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ENTREPRENEURIAL ECOSYSTEM PRACTISES AND PERFORMANCE OF SMES IN NAIROBI CITY COUNTY'S TRADE SECTOR, KENYA

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ABSTRACT

Entrepreneurial ecosystem support practices are interactions among institutions, infrastructure, policies, and support systems that collectively create an environment conducive for entrepreneurial development and business growth. Small and medium enterprises (SMEs) play a critical role in promoting economic growth, employment creation, and social well-being. However, performance of SMEs in Kenya continues to face challenges associated with inadequate infrastructure and unfavorable policy environments. This study examined the effect of infrastructure support practices and policy support practices on performance of SMEs in Nairobi City County's wholesale and retail trade sector, Kenya. The study was guided by Infrastructure-Led Growth Theory and Institutional Theory. The study adopted a descriptive research design targeting 11,253 SMEs operating within Nairobi City County's wholesale and retail trade sector, with business managers serving as the unit of observation. Using Yamane's (1967) formula, a sample size of 386 SMEs was obtained through stratified random sampling. Primary data was collected using structured questionnaires. A pilot study involving 39 business managers was conducted to test validity and reliability of the research instrument. Data was analyzed using Statistical Package for Social Sciences (SPSS) Version 28 using descriptive and inferential statistics, including correlation and multiple regression analysis. Findings revealed that infrastructure support practices had a strong positive and statistically significant relationship with performance of SMEs ($r = 0.543$, $p = 0.000$), while policy support practices had the strongest positive and statistically significant relationship with performance of SMEs ($r = 0.828$, $p = 0.000$). Regression findings further established that both variables significantly predicted performance of SMEs in Nairobi City County's wholesale and retail trade sector. The study concludes that infrastructure support practices and policy support practices significantly influence performance of SMEs. The study recommends improvement of transport systems, electricity supply, water supply, and digital infrastructure within business zones. The study further recommends implementation of supportive regulatory and policy reforms aimed at simplifying licensing procedures, improving tax fairness, and enhancing access to SME support programs.

Key Words: Entrepreneurial Ecosystem Practices, Infrastructure Support Practices, Policy Support Practices, Performance of SMEs, Nairobi City County, Kenya.

Background of the Study

Entrepreneurial ecosystem practices are groups of interdependent individuals and elements that work together in a specific region to promote successful entrepreneurship. Many researchers view entrepreneurial ecosystems as complex, dynamic systems that are always changing (Cavallo et al., 2021). Contemporary models define these ecosystems through interconnected elements such as institutional frameworks, availability of skilled labour, access to funding, knowledge infrastructure, and market demand (Stam & van de Ven, 2021; Dhewanto et al., 2022). These components interact to create environments where entrepreneurs can innovate, scale, and sustain their ventures. Current research emphasizes that successful ecosystems rely not only on the presence of these elements but also on their quality of interaction and adaptability to regional needs (Roundy, 2022).

According to Suresh and Ramraj (2022), an entrepreneurship ecosystem practice is, by nature, the result of the interaction between people, roles, organizations, infrastructure, and events that create an environment apt for the enhancement of entrepreneurial activities. This ecosystem is composed of components like access to capital, entrepreneurship training, the presence of government-oriented entrepreneurship plans, research and development, commercial and legal Policy Support and infrastructure, and easy regulations to enter a job. It plays a role in the creation and development of entrepreneurship through ethical, financial, technological, market, social, network, governmental, and environmental support. The entire entrepreneurial ecosystem benefits from startups acting as network brokers between venture capitalists and other startups due to their embeddedness. By connecting startups with other players, entrepreneurial support organizations can aid in the development of a sufficiently dense financial support network (Rijnsoever, 2022).

Statement of the Problem

A healthy entrepreneurial ecosystem relies on a network of people and institutions working together. Ideally, businesses need reliable power, strong networks, and fair Policy Support to grow. In hubs like Singapore and Tel Aviv, startups thrive because they have easy access to capital and mentorship (Faizah et al., 2024; Autio et al., 2021). These systems lower failure rates by coordinating resources effectively. However, Nairobi City County's ecosystem is currently fragmented and faces several major hurdles. Infrastructure remains a primary concern for many small and medium enterprises (SMEs). Frequent power outages and poor roads make daily operations difficult and expensive. The Kenya Association of Manufacturers (2023) found that 68% of SMEs struggle with high costs from power issues. Additionally, bad road networks increase distribution expenses by roughly 25%. These deficiencies especially hurt the wholesale and retail sector, which represents over half of Nairobi City County's SMEs (KNBS, 2022).

Professional networking in Nairobi City County is often too informal to provide real growth. Many entrepreneurs, particularly women, lack access to structured groups that offer credit and mentorship (Mungai, 2021). Currently, fewer than 20% of local SMEs are linked to formal trade networks (Okatch, 2022). This lack of connection makes it hard for retail firms to expand their reach. Furthermore, many businesses struggle to find new customers despite being in a major commercial hub. Most SMEs rely on small, local groups of buyers, making them vulnerable to market shifts (Njeru & Wambugu, 2021). Weak branding and distribution issues can lead to revenue losses of up to 60% (Guguyu, 2022). Digital tools offer hope, yet only 35% of Kenyan SMEs use e-commerce (UNCTAD, 2022). This digital gap keeps many wholesale businesses from finding new market opportunities.

Policy implementation also remains a significant challenge for local business owners. Complicated licensing and heavy regulations lead 84% of SMEs to stay informal (KNBS,

2022). New taxes have also increased the cost of doing business for small firms (Mwenda, 2020). These pressures contribute to a high failure rate, with 80% of SMEs closing within five years (Mwaura, Muchara, & Kangu, 2024). Recent data shows the retail sector is growing slowly compared to previous years (Economic Survey, 2024). Many traders now express pessimism about future costs and low demand (KAM, 2025). While previous research focused on farming or manufacturing, the retail sector remains understudied (Mwaniki, 2024; Muathe et al., 2022). This study examines how infrastructure and policy support interact to affect retail performance. The goal is to provide evidence that helps strengthen Nairobi City County's urban economy and SME sustainability.

Objectives of the Study

The general objective of the study was to determine effect of entrepreneurial ecosystem practices on the performance of SMEs in Nairobi City County's wholesale and retail sector.

Specific Objectives

i. To examine the effect of infrastructure support practices on performance of SMEs in Nairobi City County's wholesale and retail sector.

ii. To determine the effect of policy support on performance of SMEs in Nairobi City County's wholesale and retail sector.

LITERATURE REVIEW

Theoretical Review

Infrastructure-Led Growth Theory

The infrastructure-Led Growth Theory (ILGT), rooted in development economics and championed by scholars such as Aschauer (1989) and Calderón & Servén (2004), posits that infrastructure is a form of capital investment that significantly enhances productivity and long-term economic growth. The theory suggests that infrastructure, such as transport systems, energy supply, water, and communication facilities, provides the foundational support necessary for efficient production, distribution, and exchange. In this sense, infrastructure is comparable to traditional forms of capital, but it operates at a systemic level by enabling enterprises, households, and governments to function more effectively.

Aschauer (1989) introduced the idea that public infrastructure investment directly increases private sector productivity by reducing transaction and operational costs. For instance, reliable electricity enables longer production hours, efficient logistics reduce delivery times, and modern ICT infrastructure improves access to information and Marketing. Calderón and Servén (2004) extended this argument by empirically demonstrating that countries with higher levels of infrastructure investment achieve faster GDP growth, reduced inequality, and improved competitiveness of small and medium-sized enterprises (SMEs).

In the context of SMEs, infrastructure is particularly important because it shapes their ability to compete, grow, and survive in dynamic Marketing. SMEs often lack the financial buffers that allow larger firms to compensate for infrastructural deficiencies. Studies such as Kiveu and Ofafa (2017) highlight that unreliable electricity supply in Kenya increases the cost of doing business by up to 30%, while poor road networks restrict access to Marketing. Similarly, ICT infrastructure has emerged as a transformative factor: Nyangilo (2022) notes that digital platforms and internet connectivity enable SMEs to reach wider customer bases, diversify sales channels, and enhance marketing strategies, all of which directly improve Performance of SMEs.

Modern extensions of ILGT incorporate the role of digital infrastructure, recognizing that broadband internet, mobile technology, and financial infrastructure (e.g., mobile money) are as

critical as traditional physical infrastructure. Chen and Qian (2020) argue that firms with stronger access to both physical and digital infrastructure outperform their peers in efficiency, market reach, and customer satisfaction. This demonstrates that infrastructure's impact extends beyond lowering costs, it also enhances adaptability, innovation, and competitiveness in globalized economies.

The infrastructure-Led Growth Theory is highly relevant to this study as it provides a theoretical lens to analyse how infrastructure support practices supports SME performance in Nairobi City County. By conceptualizing infrastructure support practices as both a public good and a production enabler, the theory underscores that SMEs with better access to transport, electricity, ICT, and business-support services are more likely to achieve higher profitability, sales growth, and customer satisfaction. In Nairobi City County's entrepreneurial ecosystem, where infrastructural disparities remain pronounced, ILGT highlights the importance of addressing these gaps to unlock SME potential and foster inclusive economic growth.

Institutional Theory

Institutional Theory, developed by DiMaggio and Powell (1991), provides a framework for understanding how external structures, such as norms, rules, laws, and regulatory bodies, shape the behavior and performance of organizations. The theory posits that firms do not exist in a vacuum; rather, they operate within an institutional environment that both constrains and enables their actions. Institutions, as defined by this theory, are the formal and informal rules that structure social and organizational behavior. Over time, these institutions gain legitimacy, and firms are compelled to conform to institutional norms to appear rational, responsible, and credible in the eyes of stakeholders (Scott, 2014).

According to DiMaggio and Powell, organizational structures and practices are often adopted not purely for their technical efficiency but because they are considered legitimate and socially acceptable. This process, known as institutional isomorphism, leads organizations to mimic others in the same field, especially when facing uncertainty. In the case of SMEs, particularly in regulated sectors, survival and growth often depend not just on entrepreneurial competence but also on the ability to comply with institutional expectations, including regulatory standards, licensing, and tax compliance.

Institutional Theory highlights that the external institutional environment, comprising government agencies, regulatory bodies, and policy frameworks, has a direct influence on firm behaviour and performance. For SMEs, this influence manifests through access to credit, taxation Policy Support, business registration processes, labour laws, and market regulation. For example, complex licensing procedures or frequent policy shifts may discourage innovation or scale-up efforts, while supportive Policy Support such as tax incentives or credit guarantees can stimulate growth and formalization (Greenwood et al., 2017).

In the Kenyan context, especially within Nairobi City County, SMEs operate under devolved government systems and multiple institutional layers. These include national Policy Support, county-level bylaws, and sectoral regulations. Institutional Theory is thus relevant in analyzing how such layered institutional structures affect SME performance, particularly in terms of operational efficiency, sustainability, and access to Marketing or funding. The theory also underscores the importance of policy legitimacy, where entrepreneurs are more likely to adopt regulations perceived as fair, transparent, and beneficial.

This theoretical lens aligns directly with the dependent variable of this study, performance of SMEs. SME performance is shaped not only by internal capabilities but also by how well these businesses navigate and respond to external institutional pressures. Policy Support, one of the independent variables, are a key part of this institutional environment. Through the lens of Institutional Theory, we understand that SMEs adopt certain practices or innovations not solely to improve efficiency but to gain legitimacy, avoid sanctions, and access institutional resources.

Therefore, institutional structures and public Policy Support are not just background conditions; they are active determinants of business behavior and outcomes, making this theory foundational to understanding how Policy Support influence SME performance.

Conceptual Framework

According to Shavelson et al. (2021), a conceptual framework describes the way a researcher understands the factors and variables involved in the study and the relationships among them. It provides a systematic structure that guides the direction of the study by illustrating how the independent variables are expected to influence the dependent variable. The conceptual framework also assists in guiding data collection, analysis, and interpretation of findings. In this study, the conceptual framework illustrates the relationship between selected entrepreneurial ecosystem support practices and performance of SMEs in Nairobi City County's wholesale and retail trade sector. The framework specifically focuses on infrastructure support practices, and policy support practices as the independent variables influencing SME performance. The relationships among the variables are illustrated in Figure 2.1 through directional arrows showing the presumed influence of the independent variables on the dependent variable.

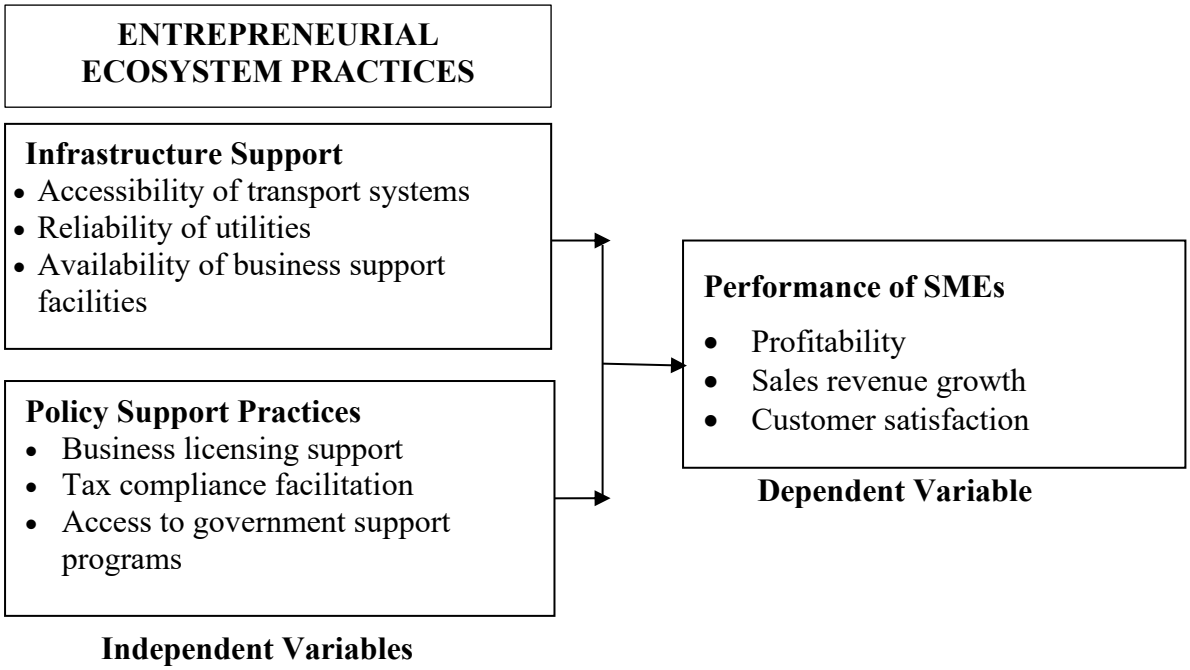

Figure 2. 1: Conceptual Framework

Infrastructure Support Practices

Infrastructure support practices refer to deliberate initiatives and mechanisms aimed at improving the accessibility, reliability, and availability of physical and digital infrastructure that supports business operations and economic activities (World Bank, 2022). These practices include provision and maintenance of transport systems, electricity, water supply, internet connectivity, and business-support facilities that facilitate enterprise productivity and competitiveness.

According to Akinwale and Olawale (2020), reliable infrastructure is a critical support mechanism for SMEs because it facilitates production, distribution, and communication. Inadequate infrastructure support, such as unreliable electricity supply and poor road networks, significantly increases the cost of doing business and limits the ability of SMEs to compete effectively. Similarly, Kiveu and Ofafa (2021) established that support practices aimed at improving ICT infrastructure, including broadband internet and digital platforms, empower SMEs to innovate, expand market reach, and integrate into regional and global value chains.

Infrastructure support practices may be categorized into physical infrastructure support and digital infrastructure support. Physical infrastructure support includes practices that improve transport systems, utilities, and industrial facilities that facilitate day-to-day business operations (AfDB, 2021). Digital infrastructure support practices involve enhancement of ICT facilities that enable businesses to adopt e-commerce, mobile money systems, online marketing, and digital communication platforms. SMEs with stronger access to these support systems have been shown to experience higher efficiency, improved customer satisfaction, and increased revenue growth (Nyangilo, 2022).

The availability of infrastructure support practices also influences business resilience and adaptability. Mutinda and Ngugi (2021) observed that firms with reliable internet connectivity and digital support systems were better able to adapt to remote operations and maintain customer engagement compared to firms lacking such support. In addition, supportive business infrastructure practices such as establishment of incubation centers, innovation hubs, and financial support facilities provide SMEs with opportunities for mentorship, networking, training, and resource sharing, thereby improving survival and growth prospects.

Infrastructure support practices are therefore a critical component of the entrepreneurial ecosystem because they reduce barriers to entry, enhance operational efficiency, and foster innovation and competitiveness among SMEs. In this study, infrastructure support practices are conceptualized in terms of accessibility of transport systems, reliability of utilities, and availability of business-support facilities, which collectively influence the performance of SMEs in Nairobi City County's wholesale and retail trade sector.

Policy Support Practices

Policy support practices refer to government and institutional interventions designed to create a favorable business environment through supportive regulations, tax incentives, licensing facilitation, and SME support programs that enhance enterprise growth and sustainability (Fapohunda, 2022). These practices reduce operational barriers and improve business formalization and competitiveness.

Policy support practices enhance enterprise performance by providing financial incentives, simplified compliance procedures, and business development support mechanisms. Hyland (2023) noted that supportive tax Policy Support and regulatory incentives reduce operational costs and create a more conducive environment for enterprise growth.

Government regulations and administrative procedures can either facilitate or hinder entrepreneurial activities. Sathe (2020) argues that supportive government Policy Support encourage innovation, technology adoption, and enterprise development, while restrictive or bureaucratic Policy Support may limit entrepreneurial freedom and business expansion. SMEs are particularly vulnerable to policy instability because unpredictable tax changes, licensing requirements, and regulatory costs disrupt long-term planning and investment decisions.

Corruption, administrative inefficiencies, and costly compliance procedures further affect SME participation in formal support mechanisms. Ibrahim (2023) observed that complex business registration procedures and weak regulatory enforcement increase operational burdens on entrepreneurs and discourage formalization of businesses.

In Kenya, policy-related changes such as introduction of digital taxes have significantly influenced SME operations. Mwenda (2020) noted that implementation of the Digital Services Tax and other tax amendments increased operational costs for many SMEs, particularly those operating through online platforms. Since SMEs account for a substantial proportion of Kenya's business sector and employment, supportive policy practices remain essential for improving business sustainability and competitiveness.

In this study, policy support practices are conceptualized in terms of business licensing support, tax compliance facilitation, and access to government support programs, which collectively influence performance of SMEs in Nairobi City County's wholesale and retail trade sector.

Performance of Small and Medium Enterprises (SMEs)

Performance of SMEs refers to the extent to which small and medium enterprises achieve their financial, operational, and strategic objectives as measured through indicators such as profitability, sales revenue growth, customer satisfaction, and business sustainability (Edeh et al., 2020). SME performance reflects the ability of enterprises to remain competitive, efficient, and sustainable within dynamic business environments.

According to KNBS (2023), SMEs contribute significantly to Kenya's economy through employment creation, income generation, and contribution to the national GDP. However, SME performance remains affected by both internal managerial capabilities and external entrepreneurial ecosystem factors. Mwaura, Muchara, and Kangu (2024) noted that many SMEs in Kenya experience low survival rates due to limited innovation, weak managerial practices, inadequate support systems, and unfavorable policy environments.

Performance of SMEs is strongly influenced by entrepreneurial ecosystem support practices. Infrastructure support practices improve operational efficiency while policy support practices reduce operational barriers and improve business formalization. Together, these ecosystem support practices shape the sustainability and competitiveness of SMEs. In this study, performance of SMEs is conceptualized in terms of profitability, sales revenue growth, and customer satisfaction. These indicators are used to assess the influence of selected entrepreneurial ecosystem support practices on SMEs operating in Nairobi City County's wholesale and retail trade sector.

Empirical Review

Infrastructure Support and Performance of SMEs

Jayabalan and Ismail (2021) investigated the relationship between infrastructure and SME performance in Malaysia, focusing on transport and ICT systems. Their study established that adequate road networks and reliable internet connectivity reduced logistical costs, expanded market reach, and improved service delivery. SMEs operating in well-serviced regions recorded higher productivity compared to those in poorly connected areas. This finding underscores the strategic role of infrastructure as both a cost-reducing and revenue-enhancing factor.

Similarly, Musthafa, Elfindri, Anas, and Ariyanto (2024) conducted a systematic literature review across multiple developing economies, revealing that infrastructure impacts MSMEs through both direct and indirect pathways. Physical infrastructure such as electricity, water, and transport facilitates operational continuity, while digital infrastructure such as broadband and mobile networks enhances business visibility, e-commerce adoption, and customer engagement. Their review highlighted that digital infrastructure is increasingly becoming as critical as traditional infrastructure in determining SME competitiveness in the knowledge economy.

In Eastern Europe, Simić et al. (2020) studied SMEs in Serbia and concluded that infrastructure availability has a strong positive correlation with competitiveness and financial performance. SMEs in regions with high-quality infrastructure demonstrated better supply chain coordination, faster delivery times, and improved customer satisfaction. Conversely, firms in areas with inadequate infrastructure were forced to incur higher operating costs, diminishing their competitive advantage.

African perspectives reinforce the infrastructure–performance nexus. Adeyemo, Gbadeyan, and Brimah (2020), in their study of SMEs in South West Nigeria, found that unreliable

electricity supply and poor road networks were among the most critical barriers to SME growth. These deficiencies resulted in frequent business interruptions, inflated operational costs, and limited market access. However, firms that had access to alternative energy and better location-based infrastructure outperformed their peers, suggesting that investment in infrastructure is not only an enabler but also a determinant of survival.

Chika and Nwosu (2021) extended this argument by emphasizing ICT infrastructure in Nigeria's Anambra State. Their findings showed that adoption of internet services, mobile technologies, and digital platforms significantly improved marketing reach, customer feedback mechanisms, and service delivery. This digital transformation translated into better financial performance and greater resilience in the face of competition.

At a regional level, Dinku et al. (2024) examined Ethiopian SMEs and found that infrastructure development, particularly in ICT and financial services, significantly enhanced innovation practices and firm performance. They also highlighted that infrastructure moderated the relationship between managerial capacity and SME success: even highly skilled entrepreneurs were constrained if they lacked reliable electricity, transport, or internet services.

Kenyan studies echo similar findings. Ng'aru et al. (2018) demonstrated that access to industrial zones, supportive financial infrastructure, and business development services was positively correlated with SME growth and competitiveness. Nairobi City County, in particular, benefits from relatively advanced infrastructure compared to other counties; however, infrastructural disparities persist, especially in informal settlements where many SMEs operate. Such disparities create uneven growth and limit inclusivity in the entrepreneurial ecosystem.

Collectively, these studies highlight a consistent theme: infrastructure is not a passive backdrop but an active determinant of SME performance. It shapes firms' ability to access Marketing, engage with customers, reduce costs, and innovate. In contexts where infrastructure is underdeveloped, SMEs face survival challenges, while in regions with strong infrastructure, firms thrive and scale more effectively. The reviewed literature also identifies a gap in examining how infrastructure interacts with other ecosystem elements, such as Policy Support to influence SME outcomes, a gap that this study sought to address in Nairobi City County.

Policy Support Support and Performance of SMEs

Yadewani et al (2024) evaluated the factors influencing operational performance in SMEs. The study utilized a sample of 200 SME owners in Padang, selected through convenience sampling. Data was collected via online questionnaires based on field studies. The analysis revealed that knowledge investment is crucial for the operational success of SMEs, underscoring its importance in business strategy. Policy Support also positively influence SME performance, highlighting the need for supportive regulatory environments. From the government side, the Policy Support that were prepared supported the development of SMEs, such as facilitating access to capital for SMEs, establishing cooperation between government, private and academic institutions to support the development of SMEs.

Prasannath, Adhikari, and Gronum (2024) investigated how government impacted performance of an SME. A systematic literature review was conducted using the PRISMA methodology to synthesize this understanding, resulting in 65 relevant articles. The study found that Policy Support have four different pathways by which they can impact performance. Both direct and indirect Policy Support have moderating effects that can magnify Performance of SMEs. Eniola, (2023) reviewed the relationship between Policy Support and small and medium enterprises (SMEs) performance in Nigeria. This study found the relationship between government policy and SME firm performance. Likewise, government policy has a major impact on the competitiveness of SMEs. The study indicated that SME firm performance varies

with the choice of the government policy they adopted, spatial relations and guidelines of government, schemes and incentives and support arrangements for the individual sector.

Ahmadu et al., (2025) examined the effect of Policy Support on SME support programs in Abuja, focusing on their impact on SME growth, sustainability, and contribution to economic development. The research aimed to evaluate how policy frameworks, funding mechanisms, and regulatory environments influenced the effectiveness of these programs. A survey method was employed to collect data from key stakeholders, including SME owners, government officials, and program coordinators. A total of 135 questionnaires were administered to experienced participants. The study underscored the importance of aligning government interventions with the evolving needs of SMEs to enhance inclusivity, innovation, and competitiveness. Musabayana, Mutambara, and Ngwenya (2022) sought to establish the extent to which the Policy Support were effective in influencing the performance of SMEs in Zimbabwe. The study used mixed research method following the sequential exploratory strategy. The findings of this study indicated that the government managed to inform the elite group, its officers who are well versed with SME Policy Support and government intentions were clearly communicated to all the experts in the SME sector, but this information did not cascade down to the SME implementers.

Ngali (2020) sought to establish the effects of taxation on the performance of SMEs in Voi Town. The study adopted a cross-sectional research design, where 130 SMEs of the town were targeted. The study used Yamen's formulae to determine a sample of 98 SMEs which were stratified into various business categories. The study used structured questionnaires to collect data. The study showed that there was a significant negative very weak relationship between tax Policy Support and SMEs performance. Secondly, it was determined that there was a weak negative and significant relationship between tax rates and SMEs performance and a weak positive relationship between the two study variables. The study concluded that tax rates and tax Policy Support has a significant negative effect on tax performance, while tax reforms has a significant positive effect on SMEs performance

Bosire and Muturi (2020) assessed the effect of government entrepreneurial interventions on the growth of micro, small and medium youth enterprises. The study targeted a population of 1262 youth led micro and small and medium enterprises registered by the ministry of youth and sports in Kisii County. A descriptive research design combined with quantitative research approach was used to guide the study. Quantitative data was collected through the use of closed ended questionnaires. The findings revealed that government funding, entrepreneurial training, marketing and Policy Support affected growth of youth owned micro, small and medium enterprises. The study concluded that most youth had limited or no access to government funding, training, involvement in policy making and marketing support thus their enterprises failed to grow.

RESEARCH METHODOLOGY

The study adopted a descriptive research design to examine the effect of entrepreneurial ecosystem support practices on performance of SMEs in Nairobi City County's wholesale and retail trade sector. The target population comprised 11,253 licensed SMEs operating within the wholesale and retail subsector in Nairobi City County, with business managers or owners serving as the unit of observation. Using Yamane's (1967) formula, a sample size of 386 respondents was obtained. Stratified random sampling technique was used to ensure proportional representation of wholesale businesses, retail outlets, and general trade stores.
Primary data was collected using structured questionnaires measured on a five-point Likert scale. A pilot study involving 39 business managers was conducted to test the validity and reliability of the research instrument. Content and construct validity were assessed, while reliability was tested using Cronbach's Alpha coefficient, where all constructs achieved the

acceptable threshold of 0.7 and above. Data collection was conducted after obtaining authorization from the university and a research permit from NACOSTI.
Collected data was coded and analyzed using Statistical Package for Social Sciences (SPSS) Version 28. Both descriptive and inferential statistics were used in the analysis. Descriptive statistics included frequencies, percentages, means, and standard deviations, while inferential statistics included correlation and multiple regression analysis. The regression model examined the effect of infrastructure support practices, and policy support practices on performance of SMEs. All statistical tests were conducted at a 95% confidence level.

RESEARCH FINDINGS AND DISCUSSIONS

The sample size of study was 386 SMEs owners/managers. The pilot test was conducted with 39 respondents representing 10% of the sample size. The pilot respondents were not included in the actual study hence 347 questionnaires were administered out of which 310 were answered successfully. The response rate was 89.3%. Kothari (2012) recommended that an adequate response rate is one that is greater than 50%, while an exceptional response rate is typically one that is greater than 70%.

Descriptive Statistics

This section presents the findings from the Likert scale questions where respondents indicated their level of agreement with various statements regarding entrepreneurial ecosystem practices and performance of SMEs in Nairobi City County's wholesale and retail sector. A 5-point Likert scale was used, with mean values and standard deviations calculated to interpret the findings. A mean value of 1.0-1.80 was strongly disagreed 1.80-2.60 disagree, 2.61-3.20 not sure, 3.21-4.20 agree and 4.21-5.00 strongly agree. On the other hand, a standard deviation less than 2.0 suggests that the responses had a close range of scores across the participants. This implies a high degree of agreement or consistency among the respondents regarding the statement being measured. Most people tended to select the same, or very similar, response category.

Infrastructure Support

The first objective sought to examine the effect of infrastructure on performance of SMEs in Nairobi City County's wholesale and retail sector. The respondents were asked to indicate the extent to which they agree with statements on infrastructure. Responses are presented in Table 1.

Table1: Infrastructure

Statements	M	Std.
Our business has reliable electricity supply that supports daily operations.	2.25	.519
The transport infrastructure (roads, delivery systems) enables us to reach customers effectively.	4.40	.491
Internet and ICT facilities are reliable for supporting our business activities.	4.39	.544
Water supply and other basic utilities are sufficient for our business operations.	2.06	.455
Our business benefits from access to support infrastructure (Marketing, incubation hubs, financial services).	2.48	.766
The state of infrastructure in our location positively influences our Performance of SMEs.	4.77	.423
Average	**3.40**	**.530**

N=310

Results show that the respondents strongly agreed that; the state of infrastructure in their business location positively influences the Performance of SMEs (M=4.77, Std.= 0.423), the transport infrastructure (roads, delivery systems) enables them to reach customers effectively (M=4.40, Std.= 0.491), and internet and ICT facilities are reliable for supporting their business activities (M=4.39, Std.= 0.544). Respondents disagreed that; the business benefits from access to support infrastructure (Marketing, incubation hubs, financial services) (M=2.48, Std.= 0.766), business has reliable electricity supply that supports daily operations (M=2.25,

Std.=0.519), and that water supply and other basic utilities are sufficient for their business operations (M=2.06, Std.= 0.455).

The results show a moderate general perception on infrastructure adequacy with a composite mean of 3.40 and SD of 0.53 suggesting that while some infrastructure are available, others are either inadequate or unavailable. Transport infrastructure had the highest rating indicating that road and delivery systems are key facilitators for reaching customers and suppliers effectively. Transport is especially essential in Nairobi City County's wholesale and retail sector where punctuality need to be observed in delivery to enhance customer satisfaction. The results also underscore the growing importance of internet connectivity in enabling communication, mobile payment, inventory management, and online marketing. The results also show that the businesses are leveraging the internet to market their goods and services online which enhances their sales growth.

However, the findings show outstanding infrastructure challenges mainly electricity and water supply. This implies that the city experiences constant power challenges that hinder their business operations. In Nairobi City County, recurrent power disruptions and water shortages may force SMEs to depend on costly alternatives like generators and water vendors, thereby reducing profitability. Access to support infrastructure such as Marketing, incubation hubs, and financial services were also rated low. This indicates that there is little support from the government that hinders business growth. Lack of these infrastructures may also hinder innovation, business growth, and access to affordable financing particularly for small and medium businesses. The limited access to support infrastructure shows weaknesses in the entrepreneurial ecosystem especially linking SMEs to incubation programs, structured Marketing, and affordable financing. Findings are in agreement with the Kenya Association of Manufacturers (2023) report that 68% of SMEs incur high production costs due to unreliable power supply, while poor road networks increase distribution costs. Jayabalan and Ismail (2021) established that adequate road networks and reliable internet connectivity reduced logistical costs, expanded market reach, and improved service delivery. Musthafa, Elfindri, Anas, and Ariyanto (2024) also found that physical infrastructure such as electricity, water, and transport facilitates operational continuity, while digital infrastructure such as broadband and mobile networks enhances business visibility, e-commerce adoption, and customer engagement.

Policy Support

The fourth objective aimed at determining the effect of Policy Support on performance of SMEs in Nairobi City County's wholesale and retail sector. Respondents were asked to indicate the extent to which they agree with statements relating to Policy Support. Results are presented in Table 2.

Table: Policy Support

Statements	M	Std.
Our tax obligations are fair and manageable.	2.49	1.600
Tax Policy Support promote the growth of small businesses.	2.34	.687
Licensing and compliance processes are simple and straightforward.	2.40	1.203
Business regulations are transparent and easy to understand.	2.49	.520
Government Policy Support provide adequate support for SMEs.	2.21	.500
Policy changes are communicated clearly and in a timely manner.	1.82	.540
Average	**2.30**	**0.841**

N=310

The results show that the respondents disagreed with all the statements on Policy Support; tax obligations are unfair and unmanageable (M=2.49, Std.= 1.600), business regulations are neither transparent nor easy to understand (M=2.49, Std.= 1.203), licensing and compliance

processes are hard and complicated (M=2.40, Std.= 1.203), tax Policy Support hinder the growth of small businesses (M=2.34, Std.= 0.687), government Policy Support do not provide adequate support for SMEs (M=2.21, Std.= 0.500), and policy changes are not communicated clearly and in a timely manner (M=1.82, Std.= 0.540). The findings show a low rating of policy awareness with a composite mean of 2.30 and a low standard deviation of 0.841. This indicates general disagreement that existing Policy Support adequately support SME performance.

The results show that the policy environment is a great challenge to SMEs in Nairobi City County County. The findings imply that the tax imposed to the traders is burden and inhibit SME growth since they significantly increase operational costs and constrains profitability. The notably higher standard deviations for licensing and compliance processes show differences in experiences. This shows that whereas some SMEs experience challenges while navigating bureaucratic processes, others are able to register and pay taxes effortlessly. The results also show that there is a gap between policy intentions and practical implementation whereby the support strategies such as incentives, subsidies, or business training programs are either not adequately accessible to the SMEs or they are considered in effective. The findings imply that although the government has established various Policy Support that govern the SME sector, these Policy Support are not clearly communicated to the main stakeholders. This had led to non-compliance especially to taxes, uncertainty, and increased operational costs for the business adapting to regulatory changes. The results highlight the crucial role of supportive regulatory framework in enhancing business growth. Unfavourable Policy Support increase transaction costs and discourages investments especially amongst small business with strained capitals. Therefore, regulatory burden and policy uncertainties are key challenges to SME performance. Findings are in agreement with Mwenda (2020) that tax measures, such as the digital services tax, have disproportionately increased compliance costs, further straining small firms. These regulatory constraints undermine the potential of wholesale and retail SMEs. Musabayana, Mutambara, and Ngwenya (2022) indicated that the government inform the elite group, its officers who are well versed with SME Policy Support and government intentions are clearly communicated to all the experts in the SME sector, but this information does not cascade down to the SME implementers. Bosire and Muturi (2020) concluded that most youth have limited or no access to government funding, training, involvement in policy making and marketing support thus their enterprises failed to grow.

Performance of SMEs

The study also sought to determine the performance of the SMEs. Respondents were hence asked to indicate their level of agreement on the listed statements relating to various metrics of Performance of SMEs. Results are presented in Table 3.

Table 3: Performance of SMEs

Statements	M	Std.
Business profits have increased over the past three years.	2.05	.577
Return on investment has improved annually.	2.27	.617
Sales revenue has increased consistently.	3.18	.832
The number of repeat or loyal customers has increased.	4.03	1.497
Customer feedback indicates high satisfaction with our products/services.	4.26	.497
Our market share in the local area has expanded in recent years.	4.42	.500
Average	**3.37**	**0.753**

N=310

Results show that the respondents strongly agreed that; the market share in the local area has expanded in recent years (M=4.42, Std.= 0.500), and that customer feedback indicates high satisfaction with products/services (M=4.26, Std.= 0.497). The respondents also agreed that the number of repeat or loyal customers has increased (M=4.03, Std.= 1.497). There was mixed perceptions on consistent increase of sales revenue (M=3.18, Std. = 0.832). The respondents

disagreed that; return on investment has improved annually (M=2.27, Std. = 0.617), and business profits have increased over the past three years (M=2.05, Std.= 0.577). The results generally show a moderate level of Performance of SMEs with a composite mean score of 3.47 (Std.=0.753). This shows that whereas some SMEs show strength in market-related performance indicators, there are inconsistencies in businesses financial performance.

The results show that irrespective of the continuous business operations, majority of the SMEs face profitability challenges mainly due to increasing operational costs, high taxes, and infrastructural challenges. On the contrary, sales revenue showed some moderate improvement implying that although sales volumes may be increasing, they do not translate into increased profits or returns. This difference may show low profit margins and high operation costs in the business sector. The market-based performance measures were however rated higher implying strong customer relationships and service quality as key performance strengths among SMEs. The results also imply that SMEs are successfully maintaining their customers amidst financial and regulatory challenges. The results are in line with entrepreneurial ecosystem perceptions which acknowledge that Performance of SMEs is influenced by both internal abilities and external environmental factors.

The research further sought to find out respondent's opinions regarding SME performance trend in the past three years. Results are presented in Figure 4.1

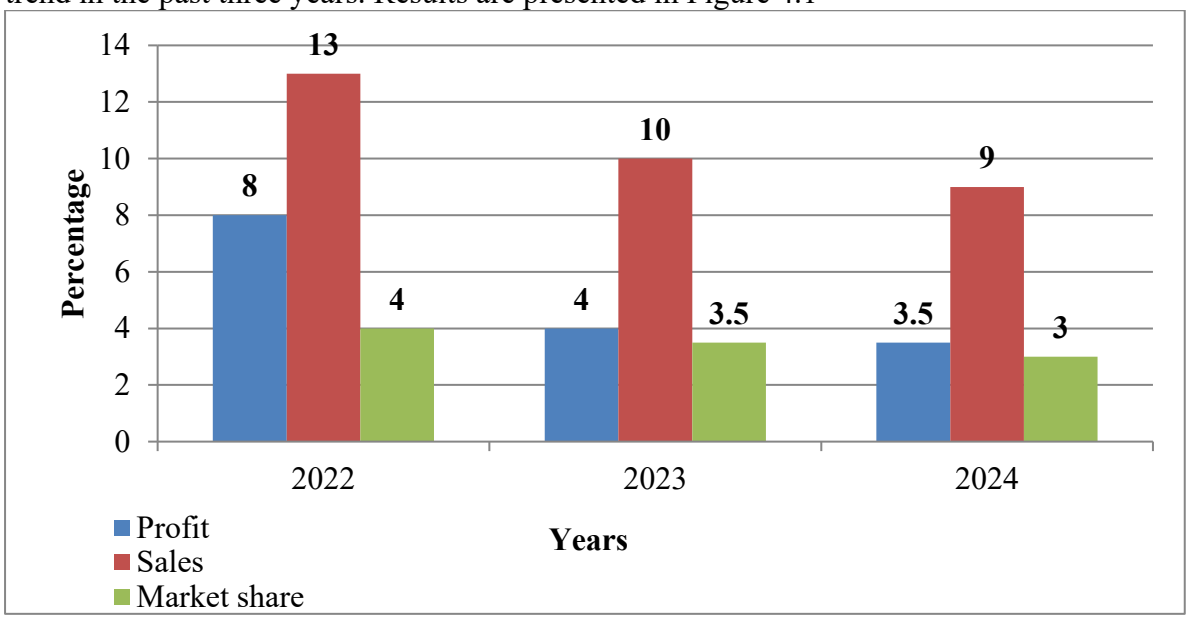

Figure 1: Performance Trend of SMEs

The results show a declining performance trend across key financial and market indicators. Profit margins declined sharply from 8% in 2022 to 3.5% in 2024 indicating a notable deterioration in profitability. This shows that SMEs are continuously struggling to convert revenues into profits probably due to increasing operational costs, taxation pressures, and infrastructural challenges. Sales growth also reduced from 13% to 9% over the same period indicating a slowdown in revenue growth. Although sales continue to grow, the reduced growth rate shows a weak market drive probably due to high competitiveness, low purchasing power, or limited market diversification opportunities.

Market share, similarly dropped progressively from 4% to 3%, signifying limited acquisition of new customers. This trend may show market saturation in Nairobi City County and challenges in exploiting new Marketing especially in the digital Marketing. The results generally show that the trade sector SMEs in Nairobi City County is stagnating in profits, sales, and market share since 2023. This shows that the entrepreneurial ecosystem has been affecting

SME financial performance. The declining performance trends strengthen the findings that policy and infrastructure challenges exert a challenge effect on SME performance.

Correlation Analysis

Correlation portrays the strength of relationship between the independent and dependent variable. Table 4 shows the Pearson correlation results.

Table 4: Coefficient of Correlation

Variables		Performance	Infrastructure	Policy Support
Performance of SMEs	Pearson Correlation	1		
	Sig. (2-tailed)			
Infrastructure support	Pearson Correlation	.543	1	
	Sig. (2-tailed)	.000		
Policy Support	Pearson Correlation	.828	.439	1
	Sig. (2-tailed)	.000	.000	

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

Infrastructure has a strong significant relationship with Performance of SMEs (r=0.543, p=0.000). This implies that access to good transportation system, internet and ICT facilities, and electricity notably contributes to enhance SME performance. This finding supports descriptive results which showed that transport and technology infrastructure influences business operations, regardless of some challenges in electricity and water supply. Findings are in agreement with Simić et al. (2020) that infrastructure availability has a strong positive correlation with business competitiveness and financial performance.

Policy Support have a strong significant relationship with Performance of SMEs (r=0.828, p=0.000). The results suggest that the regulatory and policy environment is a key determinant of SME performance. This implies that enhancements in taxation, licensing, regulatory transparency, and policy communication may enhance SME performance. On the contrary, unfavorable Policy Support significantly challenge profitability and growth. Findings are in agreement with Bosire and Muturi (2020) that government funding, entrepreneurial training, marketing and Policy Support affected growth of youth owned micro, small and medium enterprises.

Regression Analysis

Regression analysis was conducted to examine whether changes in the independent variables (infrastructure and policy support) could predict changes in the dependent variable (performance of SMEs in Nairobi City County's wholesale and retail sector). Regression outputs are presented in Tables 5.

Table 5: Model Summary

Model	R	r^2	Adjusted r^2	Std. Error of the Estimate
1	0.896	0.803	0.801	.650

Predicators: (constant) infrastructure, and policy support

Findings in Table 5 show an R^2 value of 0.803 and an adjusted R^2 value of 0.801. The R^2 value implies that 80.3% of the variation in performance of SMEs in Nairobi City County's wholesale and retail sector is explained by infrastructure, and policy support collectively. The remaining 19.7% variation in performance is explained by other factors outside the model that were not considered in this study. The adjusted R^2 value of 0.801 confirms that the model remained strong even after adjusting for the number of predictors included in the regression model.

Therefore, the regression model had a strong explanatory power in predicting performance of SMEs in Nairobi City County's wholesale and retail sector.

Table 6: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	526.350	2	131.588	311.543	.000[b]
	Residual	128.824	307	.422		
	Total	655.174	309			

Predicators: *(constant) infrastructure, and policy support*

Dependent variable: *Performance of SMEs*

The ANOVA results in Table 6 indicate that the regression model was statistically significant (F = 311.543, p = 0.000). Since the p-value was less than 0.05, the study concluded that the combined effect of infrastructure, and policy support significantly predicted performance of SMEs in Nairobi City County's wholesale and retail sector. The degrees of freedom (df) for regression was 4, representing the four predictor variables included in the model namely infrastructure, and policies. The residual degrees of freedom of 305 represented the unexplained variation after fitting the model, while the total degrees of freedom of 309 represented the total sample size minus one (n-1). Therefore, the regression model was suitable for explaining variations in performance of SMEs in Nairobi City County's wholesale and retail sector.

Table 7: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant/Y Intercept	4.720	.210		22.468	.000
Infrastructure support	.731	.059	.609	12.327	.000
Policy Support	.740	.032	.675	23.305	.000

Using the unstandardized coefficients generated from SPSS in Table 4.14, the regression model was expressed as follows:

Performance of SMEs = 4.720 + 0.731 (infrastructure support) +0.740 (Policy Support).

This means that holding all independent variables constant at zero, performance of SMEs in Nairobi City County's wholesale and retail sector would be 4.720.

Results further show that infrastructure was statistically significant to performance of SMEs in Nairobi City County's wholesale and retail sector (β = 0.731, t = 12.327, p = 0.000). This shows that infrastructure had a significant positive relationship with performance of SMEs in Nairobi City County's wholesale and retail sector. This implies that a one-unit increase in infrastructure would result in a 0.731-unit increase in performance of SMEs in Nairobi City County's wholesale and retail sector, holding other factors constant. Infrastructure had the second greatest effect on Performance of SMEs (standardized Beta = 0.609). Findings are in support of Chika and Nwosu (2021) that adoption of internet services, mobile technologies, and digital platforms significantly improved marketing reach, customer feedback mechanisms, and service delivery. Ng'aru et al. (2018) also demonstrated that access to industrial zones, supportive financial infrastructure, and business development services was positively correlated with SME growth and competitiveness.

Policy Support were statistically significant to performance of SMEs in Nairobi City County's wholesale and retail sector (β = 0.740, t = 23.305, p = 0.000). This shows that Policy Support had a significant positive relationship with performance of SMEs in Nairobi City County's wholesale and retail sector. This implies that a one-unit increase in Policy Support would result

in a 0.740-unit increase in performance of SMEs in Nairobi City County's wholesale and retail sector, holding other factors constant. Policy Support had the greatest effect on Performance of SMEs (standardized Beta = 0.675). Findings align with Yadewani et al. (2024) that Policy Support positively influence SME performance, highlighting the need for supportive regulatory environments. Bosire and Muturi (2020) revealed that government funding, entrepreneurial training, marketing, and Policy Support affected growth of youth owned micro, small and medium enterprises.

Conclusion

Infrastructure significantly affects performance of SMEs in Nairobi City County's wholesale and retail sector, although transport networks and ICT infrastructure effectively support business operations and market access, constant power outages, water shortages constraint SME efficiency and profitability. Infrastructure improvements especially in essential services like water and electricity enhance Performance of SMEs. Businesses incur extra costs when these infrastructures are not available hence declining return on investments.

Policy Support are the most notable determinant of SME performance in Nairobi City County's wholesale and retail sector. Unfavourable taxation, complex licensing processes, unclear regulations, inadequate government support, and poor policy communication notably limit SME profitability and growth. A supportive, transparent, and well-communicated policy environment enhances SME performance and sustainability.

Recommendations

The national and county governments should ensure that there is reliable power and water especially within major wholesale and retail zones in Nairobi City County. Minimizing power outages and improving access to basic utilities will reduce the operating costs and improve productivity particularly in businesses that highly depend on power for operations. Policy makers should strengthen support infrastructure including affordable Marketing, incubation centres, and access to financial services designed for SMEs. Improving last-mile transport and digital infrastructure may also improve operational efficiency and market accessibility.

The government should establish comprehensive policy and regulatory reforms to create a more supporting business environment for SMEs. This includes easing licensing and compliance processes, improving regulatory transparency, and policy communication. Taxes should be restructured to ensure they are fair, foreseeable, and equivalent to SME financial ability. Government support programs should also be strengthened and made more accessible to SMEs in the wholesale and retail sector.

Areas for Further Study

A study on remaining 19.7% of the unclaimed part of the study given this study realized a strength of 80.3% correlation. Similarly, a study on effect of entrepreneurial ecosystem practices on performance of SMEs using longitudinal research design. The study would enable researchers to collect data on changes in entrepreneurial ecosystem over time and establish the causal relationships between entrepreneurial ecosystem and SME performance especially in the midst of dynamic economic and policy conditions. A similar study on SMEs in other sectors since study focused only on the wholesale and retail sector. This will help to establish whether the entrepreneurial ecosystem practices affecting performance of wholesale and retail also apply to other SMEs in Kenya. A similar study in other counties in Kenya since the study was limited to Nairobi City County County to assess how contextual differences in entrepreneurial ecosystems affect SME performance.

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