of "information technology professional" that tends to exclude women. It examines the recent discourse on the "Information Technology Skills Shortage" in selected texts from industry, professional associations, academia and programs aimed at increasing the participation of women, focusing on the implications of discursive practices for the inclusion of women. In particular, it examines some of the apparent inconsistencies and contradictions which appear in the institutionalized discourse and practices

Lubua (2022) conducted a study on the effect of the Impact of Technical Competency, Experience and Communication Skills on the Level of ICT Innovation in Tanzania The study is relevant to Tanzania because the country depends on imported technological business solutions, which could be developed in the country. The study used the survey strategy, with 116 respondents representing different organizations within Tanzania. The findings of the study concluded that the technical competency of experts, the level of communication skills and the experience of experts in dealing with complex projects significantly impacted the level of ICT innovations within Tanzania The first objective determined the impact of technical competency on the level of innovation by the organization

Nkere (2020) conducted a study on the effect of the role of NGOS in the development of technical skills among the youth in Alexandra, Johannesburg. NGOs entrance into the development arena was not to take over the work of the government but to assist the government in improving the living condition of the people It assesses the impact of NGO’s on the youth in Alexandra. Various methods are used in the gathering of data ─ these include written materials, case study, structured and semi-structured Interviews, in-depth Interviews, purposive sampling, focus groups, and sampling methods It has been previously stated in this report that the attitude of the youth has contributed greatly and has affected skill development among the Alexandra youth

Kiprono, Okemwa and Kanyeki (2020) conducted a study on the effect of Relationship between Technical Skills Acquired and Skills Required on Electrical Equipment Servicing among Electrical Engineering Technicians in Manufacturing Industries in Kenya The study was conducted in Nandi and Uasin-Gishu Counties in Kenya, which have 7 TVETA registered and licensed public Technical Training Institutions offering Diploma, Craft Certificate and Artisan electrical engineering courses. The Kenyan government through the ministry of education should ensure adequate training is carried out to achieve training relevant for the needs of the industry. The findings indicate that skills necessary for diagnosing and repairing of faults in case of a machine failure was relevant and consistent with the needs of the industry.

Maina (2020) conducted a study on the effect of analysis of technical skills of local authority staff in urban land use planning units in central region, Kenya The purpose of this study was to investigate the influence of institutional technical skills capacity within the Local authorities in application of urban land use planning as process to controlling the development with the jurisdiction. The study also aimed at identifying gaps in the process of urban land use planning procedures and approval in local authorities, staffing levels and capacity of staff handling approvals, role of other government agencies in approval procedure and follow up procedures by local authority staff after approval. On the approval procedures in urban land use planning, the study found that all the sampled local authority councils kept records of land use applications he researcher concluded that of all the variables under investigation, technical capacity of the staff in local authorities was the most significant since

Murgor (2020) conducted a study on the effect of A Comparison of Technical and Vocational Acquired Skills Differences Based on Gender in TVET Institutions, Uasin Gishu County, Kenya The current study compared technical and vocational acquired skills acquired between male and female in Technical Vocational Education and Training (TVET) institutions, Uasin Gishu. From the findings it has been observed that Male students had significantly and highly acquired interpersonal skills, Information Communication Technical (ICT) skills, Critical analysis, ability to use numerical data and management skills than female.

Policies and Regulation and Service Delivery

Eliassen and From (2020) conducted a study on the effect of Deregulation, privatization and public service delivery: Universal service in telecommunications in Europe This paper argues that the re-emergence of a universal service debate is a political reaction to the deregulation process and an attempt to force the role of the state and public services higher on the agenda at EU level Findings suggest the legitimating effect of USO is greater than its practical effects, and that market, competition, and technology have largely addressed problems with universal access, equality, continuity and affordability, rather than regulations. In this conclusion we will look at the future of public services in a liberalized economy with special emphasis on the effects of digitalization.

Likangaga, Kumburu and Panga (2022) conducted a study on the effect of Influence of Institutional Arrangement Factors on Local Government Authorities' Service Delivery in Dodoma, Tanzania The study was conducted in Dodoma City as well as Kongwa and Chamwino District councils in Dodoma Region using a sample of 399 village council and street committee members The study established that By-laws, Acts and Policies were positive predictors of institutional arrangements towards service delivery Based on the conclusions, it was recommended that by-laws should be provided to citizens and all service delivery potential actors in LGAs

Okojie (2020) conducted a study on the effect of Decentralization and Public Service Delivery in Nigeria This paper has reviewed the constitutional provisions for political, administrative and fiscal decentralization in Nigeria and its implications for public service delivery. The study concluded that there are no clear guidelines on the interface between central line ministries such as education and health, and local governments. In Nigeria, decentralization has been used by ruling parties at the federal and state levels to renew or consolidate their power and influence at the local level. In summary, many consider decentralization one of the most important strategies for public sector reform.

Ngugi, Kiprono and Muhindi (2022) conducted a study on the effect of Influence of Policies and Regulations on Service Delivery in the County of Murang'a, Kenya Therefore good ethical leader must set standards in form of rules and regulations that can help the organization to be in a position to cope with circumstances that may involve copy with ethical differences. The findings were presented in frequency tables or graphical displays such as charts. The conclusion of the study acted as a benchmark that other researcher and can utilize to conduct other research on the subjects of service delivery and ethical leadership in organization whether public or private

Chewa, Minja and Njoroge (2022) conducted a study on the effect of the effect of policy compliance on service delivery in state-owned enterprises in the energy sector in Kenya This paper particularly established the influence of policy compliance on service delivery in State-owned enterprises. The target population was 124 suppliers, 5,107 end-user consumers, 1,817 employees in KPLC plus 480 employees in REREC and 30 employees in the Energy regulator (EPRA) The findings demonstrated that policy compliance positively affected delivery of services. Management of state owned enterprises should enact policies to reinforce practices on aspects of leadership power, leadership motivation and leadership delegation. The thesis generally intended to investigate the effect of policy compliance on service delivery in state owned enterprises within the energy sector in Kenya.

Lundenyo and Shitseswa (2024) conducted a study on the effect of Impact of Human Resource Policy Implementation on Service Delivery at the Office of the Director of Public Prosecutions, Western Region, Kenya. To achieve high-quality, efficient and timely service delivery, the Directorate has adopted a strategy of revamping, retooling, and continuous learning. The findings indicated that human resource has a significant impact on service delivery at the ODPP, Western Region, and Kenya It was concluded that Policy Implementation had a statistically significant impact on service delivery in the ODPP.

RESEARCH METHODOLOGY

Descriptive research design was used in this study. This study targeted Senior employees working in Nairobi County government. These included; heads of department and their deputies. The total target population therefore comprised of 130 staff of the county government drawn from various departments including ICT, Finance, Procurement, Enforcement, Administration and Inspectorate. The study used Yamane formulae (Yamane 1967) to determine the appropriate sample size for this study. Therefore, the sample size of the study was 98 respondents. Stratified and random sampling was used to select sampled employee of 98 staff from the target population in each strata.

Table 1: Sample Frame of the Respondents

Department	Employees	Sample
ICT	15	11
Enforcement	30	22
Finance	10	8
Administration	20	15
Procurement	10	8
Urban Planning	20	15
Inspectorate	25	19
Total	**130**	**98**

This study relied on primary data which was collected through use of structured questionnaire. Data obtained from the field was coded, cleaned, and entered into the computer for analysis using the SPSS version 25. Data analysis was done through use of descriptive and inferential statistics. Descriptive statistical included frequency, percentages, mean and standard deviation. Inferential statistical analysis to be used was multiple regression and correlation analysis. The significant of each independent variable was tested at a confidence level of 95%.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

The researcher sampled 98 respondents who were each administered with the questionnaires. From the 98 questionnaires 81 were completely filled and returned hence a response rate of 82.7%. The response rate was considered as suitable for making inferences from the data collected. As indicated by Metsamuuronen (2019), a response rate that is above fifty percent is considered adequate for data analysis and reporting while a response rate that is above 70% is classified as excellent. Hence, the response rate of this study was within the acceptable limits for drawing conclusions and making recommendations.

Descriptive Statistics Analysis

Technical Skills and Service Delivery

The first specific objective of the study was to establish the influence of technical skills on service delivery in Nairobi City County, Kenya. The respondents were requested to indicate their level of agreement on the statements relating to technical skills and service delivery in Nairobi City County, Kenya. The results were as shown in Table 2

From the results, the respondents agreed that their team possesses a high level of expertise in the latest ICT tools and technologies to effectively support business operations (M=3.964, SD= 0.997). In addition, the respondents agreed that they continuously invest in training and development to ensure that their ICT staff stays updated with current industry trends and innovations (M=3.917, SD= 0.831). Further, the respondents agreed that they have a clear and well-documented process for escalating system issues, enabling faster resolution and better service continuity (M=3.858, SD=0.563).

From the results, the respondents agreed that their systems support team is proactive in identifying potential problems and performing regular maintenance to avoid service disruptions (M= 3.831, SD= 0.851). In addition, the respondents agreed that employees are regularly trained on security best practices and are aware of potential cybersecurity threats in the organization (M=3.751, SD= 0.935). Further, the respondents agreed that their organization experience minimal security breaches or data loss due to the robust cybersecurity measures they have in place (M=3.742, SD=0.692).

Table 2: Technical Skills and Service Delivery

	Mean	Std. Deviation
Our team possesses a high level of expertise in the latest ICT tools and technologies to effectively support business operations.	3.964	0.997
We continuously invest in training and development to ensure that our ICT staff stays updated with current industry trends and innovations.	3.917	0.831
We have a clear and well-documented process for escalating system issues, enabling faster resolution and better service continuity.	3.858	0.563
Our systems support team is proactive in identifying potential problems and performing regular maintenance to avoid service disruptions.	3.831	0.851
Employees are regularly trained on security best practices and are aware of potential cybersecurity threats in the organization.	3.751	0.935
Our organization experience minimal security breaches or data loss due to the robust cybersecurity measures we have in place.	3.742	0.692
Aggregate	**3.844**	**0.812**

Policy and Regulations and Service Delivery

The second specific objective of the study was to evaluate the influence of policy and regulations on service delivery in Nairobi City County, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to influence of policy and regulations and service delivery in Nairobi City County, Kenya. The results were as presented in Table 3.

From the results, the respondents agreed that their organization regularly reviews and updates the County Service Level Agreement to ensure it remains aligned with the evolving needs of both service providers and customers (M=3.943, SD= 0.981). In addition, the respondents agreed that they experience improved service quality and response times since implementing a County Service Level Agreement with defined performance metrics (M=3.866, SD= 0.850). Further, the respondents agreed that the enforcement policy is clearly communicated to all stakeholders and is consistently applied to ensure compliance with regulations (M=3.731, SD= 0.914).

The respondents also agreed that their enforcement policy is effective in minimizing instances of non-compliance and promoting adherence to established rules and guidelines (M=3.696, SD= 0.947). In addition, the respondents agreed that they observe improvements in financial management and resource allocation as a result of the implementation of the County Finance Bill (M=3.689, SD= 0.856). Further the respondents agreed that the County Finance Bill is regularly reviewed and adjusted to reflect changes in the economic environment and ensure sustainable financial practices (M=3.671, SD=0.621).

Table 3: Policy and Regulations and Service Delivery

	Mean	**Std. Deviation**
Our organization regularly reviews and updates the County Service Level Agreement to ensure it remains aligned with the evolving needs of both service providers and customers.	3.943	0.981
We experience improved service quality and response times since implementing a County Service Level Agreement with defined performance metrics.	3.866	0.850
The enforcement policy is clearly communicated to all stakeholders and is consistently applied to ensure compliance with regulations.	3.731	0.914
Our enforcement policy is effective in minimizing instances of non-compliance and promoting adherence to established rules and guidelines.	3.696	0.947
We observe improvements in financial management and resource allocation as a result of the implementation of the County Finance Bill.	3.689	0.856
The County Finance Bill is regularly reviewed and adjusted to reflect changes in the economic environment and ensure sustainable financial practices.	3.671	0.621
Aggregate	**3.766**	**0.862**

Service Delivery

The respondents were requested to indicate their level of agreement on various statements relating to service delivery in Nairobi City County, Kenya. The results were as presented in Table 4.

From the results, the respondents agreed that their organization successfully automated a significant number of services, resulting in faster and more efficient service delivery (M=3.896, SD=0.865). In addition, the respondents agreed that the transition to automated services reduces the manual workload, allowing employees to focus on higher-value tasks (M=3.819, SD=0.945). Further, the respondents agreed that their service delivery processes are regularly evaluated and optimized to ensure that they provide prompt and high-quality services to all customers (M=3.798, SD=0.611).

From the results, the respondents agreed that they see a measurable increase in customer satisfaction due to the enhanced efficiency of their service delivery system (M=3.731, SD=0.908). In addition, the respondents agreed that the implementation of digital payment solutions contributes to a noticeable increase in revenue collection by streamlining payment processes (M=3.724, SD=0.877). Further, the respondents agreed that they observe improved revenue collection rates as a result of automating billing and payment systems (M=3.709, SD=0.543).

Table 4: Service Delivery

	Mean	Std. Deviation
Our organization successfully automated a significant number of services, resulting in faster and more efficient service delivery.	3.896	0.865
The transition to automated services reduces the manual workload, allowing employees to focus on higher-value tasks.	3.819	0.945
Our service delivery processes are regularly evaluated and optimized to ensure that we provide prompt and high-quality services to all customers.	3.798	0.611
We see a measurable increase in customer satisfaction due to the enhanced efficiency of our service delivery system.	3.731	0.908
The implementation of digital payment solutions contributes to a noticeable increase in revenue collection by streamlining payment processes.	3.724	0.877
We observe improved revenue collection rates as a result of automating billing and payment systems.	3.709	0.543
Aggregate	**3.780**	**0.792**

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (technical skills, and policy and regulations) and the dependent variable (service delivery in Nairobi City County, Kenya) dependent variable. Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients.

Table 5: Correlation Coefficients

		Service Delivery	Technical Skills	Policy and Regulations
Service Delivery	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	81		
Technical Skills	Pearson Correlation	.842**	1	
	Sig. (2-tailed)	.002		
	N	81	81	
Policy and Regulations	Pearson Correlation	.910**	.179	1
	Sig. (2-tailed)	.000	.081	
	N	81	81	81

The results revealed that there is a very strong relationship between technical skills and service delivery in Nairobi City County, Kenya (r = 0.842, p value =0.002). The relationship was significant since the p value 0.002 was less than 0.05 (significant level). The findings conform to the findings of Nkere (2020) who revealed that there is a very strong relationship between technical skills and service delivery.

The results also revealed that there was a very strong relationship between policy and regulations and service delivery in Nairobi City County, Kenya ($r = 0.910$, p value $=0.000$). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the results of Likangaga, Kumburu and Panga (2022) who revealed that there is a very strong relationship between policy and regulations and service delivery

Regression Analysis

Table 6: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.205	0.053		3.867	0.000
	technical skills	0.486	0.123	0.487	3.951	0.000
	policy and regulations	0.430	0.113	0.431	3.805	0.001

a Dependent Variable: service delivery in Nairobi City County, Kenya

The regression model was as follows:

$$\mathbf{Y = 0.205 + 0.486X_1 + 0.430X_2 + \varepsilon}$$

The results also revealed that technical skills have significant effect on service delivery in Nairobi City County, Kenya, $\beta 1=0.486$, p value= 0.000). The relationship was considered significant since the p value 0.000 was less than the significant level of 0.05. The findings conform to the findings of Nkere (2020) that there is a very strong relationship between technical skills and service delivery.

In addition, the results revealed that policy and regulations has significant effect on service delivery in Nairobi City County, Kenya $\beta 1=0.430$, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the results of Likangaga, Kumburu and Panga (2022) who revealed that there is a very strong relationship between policy and regulations and service delivery.

Conclusions

The study concludes that technical skills have a positive and significant effect on service delivery in Nairobi City County, Kenya. Findings revealed that ICT expertise, systems support and security influences service delivery in Nairobi City County, Kenya.

The study also concludes that policy and regulations have a positive and significant effect on service delivery in Nairobi City County, Kenya. Findings revealed that County Service level agreement, Enforcement policy and County finance bill influence service delivery in Nairobi City County, Kenya.

Recommendations

The study recommends that Nairobi County government should invest in the continuous development of technical skills among its employees, particularly in areas such as data analysis, information technology, and digital infrastructure management. Providing training programs and certifications in emerging technologies can enable county staff to effectively manage and optimize digital platforms for service delivery.

The study also recommends that Nairobi County government should review and update its policies and regulations to support the seamless integration of digital technologies in service delivery. By establishing progressive policies that encourage innovation while ensuring security and accountability, the county can foster an environment that enables faster, more transparent, and more efficient public services.

Suggestions for Further Studies

This study was limited to the influence of management of digital payments on service delivery in Nairobi City County, Kenya hence the study findings cannot be generalized to service delivery in the private sector in Kenya. The study therefore suggests further studies on the influence of management of digital payments on performance of the private sectorin Kenya.

Further, the study found that the independent variables (technical skills, and policy and regulations) could only explain 75.3% of service delivery in Nairobi City County, Kenya. This study therefore suggests further research on other factors affecting service delivery in Nairobi City County, Kenya.

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