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ENVIRONMENTAL SCANNING AND ITS ROLE IN ENHANCING SERVICE DELIVERY IN DEVOLVED UNITS: EVIDENCE FROM KENYA'S CENTRAL REGION

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ABSTRACT

This study examined how environmental scanning contributes to service delivery in Kenya's Central Region under devolved governance. Although devolution was intended to enhance efficiency, equity, and responsiveness, county governments continue to face challenges such as weak capacity, political interference, and inadequate resources. The study explored environmental scanning as a strategic tool for identifying opportunities, anticipating risks, and aligning planning with service delivery. Grounded in Dynamic Capabilities Theory, the Resource-Based View, and Institutional Theory, the research employed a mixed-methods design involving surveys, interviews, and document review with county officials and policymakers. Analysis showed that counties practicing structured environmental scanning achieved greater strategic responsiveness, better resource use, and improved outcomes in health, education, water, and infrastructure. Leadership commitment, institutional capacity, and regulatory support were identified as key enablers, while counties lacking scanning mechanisms displayed reactive planning and inconsistent services. The study concludes that institutionalizing environmental scanning enhances timely and citizen-centered service delivery and recommends creating formal scanning units, training staff, and integrating scanning into policy and budgeting frameworks.

Keywords: Environmental scanning, service delivery, devolved units, governance, Central Region Kenya

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INTRODUCTION

Devolution in Kenya was constitutionally entrenched through the 2010 Constitution, representing one of the most ambitious governance reforms in the country's history. Its central objective was to bring government closer to the people by creating county governments mandated to provide efficient, equitable, and participatory service delivery (Kimenyi, 2018; Ndiritu & Irungu, 2018). Devolved units were expected to address long-standing inequalities in access to public services, enhance citizen participation in governance, and promote accountability in the use of public resources (Chitere & Mutiso, 2019). Counties were thus positioned as critical drivers of socio-economic development, tasked with delivering essential services in health, education, water and sanitation, agriculture, and infrastructure. By transferring authority and resources from the national government to the local level, devolution sought to strengthen governance structures, reduce regional disparities, and empower citizens in decision-making processes (Mwangi, 2023).

While the promise of devolution has been widely celebrated, the implementation of county governance in Kenya has faced persistent challenges. Counties across the Central Region comprising Nyeri, Kirinyaga, Nyandarua, Murang'a, and Kiambu have experienced significant resource constraints, weak institutional capacity, and political interference that undermine effective service delivery (Ndung'u & Wanjohi, 2023). Limited fiscal autonomy, delays in disbursement of national funds, and inequitable allocation of resources have resulted in stalled projects, inadequate staffing in critical sectors such as healthcare and agriculture, and deteriorating infrastructure (Kariuki & Mutua, 2022). Moreover, political dynamics, including competition between county assemblies and executives as well as interference from the national government, have often compromised long-term planning (Wanjiru & Otieno, 2020). Corruption, poor financial management, and weak accountability mechanisms have further exacerbated service delivery failures (Ndiritu & Irungu, 2018). Consequently, citizen satisfaction with devolved services remains uneven, with rural populations particularly disadvantaged in access to quality healthcare, water, and infrastructure (Mwangi, 2023).

These governance challenges raise questions about the extent to which county governments can adapt to complex and dynamic environments while remaining responsive to citizen needs. One critical dimension of strategic management that has gained prominence in this regard is environmental scanning. Environmental scanning refers to the systematic collection and analysis of information from both the internal and external environment to identify emerging opportunities and threats (Choo, 2001). It enables organizations to align their strategies with shifting social, economic, political, and technological conditions (Poister, 2021). Within the public sector, environmental scanning facilitates informed decision-making, helps anticipate risks, and supports the efficient allocation of resources. For devolved units in Kenya, institutionalizing environmental scanning has the potential to transform service delivery by making governance more adaptive, evidence-based, and citizen-centered (Mwangi, 2023).

The importance of environmental scanning is underlined by global governance experiences. For example, Singapore has successfully institutionalized data-driven governance, using real-time monitoring of demographic and economic indicators to align public policies with societal needs (Poister, 2021). Similarly, Estonia's digital governance framework leverages environmental scanning tools to forecast service demands, enhance transparency, and streamline decision-making (Choo, 2001). Closer to Africa, Rwanda has demonstrated how participatory environmental scanning at the community level strengthens decentralization, enabling local governments to design services that reflect citizen priorities (Ndung'u & Wanjohi, 2023). These international cases illustrate how systematic scanning practices allow governments to stay responsive and innovative in the face of rapid socio-economic and technological change. Kenya's devolved units, operating in similarly dynamic environments, stand to benefit from embedding environmental scanning in their strategic management systems.

Within Kenya, however, research indicates that counties often underutilize environmental scanning in decision-making. Many rely on ad hoc or politically driven planning processes that fail to integrate systematic

analysis of external and internal trends (Kariuki & Mutua, 2022). As a result, county governments frequently engage in reactive rather than proactive service delivery, leading to duplication of projects, inefficient allocation of resources, and low citizen satisfaction (Wanjiru & Otieno, 2020). The Central Region, which plays a critical role in Kenya's agricultural economy and has diverse socio-economic characteristics, illustrates both the potential and shortcomings of devolution (Mwangi, 2023). Some counties, such as Kiambu, have embraced innovative approaches in infrastructure and service digitization, while others continue to lag due to weak institutional capacity and limited application of strategic tools like environmental scanning (Ndiritu & Irungu, 2018). Examining how counties in this region utilize environmental scanning is therefore essential to understanding the determinants of effective service delivery in devolved units.

The theoretical grounding for environmental scanning in governance lies in several complementary perspectives. The Dynamic Capabilities Theory emphasizes the importance of organizational agility and adaptability in responding to changing environments (Teece et al., 1997). County governments, much like firms, require the capacity to sense opportunities, seize them through strategic resource allocation, and transform their operations to remain effective. Resource-Based View (RBV) complements this by highlighting the value of leveraging internal capabilities such as skilled personnel, technology, and leadership structures to gain a governance advantage (Barney, 1991). Meanwhile, Institutional Theory underscores the role of regulatory frameworks and compliance structures in shaping how counties implement strategic decisions (Pfeffer & Salancik, 1978). Together, these perspectives suggest that environmental scanning is not a peripheral activity but a central mechanism for linking governance structures, institutional capacities, and service delivery outcomes (Ndung'u & Wanjohi, 2023).

Empirical evidence reinforces the relevance of environmental scanning in public sector governance. Studies have shown that local governments that systematically monitor their environments achieve greater efficiency, citizen satisfaction, and developmental outcomes (Poister, 2021). In Kenya, Mwangi (2023) demonstrated that counties adopting environmental scanning practices achieved better alignment between planning and resource allocation, resulting in improved service provision. Nevertheless, a persistent gap exists between theoretical models and practical implementation, as many counties lack the institutional mechanisms, human capacity, or political will to operationalize scanning effectively (Kariuki & Mutua, 2022).

The Central Region provides an ideal context for exploring these dynamics. Its five counties represent a mix of rural and urban populations, agricultural and industrial economies, and varying levels of institutional development (Mwangi, 2023). For example, Nyeri County has invested significantly in healthcare and agricultural extension services, while Nyandarua struggles with infrastructural deficits and underfunded service delivery (Ndiritu & Irungu, 2018). Kiambu County, facing rapid urbanization, has implemented innovative ICT-based systems but continues to grapple with resource mismanagement (Ndung'u & Wanjohi, 2023). Such diversity allows for a comprehensive analysis of how environmental scanning practices or their absence shape service delivery outcomes.

In addition to contextual challenges, citizen expectations of devolved governments remain high. The 2010 Constitution enshrined the right to access quality services, and citizens increasingly demand accountability and transparency from county administrations (Kimenyi, 2018). This has created pressure on counties to adopt evidence-based planning approaches that reflect community needs. Public participation, mandated by law, is a critical aspect of environmental scanning, ensuring that governance decisions are not only data-driven but also socially legitimate (Chitere & Mutiso, 2019). Counties that integrate citizen feedback into their scanning processes are better positioned to design services that enhance equity, responsiveness, and sustainability (Mwangi, 2023).

Research Problem

Devolved governance in Kenya has created opportunities for localized planning and citizen-centered service delivery. However, counties continue to face structural constraints that hinder the institutionalization of environmental scanning as a strategic management tool. Financial limitations remain a critical barrier since counties depend heavily on intergovernmental transfers from the national government, which are often delayed and inadequate to meet rising expenditure demands (Mwangi & Otieno, 2021; World Bank, 2022). Human resource gaps also persist, particularly in technical areas such as data analytics, strategic planning, and performance monitoring skills essential for conducting systematic scanning and evidence-based decision-making (Kiai & Muturi, 2020; Nyamori & Gachanja, 2023).

Beyond resource challenges, political interference undermines the integration of scanning into county operations. Elected leaders frequently prioritize short-term, politically visible projects over long-term strategic interventions, thereby weakening institutional commitment to proactive planning (Obosi & Nyanjom, 2021; Oloo, 2023). Weak enforcement of regulatory and accountability frameworks further compounds the problem, allowing corruption and mismanagement to persist, which compromises the effectiveness of scanning outcomes and ultimately erodes public trust in devolved institutions (Transparency International, 2022; Onyango, 2023).

Scholarly work on devolution in Kenya has predominantly emphasized fiscal decentralization, citizen participation, and service delivery outcomes (Bosire & Wanjala, 2020; Institute of Economic Affairs, 2021). However, a conceptual gap exists regarding how environmental scanning influences planning and resource allocation in county governments. Existing studies have not sufficiently examined scanning as a systematic governance practice that shapes responsiveness, efficiency, and long-term sustainability under devolution (Kariuki & Wanjiru, 2022). Furthermore, a contextual gap remains in the Central Region of Kenya, an area that is both economically dynamic and administratively diverse, yet underexplored in empirical scholarship.

This study therefore seeks to bridge these gaps by examining the role of environmental scanning in enhancing service delivery in devolved units within Kenya's Central Region. Specifically, it investigates how counties conduct environmental scanning, the extent to which it informs strategic planning and resource allocation, and the barriers that hinder its institutionalization.

Ultimately, the study contends that environmental scanning is a critical determinant of governance effectiveness under devolution. Counties that institutionalize structured scanning practices are better positioned to anticipate emerging challenges, optimize scarce resources, and align service delivery with citizen priorities (UNDP, 2021; Keter & Akinyi, 2024). Conversely, neglect of scanning processes reinforces reactive planning, resource wastage, and declining citizen confidence in devolved governance.

LITERATURE REVIEW

Theoretical perspectives provide the foundation for understanding the role of environmental scanning in devolved governance systems. By drawing on established theories, the study is able to situate environmental scanning within broader explanations of organizational decision-making, resource utilization, adaptability, and institutional compliance. This section therefore reviews key theories including Rational Decision-Making Theory, the Resource-Based View, Dynamic Capabilities Theory, and Institutional Theory that collectively explain how counties can leverage environmental scanning to anticipate change, allocate resources strategically, and align with governance frameworks.

Environmental Scanning in Public Sector Governance

Environmental scanning is increasingly recognized as a central strategic tool in public sector organizations, particularly within devolved governance systems where responsiveness and adaptability are essential for effective service delivery. It is commonly defined as the systematic collection, analysis, and interpretation of information from internal and external environments to support evidence-based decision-making (Cheng &

Zhang, 2021; Mitra, 2022). In governance contexts, scanning forms the foundation of strategic management by equipping decision-makers with insights necessary to identify opportunities, mitigate risks, and align scarce resources with emerging priorities (Kithinji & Wanjiru, 2023).

In devolved governments, scanning is closely linked to organizational learning, strategic alignment, and proactive decision-making. These three dimensions determine how institutions navigate dynamic environments, enabling them to remain efficient, responsive, and equitable in service delivery (Nabatchi & Sancino, 2020; UNDP, 2021). Counties that adopt structured scanning practices are therefore better positioned to anticipate change and to allocate resources strategically, enhancing citizen trust in governance outcomes.

Theoretical Perspectives

Rational Decision-Making Theory provides one of the earliest foundations for environmental scanning. It assumes that decision-makers systematically evaluate alternatives and select the most optimal course of action, a process that begins with accurate environmental awareness (March, 2020). Scanning thus becomes indispensable for rational choices in planning and policy prioritization.

The Resource-Based View (RBV) extends this logic by emphasizing that organizations achieve sustained advantage by deploying resources that are valuable, rare, inimitable, and non-substitutable (Barney et al., 2021). In county governments, environmental scanning provides the evidence base upon which financial, human, and technological resources can be effectively allocated to priority sectors such as health, infrastructure, and education (Obeng-Odoom, 2020).

Complementing RBV, the Dynamic Capabilities Theory stresses that organizational effectiveness depends not just on resource possession but on the ability to continuously reconfigure and adapt these resources in response to change (Teece, 2021). Scanning plays a pivotal role in this cycle by enabling counties to sense environmental signals, seize emerging opportunities, and transform operations to remain relevant in fluid political and socio-economic contexts (Kamau & Gekonge, 2022).

Finally, Institutional Theory offers insights into how environmental scanning functions within governance systems. Public organizations operate within regulatory and normative frameworks including constitutional mandates, statutory laws, and oversight bodies that shape decision-making (Scott, 2020). Scanning helps counties align strategies with institutional requirements while reinforcing legitimacy and accountability by demonstrating that decisions are transparent and evidence-based (Ochieng, 2023). This legitimacy is critical in sustaining public trust under devolved governance.

Synthesis

The integration of these theoretical perspectives demonstrates that environmental scanning is not a peripheral or optional activity but rather a central mechanism that strengthens organizational capacity in devolved units. It links foresight with strategic allocation of resources, enhances compliance with institutional frameworks, and ensures adaptability in a constantly changing environment. For Kenya's counties, institutionalizing environmental scanning can thus bridge the gap between policy intent and service delivery outcomes, contributing to more resilient and citizen-centered governance (Keter & Akinyi, 2024).

Empirical Review

Empirical studies complement theoretical perspectives by providing evidence on how environmental scanning has been applied in practice across different governance contexts. Reviewing both international and local literature highlights the successes, challenges, and lessons that inform the institutionalization of scanning within devolved units. This section therefore examines empirical findings from developed countries, African nations, and the Kenyan context, before identifying knowledge gaps that the current study seeks to address.

Environmental Scanning in Developed Contexts

Empirical studies from developed nations demonstrate that institutionalized environmental scanning enhances efficiency and accountability in public administration. For instance, Singapore and Estonia have embedded scanning practices into digital governance models, enabling governments to anticipate demographic trends, economic demands, and technological disruptions (OECD, 2021; Drechsler, 2022). These practices have resulted in improved efficiency, reduced corruption, and increased citizen satisfaction.

Similarly, in the United States, local governments that engage in systematic scanning report up to a 30 percent improvement in organizational performance, attributed to better alignment of strategies with environmental realities (Kim & Lee, 2020). These findings confirm that environmental scanning facilitates proactive rather than reactive planning, thereby ensuring more consistent and effective service delivery.

Environmental Scanning in African Contexts

Within Africa, research underscores the potential of environmental scanning to strengthen governance, though challenges persist. In Rwanda, community-based scanning practices have enhanced participatory governance by involving citizens in identifying local needs and monitoring government performance. This has improved both responsiveness and legitimacy (Nzabonimpa, 2021). In South Africa, the integration of scanning into municipal planning has been linked to more equitable distribution of services across diverse communities (Van der Walddt, 2020).

Despite these gains, African governments continue to face technical capacity limitations, weak data systems, and political interference that constrain effective application of scanning (Mukonza & Managa, 2022). These findings align with the Kenyan experience, where governance and institutional weaknesses often undermine the impact of scanning practices.

Environmental Scanning in the Kenyan Context

Kenya's devolved system has produced a growing body of literature on environmental scanning, though findings remain mixed. Mwangi (2023) established that counties adopting structured scanning demonstrated stronger alignment between resource allocation and service delivery priorities, particularly in health and education sectors. Similarly, Ndung'u and Wanjohi (2023) found that counties engaging in continuous stakeholder consultations and feedback mechanisms recorded higher public satisfaction and legitimacy in governance outcomes.

However, other studies reveal persistent weaknesses. Many counties rely on ad hoc and politically motivated planning, which often results in duplication of projects, misallocation of scarce resources, and inconsistent service outcomes (Obosi & Nyanjom, 2021; Oloo, 2023). While legal frameworks such as the Public Finance Management Act and the County Governments Act mandate evidence-based and participatory planning, implementation remains inconsistent. In many cases, public consultations are treated as a formality rather than as a meaningful input into decision-making (IEA Kenya, 2022).

Capacity constraints further undermine scanning effectiveness. Counties often face shortages of technical expertise, unreliable data systems, and absence of institutionalized scanning procedures (Kiai & Muturi, 2020; Nyamori & Gachanja, 2023). Weak enforcement of regulatory frameworks exacerbates these challenges. Kariuki and Mutua (2022), for instance, found that in some counties, data generated from scanning was disregarded, allowing resource mismanagement and corruption to persist. This demonstrates that the utility of scanning depends not only on the collection of information but also on the integrity of governance structures that use it.

Knowledge Gaps

The reviewed literature underscores that while environmental scanning is globally acknowledged as a powerful governance tool, its application in African and Kenyan county governments remains uneven and underdeveloped. Specifically, a contextual gap exists in the Central Region of Kenya, an area characterized by

socio-economic diversity, strategic importance in agriculture and industry, and varying levels of institutional capacity. Despite its importance, little empirical evidence examines how counties in this region operationalize environmental scanning and how it influences service delivery outcomes. Addressing this empirical and contextual gap is therefore critical in informing governance reforms and strengthening institutional capacities under devolution.

METHODOLOGY

This section outlined the methodological approach adopted to investigate the role of environmental scanning in enhancing service delivery in devolved county governments within Kenya's Central Region. The methodology was designed to ensure that the findings are robust, reliable, and aligned with the research objectives. It discusses the research philosophy, design, target population, sampling procedures, data collection methods, data analysis techniques, and the strategies employed to ensure validity, reliability, and ethical compliance. By combining both quantitative and qualitative approaches, the methodology provided a comprehensive framework for capturing the complex dynamics of environmental scanning and its influence on governance outcomes.

Research Philosophy: The study was anchored on **pragmatism**, which emphasizes the use of multiple approaches to understand complex social realities (Creswell & Plano Clark, 2021). Pragmatism was considered appropriate because environmental scanning and service delivery involve both measurable relationships and subjective institutional experiences. This philosophy justified the adoption of a **mixed-methods approach**, enabling the study to combine quantitative rigor with qualitative depth (Saunders et al., 2019).

Research Design: The research employed a descriptive and explanatory design. The descriptive component documented the current state of environmental scanning practices in county governments, while the explanatory component analyzed causal relationships between scanning and service delivery outcomes. This design allowed for both contextual understanding and statistical testing, thereby strengthening the validity of findings (Bryman, 2020).

Target Population: The target population comprised **senior administrators, policymakers, and planners** drawn from the five counties of Kenya's Central Region: Kiambu, Nyeri, Kirinyaga, Murang'a, and Nyandarua. Specifically, this included county executive committee members, chief officers, directors of departments, and unit heads responsible for planning, budgeting, finance, agriculture, health, and infrastructure. County records indicated a total population of **412 officials**, who were deemed most relevant because of their direct involvement in strategic planning, resource allocation, and policy implementation.

Sampling Procedure and Sample Size: The study adopted a **stratified random sampling technique**, with each stratum defined by departmental roles to ensure inclusion of critical functions such as health, agriculture, education, and infrastructure. From the population of 412, a sample of **200 respondents** was selected, consistent with sampling recommendations for populations above 400 (Kothari, 2021). This approach enhanced representativeness and minimized sampling bias.

Data Collection Instruments: Data were collected through **structured questionnaires, semi-structured interviews, and document review**.

- Questionnaires consisted mainly of closed-ended questions and captured quantitative data on the frequency of scanning, its integration into planning, and its perceived effect on service delivery.
- Interviews were conducted with senior officials to gather qualitative insights on leadership, political interference, and institutional dynamics.
- Document reviews covered County Integrated Development Plans (CIDPs), budget reports, and Auditor General reports, providing secondary validation of practices.

The instruments were pre-tested with 15 officials outside the study counties to ensure clarity, validity, and reliability, as recommended by Mugenda & Mugenda (2019).

Data Analysis: Quantitative data were analyzed using **SPSS**. Descriptive statistics (frequencies, means, and percentages) summarized environmental scanning practices, while multiple regression analysis tested predictive relationships between scanning and service delivery. The regression model was specified as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where:

- Y represents service delivery outcomes,
- X₁ represents Environmental scanning practices (frequency, scope, and integration into planning)
- X₂ represents Institutional capacity (skills, structures, and systems)
- X₃ represents Leadership commitment (support and enforcement of scanning practices)
- X₄ represents Citizen participation in planning and budgeting
- β_0 is the constant $\beta_1 \dots \beta_4$ are the coefficients and ϵ is the error term

Qualitative data from interviews and documents were analyzed thematically, with transcripts coded into categories such as leadership, institutional capacity, political interference, and regulatory compliance (Nowell et al., 2017).

Validity, Reliability, and Ethical Considerations: Several measures ensured validity and reliability. **Triangulation** was achieved by cross-verifying questionnaire responses with interview findings and document reviews (Fetters, 2020). Reliability was ensured through standardized instruments and inter-coder checks during qualitative analysis.

Ethical considerations were strictly observed. Permission was obtained from relevant county authorities, and informed consent was sought from all respondents. Confidentiality, anonymity, and voluntary participation were guaranteed. Data were stored securely and used strictly for academic purposes, in line with ethical research guidelines (Resnik, 2020).

FINDINGS

Table 1: Frequency of Environmental Scanning Practices Across Counties

County	Regular Scanning (%)	Irregular Scanning (%)	No Format Scanning (%)
Kiambu	72.4	21.3	6.3
Murang'a	54.2	33.8	12
Nyeri	69.7	23.5	6.8
Kirinyaga	58.6	30.4	11
Nyandarua	49.5	35.7	14.8

The results show that counties such as Kiambu and Nyeri have institutionalized environmental scanning more effectively compared to Murang'a and Nyandarua, which still rely largely on irregular or informal scanning. Counties with structured practices were better at anticipating service delivery needs.

Table 2: Regression Results – Environmental Scanning and Service Delivery Outcomes

Variable	Coefficient (β)	Std Error	T value	Sig. (p)
Environmental Scanning (X ₁)	0.482	0.071	6.79	0.000
Institutional Capacity (X ₂)	0.311	0.066	4.71	0.000
Leadership Commitment (X ₃)	0.259	0.062	4.18	0.000
Citizen Participation (X ₄)	0.197	0.058	3.38	0.001
Constant (β_0)	0.124	0.048	2.58	0.002

Model Summary: $R^2 = 0.673$, Adjusted $R^2 = 0.664$, $F(4,195) = 93.57$, $p < 0.001$

The regression analysis indicates that environmental scanning has the strongest positive and significant effect on service delivery ($\beta = 0.482$, $p < 0.001$). Institutional capacity, leadership commitment, and citizen participation also significantly influence service outcomes, but to a lesser degree. The high R^2 value suggests that 67.3 percent of the variation in service delivery is explained by the four predictors.

Discussion of Findings

The study findings confirm that environmental scanning plays a critical role in improving service delivery in county governments. Counties with formalized scanning frameworks were able to anticipate population growth, allocate resources equitably, and respond proactively to emerging socio-economic needs. For example, Nyeri and Kiambu demonstrated better alignment of health and education resources with demographic trends, while counties with weaker scanning mechanisms such as Nyandarua struggled with infrastructural and service delivery gaps.

Regression analysis reinforces the importance of environmental scanning as a predictor of service delivery performance, showing that counties with structured scanning frameworks had greater efficiency, accessibility, and citizen satisfaction. These results are consistent with Poister (2021) and Mwangi (2023), who noted that systematic scanning enhances organizational responsiveness and resource utilization.

Qualitative findings provided additional depth by highlighting challenges such as political interference, inadequate technical capacity, and weak data infrastructure. Respondents reported that while scanning results were often available, their application in decision-making was undermined by short-term political interests. This weakened the link between analysis and service outcomes, echoing findings by Ndung'u and Wanjohi (2023).

Institutional capacity and leadership commitment emerged as important enablers. Counties where governors championed evidence-based planning allocated more resources to scanning activities, established data systems, and ensured compliance with regulatory frameworks. Conversely, counties with weak leadership or poor regulatory oversight defaulted to ad hoc planning.

Citizen participation also played a significant mediating role. In counties where communities actively contributed to identifying priorities, projects were more legitimate and better aligned with local needs. However, in many cases, participation was tokenistic, limiting its value as a complement to formal scanning practices.

CONCLUSION AND RECOMMENDATIONS

This study set out to examine the role of environmental scanning in enhancing service delivery in devolved county governments within Kenya's Central Region. The findings confirm that environmental scanning is not a peripheral activity but a central element of strategic governance that directly influences efficiency, equity, and citizen-centered service delivery. Counties that institutionalized structured scanning practices were able to anticipate future demands, align resource allocation with real needs, and build resilience against political, economic, and environmental uncertainties (Nzabonimpa, 2021; UNDP, 2021). In contrast, counties that relied on ad hoc or politically driven planning exhibited duplication of projects, misallocation of resources, and inconsistent service outcomes (Obosi & Nyanjom, 2021; Oloo, 2023).

The evidence further demonstrates that environmental scanning promotes systematic and evidence-based planning. Where scanning was conducted comprehensively, projects were better aligned with community priorities, resources were utilized more efficiently, and citizens reported higher levels of satisfaction (Mwangi, 2023; Ndung'u & Wanjohi, 2023). However, its success was found to be mediated by institutional capacity and leadership commitment. Counties with skilled personnel, adequate financial resources, and visionary leaders were more successful in translating scanning results into tangible improvements in governance.

(Kamau & Gekonge, 2022). Conversely, weak leadership or short-term political considerations marginalized scanning practices, resulting in reactive planning and weak service delivery outcomes.

The study also established that regulatory frameworks and oversight play a decisive role. Counties that operated under strong accountability systems, particularly those enforced by the Office of the Auditor General and the Controller of Budget, were more likely to integrate scanning findings into planning and budgeting processes. Where enforcement was weak, political discretion often undermined the effectiveness of scanning (Kariuki & Mutua, 2022; Transparency International, 2022). Similarly, citizen participation was identified as a critical factor. Counties that engaged communities in identifying priorities and monitoring performance enriched their scanning processes with local knowledge, enhanced the legitimacy of decisions, and strengthened trust between citizens and government (IEA Kenya, 2022; Onyango, 2023). Unfortunately, in many instances, participation was treated as a legal formality rather than a genuine avenue for citizen influence.

Despite its promise, environmental scanning faces significant challenges in Kenya's devolved system, including capacity gaps, political interference, and weak institutionalization. Many counties lack personnel trained in data collection and analysis, leading to overreliance on external consultants, while political leaders often prioritize short-term projects with electoral appeal instead of evidence-based initiatives identified through scanning. Weak institutional frameworks also mean that even when scanning is undertaken, its results are not consistently integrated into planning and budgeting processes (Nyamori & Gachanja, 2023).

From these findings, several recommendations are put forward. Counties should establish formal environmental scanning units within planning departments, adequately resourced and staffed with trained professionals to ensure sustainability and accountability (World Bank, 2022). Continuous investment in capacity building is essential, with counties encouraged to partner with universities and research institutions to enhance technical skills among staff and sensitize political leaders on the value of evidence-based decision making. Mechanisms should also be established to ensure that scanning results inform County Integrated Development Plans, annual development plans, and budgets, linking data collection to actual fiscal allocations. The national government has a role in developing standardized frameworks for scanning and providing technical and financial support to counties to strengthen institutional capacity (Oloo, 2023). Oversight bodies must enhance enforcement of compliance with planning requirements, compelling counties not only to conduct scanning but also to demonstrate how results inform policy and budgeting decisions (Transparency International, 2022). Furthermore, counties should deepen citizen participation by creating more inclusive and genuine engagement platforms, supported by digital tools to widen access and feedback. Finally, counties should embrace technological innovations such as GIS systems, mobile data platforms, and digital dashboards to improve the timeliness, accuracy, and transparency of scanning practices (Drechsler, 2022; Keter & Akinyi, 2024).

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