Accelerating growth of businesses through networking services, incubation infrastructure and management mentoring: A perspective of startups in Kenya

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ABSTRACT

Worldwide, startup businesses are essential for any country’s economic development. Despite the rapid growth of start-ups, their likelihood of success and viability remain low. This trend is more observed in developing countries due to the low uptake of business incubation services such as Kenya. The aim of the current study was to determine the effect of networking services, physical incubation, and management mentoring on the growth of start-ups in Kenya. The study was based on the social network theory, the theory of the firm, the stochastic theory and the trait theory of entrepreneurship. A cross-sectional research design was used. A sample size of 227 respondents was selected from a total population of 567 respondents using proportionate stratified and simple random sampling techniques. Primary data was collected using a structured questionnaire. The data was analyzed with multiple linear regression with the help of SPSS. The finding of the study indicated that there was a positive and significant effect between networking services, physical incubation infrastructure and management mentoring and growth of startups. The study suggests that startups should join associations like the Associations of Startups and SME Enablers of Kenya and the Association of Countryside Innovation Hubs to access incubation infrastructure. This will allow access to investor networks, civil society programs, and government agencies, accelerating business growth. Additionally, business incubators can partner with universities for specialized research in areas like health, agriculture, and climate change through the triple helix model.

Introduction

Worldwide, new businesses fail in competitive environments (Rompho, 2018). Evolutionary theorists say this eliminates uncompetitive businesses, improving population health. By creating a supportive business environment and strong institutions, business incubation reduces startup failure rates (Afriana, 2018). Global governments have established business incubation to help start-ups survive and grow in today’s competitive business environment. Abdullahi, Abubakar, Aliyu, Umar, Umar, Sabiu, Abubakar (2015) reported that most of startups collapses within their first-five-year due to poor management or lack of financial resources. In Sweden, Kiseleva (2017) says incubating startups promotes young entrepreneurs worldwide. Business incubation helps startups succeed by providing resources, networking, and knowledge. Accordini (2019) found that incubators help entrepreneurs create jobs, expand economic opportunities, and launch profitable businesses without contractual investment in Italy, as well as support funding and introduce funders.

Startups in Africa face managerial, financial, and credit issues. Business incubators provide physical locations, training, and institutional support to improve SMEs. To boost the small business economy, governments have increased company incubation. In South Africa, government incubation programmes help aspiring entrepreneurs develop their skills and knowledge in physical

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business incubators (Lose, Maziriri, Choto, & Madinga, 2017). In Nigeria, business incubation connects startups with resources and inspires future entrepreneurs. Office space, financing, coaching, shared services, and networking are available (Asikhia, Ologungba, Akinlabi & Makinde, 2020). Underutilization of entrepreneurship incubators in Tanzania hinders small business growth due to lack of support for competitive SMEs (Mmasi, 2020). Business incubators are vital, but Sub-Saharan Africa is slow to adopt them (Asikhia et al., 2020). Compared to Eastern Europe, Asia-Pacific, Brazil, Latin America, and North America, incubation is underdeveloped. Rogerson (2018) found that only Nigeria and South Africa use business incubation services more than 10%.

In Kenya, the Kenya Industrial Estate (KIE) was established in 2007 to build industrial parks that would provide infrastructure, financial support and business support to startups (Kibai, 2018). Since 2007, business incubation has gained widespread support from government, business, and academia for assisting new businesses. Due to increasing demand for business support among the business owners and startups businesses, there has a significant increase in commercial and public business incubators. The Association of Startup and SME Enablers of Kenya (ASSEK) and Countywide Innovation Hubs regulate these firms, with 63 incubated firms registered by the end of year 2021. However, the efficiency of business incubation in assisting new businesses remains unknown, necessitating an in-depth study to determine its impact on local startups.

A start-up is a business in its early stages, funded by entrepreneurs who develop a service or product, expecting increased demand over time (Karitu, Wangondu, & Muathe, 2022). Start-ups are high-tech corporations that create goods that influence technology, and their success relies on additional resources like financial support (Muathe & Otieno, 2022). Startups often struggle to sustain their operations due to high start-up costs and high competition. They are known for disrupting industries and introducing new products and processes due to their innovative spirit. These businesses anticipate growing beyond the owner and aim to become large corporations. Startup firms are crucial in Africa's economic growth and poverty reduction. They drive rapid industrialization and job creation, contributing to a country's development. However, challenges to their growth can be administrative, operational, strategic, and exogenous. MSEs enhance productivity by putting the economy under increased competitive pressure, contributing to a country's overall growth and development (Opoku & Yan, 2019).

Incubation programs are increasingly crucial for economic development in both industrialized and developing countries (Kihugu, 2017). They provide comprehensive support to encourage the invention of new business ideas and start-ups, contributing to public and private economic and social development (Matotola & Bengesi, 2019). Business incubation programs help new enterprises expand, create jobs, and facilitate economic development. They offer services like management team formation, marketing plans, capital access, professional services, and shared equipment. The number of incubators has increased due to entrepreneurialism, new technologies, and globalization (Kihugu, 2017).

Startups boost entrepreneurship in emerging nations, especially urban regions, and their growth can reduce unemployment (Karitu et al., 2022). Kenyan startups raised 21 billion Ksh in 2020, and the economy was expected to grow 5% and 5.9% in 2021 and 2022. Only one in five new businesses survive five years and one in three survive ten (Kimathi, 2020). Abdullahi et al., (2015) found that most new businesses fail within five years due to a lack of financial resources and management skills. Incubators are needed to improve startup survival rates. Numerous studies have been conducted on company incubation and startup growth. For instance, Asikhia et al., (2020) found that business incubators in Nigeria promote entrepreneurship and SMEs growth. Dvalidze and Markopoulos (2019) found that 70% of Nigerian startups survive three years of incubation. Despite rising business formation, success is unlikely. Size, age, resource depletion, insufficient financial resources, lack of markets, and poor management challenge Kenyan startups. Established firms in their industries also compete fiercely with them.

Omweri (2016) research at the Nailab Centre in Kenya found that business incubation centers are essential for encouraging young entrepreneurs to launch their own businesses. This study focused on young entrepreneurs at incubation facilities, not all Nairobi City County startups. Tiren (2020) found a correlation between business incubation resources, entrepreneurial traits and skills, and incubated business profitability and exit time in Nairobi County. Given this background, most studies have focused on business incubation and organization performance, leaving a gap in entrepreneurial culture and business growth. Thus, this research aimed at examining the effect of business incubation services on the growth of start-ups within Nairobi City County, Kenya.

**Literature Review**

This section examines a comprehensive analysis of both theoretical and empirical literature on networking services, physical incubation infrastructure, and management mentoring for startup growth.

**Theoretical Review**

**Social Network Theory**

Birley developed social network theory in 1985. The theory, which defined a network as the interaction between business owners and their external environment, was inspired by entrepreneurship (Kaberia & Muathe, 2021). This environment may include consumers, suppliers, government, research, and financial institutions. Other stakeholders may be included. Every company, regardless of age, size, or industry, needs a strong network to succeed (Kaberia & Muathe, 2021). This theory holds that networking is one of the best ways for business owners to find relevant information, advice, legitimacy, and other resources (Kaberia & Muathe, 2021). Kanini, Muathe, and Bula (2022) noted that one of the biggest benefits of starting a business is the ease with which one can
gain knowledge and direction through networks. Having connections to venture capitalists and professional services firms provides talent and market intelligence. Connecting with professional service providers is another example. Entrepreneurs use their networks to gather information and generate new ideas for business opportunities.

Not just the first phase relies on the network. Business owners continue to use their networks for information, help, and problem-solving, with specific relationships offering access to many resources. Multiplicity in network theory is including several types of interaction in a single relationship. Distribution, supplier, competitor, and customer relationships can be valuable for the information and expertise they provide. The social network theory states that successful company owners use their social and professional networks to benefit themselves and their firms. According to Kaberia and Muathe (2021), positive social networks can help startups develop quickly. This fast development may spur network change to meet venture needs. Kaberia and Muathe (2021) also suggest that good social networks may assist established firms swiftly develop, which can ease their expansion. This idea helped this research since it explains the importance of entrepreneurial networks in new enterprises.

Theory of the Firm

The firm theory was developed by Churchill and Lewis in 1983. It suggests that a firm's growth and productivity follow a predictable pattern, influenced by infrastructure and technological advancements, regardless of its size. This theory explores the connection between manufacturing inputs and finished products, specifically raw materials, labor, and machinery, which contribute to the growth of micro and small enterprises. The growth model includes stages of existing, surviving, successful, taking off, and reaching resource maturity. The company's flat hierarchy and direct supervision of staff were a significant challenge during its operation (Churchill & Lewis, 1983). The organization's survival phase necessitates the adoption of a formal system and the expansion of its structure to include more layers. Managers often delegate tasks to staff, and after a business's success, they can choose to maintain current operational status or pursue expansion strategies (Churchill & Lewis, 1983).

The decision to expand a firm is influenced by factors such as employee motivation, business opportunities, and the availability of resources, and after success, important systems are implemented. Management determines expansion speed, performance, and financing for a company. Owners and managers increase employee responsibility for improved performance. The fourth stage of resource maturity focuses on management (Churchill & Lewis, 1983). The company owners and managers prioritize proper financial management, maintaining business relationships, and adapting to changing customer demands and entrepreneurial methods (Churchill & Lewis, 1983). The organization present systems are well-established. Due to the fact that Churchill and Lewis' theory of firm growth explains the process of growth and expansion, it is intrinsically tied to the growth of startup enterprises in Nairobi County. It describes the development of a startup from inception to maturity.

Stochastic Theory

The stochastic theory originating from economics, suggests that various factors impact the growth of small and medium-sized businesses, including microbusinesses and startups (Hirschmans, 1958). According to Hirschmans (1958), the law of proportional effect, the size of a business does not correlate with its expansion rate. Other variables like infrastructure development and financing also impact the growth of small and micro enterprises. These factors enable people to access these businesses and make purchases of their goods and services (Lotti, Santarelli & Vivarelli, 2009)

Hirschman (1958) asserted that the growth rate of small and micro firms drops at varied rates as the size of an organization increases, whereas the growth rate of large organizations remains constant. When the size of the company increases, its performance tends to get better as a consequence of a rise in the number of customers as well as the amount of credit that is offered to the market. Small and micro enterprises struggle to succeed because they frequently incur financial losses and must also address other challenges, such as the development of appropriate infrastructure. This theory was used to explain how physical infrastructure in incubators and the availability of financial resources influence the growth of startup businesses. These factors are independent of one another, and none is more influential than the others.

Trait Theory of Entrepreneurship

McClelland's trait theory of entrepreneurship in 1961. The theory suggests that individuals acquire entrepreneurial traits through learning and can advance to higher levels. Successful businesses distinguish between failed ones by examining internal and external loci of control. The drive to achieve goals is a key characteristic for entrepreneurship. Entrepreneurs are self-disciplined, innovative individuals with a natural drive to take action, patience, and persistence, enabling them to make informed decisions in difficult circumstances. Entrepreneurship traits involve a strong desire for success, ability to explain a company's competitive advantage, and tolerance for ambiguity, enabling proper decision-making in challenging circumstances.

Psychological qualities of founders of start-up companies significantly influence decisions, with inventiveness, risk-taking, opportunities, and quick decision-making skills essential for initiating and managing new company initiatives. Karabulut (2016) asserts that quick decision-making skills, despite uncertainty and resource constraints, are crucial for business owners' success. Business owners who lack creativity and innovation are unable to protect their companies from competition's potential threats (Karabulut, 2016). This study aims to explain the importance of certain entrepreneurial characteristics for entrepreneurs, particularly those starting new businesses, which can be learned through mentorship or formal education (Lombardi, Tiscini, Trequattrini, &
Martiniello, 2020). Entrepreneurs who engage in business incubation gain essential skills for future firm operations, but economists argue that some possess these psychological characteristics but don't become great entrepreneurs.

**Empirical Review and Hypotheses Development**

**Effect of Networking Service on Growth of Startups**

Networking is a fun method to create business ties, assist entrepreneurs overcome feelings of isolation, and push for a better business climate. To make up for the absence of entrepreneurial networks among the businesses they nurture, incubators sometimes turn to a process known as network mediation. Networks that aid new businesses in acquiring essential information, expertise, and skills may also assist these businesses in reducing the amount of uncertainty they are subjected to. In their research, Hoang and Yi (2015) found that the provision of incubator networking services assists new businesses in acquiring a good name, market expertise, intangible resources, and financial backing from investors.

Albourini, Ahmad, Abuhashesh, and Nusairat (2020) in their study, they found that networking habits significantly impact entrepreneurial success in Jordan. The study identified six social networking strategies: cultivating company relationships, expanding external contacts, participating in social events, engaging in professional activities, participating in community activities, and improving reputation. Successful networking activities directly impact an entrepreneur's control over their company's direction, with internal relationships, external contacts, and professional activities being the most impactful aspects.

In India, Eveleens, Van Rijnsoever, and Niesten (2017) did study on examined the impact of network-based incubation on new business performance. They found that this approach provides emerging companies with resources, capacities, information, learning opportunities, and social capital, but the extent of these benefits remains unclear. Abou-Moglihi and Al Mualla (2012) conducted a study on the impact of entrepreneurial networks on the success of Canadian manufacturing companies. The study involved 248 businesses specializing in rubber and plastics production. A stratified random sample was used for a representative sample. The study revealed that entrepreneurial networks, including social, business, and inter-organizational strategic networks, significantly impact a company's long-term performance, highlighting their crucial role in enhancing a company's success and highlighting the importance of these networks.

A study by Pettersen, Aarstad, Hvig, and Tobiassen (2015) found that start-ups' own network resources were more significant than those provided by incubators at all stages of business development. These resources were crucial for acquiring non-generic knowledge, serving as an innovation engine, financial donor incentive, and enhancing a company's reputation and market access. Internal networking with other incubator firms and external network resources made possible by the incubator were both vital and complementary, despite being more general in nature and offering fewer specialized resources. The study also found that incubator network resources share traits with identity-based network resources, as they are not primarily controlled by financial considerations. Inter-tenant network resources can provide non-duplicated information and contain nonbinding weak links.

In Nigeria, Aladejebi (2020) studied how entrepreneurial networks affect small enterprises in Nigeria. The respondents were selected from a well-defined sample. Two Lagos SME groups were handed surveys. The research tool has a five-point Likert scale. Networking questions included in the survey. The research found that Nigerians support networking opportunities for SMEs. Both groups agreed that networking helped their companies. Nyangarika (2016) studied how networking affects small and medium-sized enterprises in Tanzania. Questionnaires were used for primary data collection, and SMEs' financial and sales papers were analysed for secondary data. The researcher interviewed all Dares Salaam City SMEs. This study focuses on qualitative elements. The study found that SMEs used ICT to network, which boosted their productivity, marketability, and profitability by improving business functioning, profit margins, and product advertising. According to the poll, SMBs need knowledge management help to reach their company goals since they need to network via ICT.

Turyakira and Cathy (2018) did research on startup networking in Uganda. Using a standardized questionnaire, quantitative data was collected, and the Statistical Program for Social Scientists was used to analyze it. This inquiry utilized exploratory factor analysis. According to the study's findings, enhancing a startup's networking with other businesses could be a solid starting point for enhancing its competitiveness. The outcomes of networking factors can aid in firm survival and provide enormous opportunities for company competitiveness, both locally and globally. Karanja and Odhiambo (2018) studied how business networking services effect university incubator-funded startups in Kenya. The research used descriptive surveys. A selected sample of university-sponsored graduate incubators provided qualitative and quantitative data. This study collected primary data from 189 of 372 participants. The study used a semi-structured questionnaire with open-ended comment sections and interviewer and administrator administration. The data was analyzed using descriptive and inferential statistics. Regression analysis evaluated dependent and independent variables. The research found a favourable and significant association between business networking services and university incubator-funded startup business success in Kenya.

Wanambisi (2022) did a study to examine the effect of entrepreneur networking on SMEs growth. This mixed-methods study examined how entrepreneurial networking affected small and medium-sized firm growth. There were 2,354 SMEs in Kenya's Trans Nzoia County, and 363 were selected using stratified and simple selection methods. SMEs were classified as wholesale, retail, manufacturing, restaurants, and agriculture (Wanambisi, 2022). Primary data were acquired via surveys. The data was analyzed with
SPSS. This study used descriptive statistics to gather data and regressions to evaluate hypotheses. Data support for the hypothesis was determined using descriptive statistics. The independent-dependent relationship was explored using multivariate regression. Kenya's small and medium-sized enterprises expand significantly through entrepreneurial networking.

**Effect of Physical Incubation Infrastructure on Growth of Start-Ups**

Physical infrastructure refers to the essential resources provided by business incubators to new ventures, such as subsidized office space and other shared resources, which are typically connected to other shared physical items and discounted office space rates. According to Njau, Mwenda, and Wachira (2019), start-up companies in the early phases of their development require office space in order to function properly. Tenants benefit from economies of scale by using larger areas for their businesses, reducing property length and width. Shared infrastructure reduces operating costs for incubators. New businesses receive services like receptionists and conference rooms, reducing stress and allowing more time for venture-related tasks. This benefits both tenants and incubators.

In Australia, Bliemel, Flores, De Klerk, and Miles (2019) conducted research on the role of accelerators as entrepreneurial cluster infrastructure for Austrian startups. This paper provides a comprehensive analysis of how accelerators can play a crucial role at the cluster level. This study aimed to demonstrate how accelerators provide real and intangible components of start-up infrastructure in order to create a cycle of entrepreneurial activity that reinforces itself. This was accomplished through the analysis of empirical evidence from three separate investigations. This was made possible by placing an emphasis on the manner in which accelerators provide a cycle of entrepreneurial activity that is mutually supportive. In addition, the data make it possible for us to promote the idea that the development of startup infrastructure might be an organic process including participants from a variety of clusters. The empirical findings and theoretical insights that came out of them have crucial consequences not only for the study that was discussed above, but also for individuals who work with start-ups and policymakers who want to assist entrepreneurial clusters.

Arunugam and Ravindran (2014) conducted study on the factors that influence the incubation environment in India, as well as the components that lead to the success of incubated firms. The study focused on enterprises that had been nurtured in five different incubators. A total of 35 of the 53 businesses that were still in the incubation stage when the survey was conducted responded to it, for a response rate of 66.04 percent. The data on infrastructure accessibility as a potential success indicator were examined, and a mean score of 3.91 was found. The average score for access to facilities for product development was 3.74; the average score for access to facilities for testing and validation was 3.63; the standard deviation of the scores given for access to other common facilities such as libraries, conference rooms, and training facilities, was 3.37; and the average score for access to these facilities at a reduced or subsidized price was 3.89. This suggests that one of the reasons organizations seek incubation help could be to receive aid with the establishment of infrastructural facilities.

Ngoma, Ntale, and Castro (2021) conducted research on the emergence of new businesses in the Albertine Graben region of Uganda. Their investigation focused on the role that infrastructure development played as well as entrepreneurial orientation. Quantitative information was collected from 118 businesses, the vast majority of which were considered to be of a smaller size. There was a total of 118 self-administered surveys that were made available, and 93 acceptable questionnaires were returned for a response rate of 79%. The use of SPSS 21 allowed for the management and analysis of quantitative data. It was found that infrastructure development was a strong predictor of growth in startup activity (ß = 0.432, p < 0.01), and it was found that infrastructure development was responsible for 21.6% of the region's entrepreneurial activity.

Kyunga (2017) conducted research on the rise of small and microbusinesses as well as the growth of the underlying infrastructure along the Nairobi stretch of Thika Road in Kenya. Within the scope of this study were 597 microbusinesses and small businesses located along the Thika Superhighway. The selection of 179 respondents from the target group was accomplished through the use of a straightforward random sampling. A standardized questionnaire was used throughout the entirety of this investigation to compile the primary data. According to the findings, advances in infrastructure, including roads, water and sewerage systems, and communication networks, has an effect on the growth of small and medium-sized businesses (SMEs) along the Thika expressway.

Njau, Mwenda, and Wachira (2019) conducted research to determine how the provision of infrastructure facility support by Kenyan business incubators the growth of small and medium-sized businesses in the nation is affected by a factor. A descriptive approach was taken for the investigation. The sample included 384 business incubators in Nairobi and nine managers. The incubator's administration was based on census and stratification data. Incubates responded at 82.2%, while incubator managers responded at 88.9%. 460 people answered all questionnaires. The incubator managers were interviewed using a structured interview schedule and a standardized questionnaire in a cross-sectional survey. Both descriptive and inferential statistics were applied to the analysis of quantitative data. Qualitative data analysis was performed to analyze qualitative data for the investigation. Infrastructure support boosts the creation of tech-based startups, according to the findings.

Kibuchi (2016) conducted research into the various business incubation opportunities available to Kenyan start-up companies. Case-study methodology was utilized throughout the course of the investigation. For the study, a semi-structured questionnaire was used to gather information. The significance of the effect that Kenya's physical infrastructure has on the success of incubated businesses was found to be 0.91, and the F value of the one-way analysis of variance was found to be 1.69. This significance threshold was higher than 0.05, indicating that there is no meaningful association between physical infrastructure and the performance of iHub.
incubated enterprises. This could be because iHub largely incubates technological business ideas on virtual platforms that require little physical resources, particularly office space.

**Effect of Management Mentoring Growth of Start-Ups**

Successful entrepreneurs provide a source of management expertise for incubators. This service provides access to world-class business expertise, problem-solving counsel, professional mentoring, and coaching for firm presentations to clients, investors, and venture capitalists (Eveleens, Van Rijnsoever, & Niesten, 2017). In addition to this, it provides guidance on how to communicate with other stakeholders, including investors, customers, and others. These services are designed to cut down on the operational costs of a new business. When it comes to providing support for businesses, the effectiveness of incubators is measured by the continued growth and prosperity of new businesses after they have graduated from the incubator.

Business management advice includes professional services like accounting, legal support, ownership structure, and employee stock option programs. It aims to reduce starting company operating costs and support existing firms, with success measured by new company growth and continued viability. According to Eveleens, Van Rijnsoever, and Niesten (2017), incubation management in Czechoslovakia can significantly assist start-up founders by promoting reflexive learning to minimize key moments in the future. Lee and Cobia (2013) undertook a study with aim of analyzing the impact of management accounting systems on the growth of new businesses. A new firm navigated an entrepreneurial crisis by utilizing management accounting solutions to adapt to market strategy changes and departmentalization, while maintaining an entrepreneurial culture. Chatterji, Delecourt, Hasan, and Koning (2019) evaluated the impact that management advise had on the overall success of Indian startup businesses. The study, conducted in India, involved 100 high-growth technology businesses, each with varying managerial styles, as part of a randomized field experiment. Peer advice, including regular meetings, goal setting, and feedback, significantly increased business growth and reduced failure risk in entrepreneurs without a formal management style.

In Japan, Hironaka, Zariyawati and Diana-Rose (2017) did a study on how business management affects the growth of new businesses. This study examines the impact of business management advice on new enterprise performance, emphasizing the importance of addressing this crucial aspect of a company. New businesses face challenges in effective firm management due to various factors, but capable business management is crucial for a corporation’s success. SMBs face difficulties in obtaining support due to high service costs or uncertainty about where to seek assistance. The research indicates that new business owners can establish a clear vision and set goals through effective business management, alongside effective financial management.

Matotola and Bengesi (2019) conducted an empirical study in Tanzania to investigate the effects that desire, as a potential resource, has on young people who have been trained to become entrepreneurs. The study, which assessed thirty incubators and interviewed two managers at Dares Salaam and Sokoine University, found a significant correlation between Business Startup Support (BSS) and motivation. The study found a significant correlation between inspiration and business management and product marketing, and motivation with mentoring and coaching. It suggested that young people are more likely to establish new businesses if they have access to coaching, mentorship, and strong marketing and managerial abilities. It also suggested that easier access to training programs for these skills could boost their entrepreneurial potential.

Mungai and Njeru (2018) did research to find out how business incubator services affect the success of new businesses in Kenya. This study utilized correlational methodology, with the Nairobi Incubation Lab (NaLiLab) investigating company ideas through questionnaires. Both descriptive and inferential statistical methods were used, with inferential techniques like the chi-square test and Pearson correlation coefficient used to demonstrate a connection between variables. Hypotheses were measured using one-way ANOVA. The study indicates a strong correlation between the success of new businesses and the support provided by business management, suggesting the need for various incubation services.

Therefore, the hypotheses of the study:

H01: Networking services has no significant effect on the growth of startups in Kenya.

H02: Physical incubation infrastructure has no significant effect on growth of startups in Kenya

H03: Management mentoring has no significant effect on the growth of startups in Kenya

**Research Methodology**

The study used a descriptive research design, specifically a cross-sectional design as supported by Mugenda and Mugenda (2003). The methodology is appropriate for studying the impact of business incubation on startup growth in Nairobi. A sample of 227 startup firms was selected using proportionate stratified and simple random sampling techniques. These represents a 40% of the total population. A sample size of 10-40% is considered sufficient for conducting (Mugenda & Mugenda, 2003).

Reliability test was conducted using a 0.7 Cronbach alpha as the acceptable threshold. Multiple linear regression analysis was conducted.
Findings

The study shows that increasing networking services, physical infrastructure, and management mentoring significantly boosts startup business growth, with a single unit increase resulting in 0.608, 0.584, and 0.566 growth units. The study observed a positive significant relationship between networking services and startup business growth in Nairobi County (t=2.887, P.000). Abou-Moghlil and Al Muala (2019) found that entrepreneurial networks, such as social and business networks, have a significant impact on the success of ongoing businesses in the Canadian manufacturing industry. These networks, including inter-organizational strategic networks, play a crucial role in determining the success.

The study found a significant positive correlation between physical incubation infrastructure and startup business growth in Nairobi County. The finding of this study conforms to Ngoma, Ntale, and Castro (2021) that improvements to infrastructure in the Albertine Graben region of Uganda are a key influence in the development of startup activity, accounting for 21.6% of the region's entrepreneurial activity.

The study discovered a favorable significant relationship between management mentoring and startup firm growth in Nairobi County (t=3.050, P.000). The study findings are consistent with those of Evelens, Van Rijnsoever, and Niesten (2017) research on the effect of managerial mentoring on startup growth. Entrepreneurs who received advise from peers who used a formal approach to managing people developed their businesses by 28% more and were 10% less likely to fail than those who received advice from peers who used an informal approach. This was discovered by creating regular meetings, continuously defining goals, and offering frequent feedback to staff. Furthermore, the study pointed that entrepreneurs who got guidance from peers who used an informal approach to people management were more likely to fail.

Conclusion

Business incubation services is crucial to any innovative businesses which are growth oriented, towards this end the researcher note that networking had a positive and significant effect on the growth of startup within Nairobi County. An increase to networking services through idea sharing, access to market information and social capital result to growth of startups. The study found that physical infrastructure had a positive and significant effect on the growth of startups in Nairobi County. Therefore, it implies that conducive working environment, administrative facilities and availability of infrastructure greatly enhance growth of startups. Thus, the study concludes that physical infrastructure should be considered by startups since it influences growth of startup positively within Nairobi County. In addition, the study revealed that management mentoring affect growth of startups within Nairobi County in Kenya. Therefore, through professional mentoring, business consulting services and business operation advise start-ups can realize high growth. Accordingly, the study concludes that management advise can enhance growth of start-up since it has a positive and significant effect.

Policymakers should strengthen associations like ASSEK, ACIH, and SME Founders Association to boost startup growth and enhance networking levels among hub owners. The Kenyan government can boost startup networking by attracting investors, hosting innovation weeks, and sponsoring top startups, enhancing interaction with local and international stakeholders. Corporations can leverage their product development, marketing, or corporate social responsibility budgets to partner with innovative startups, fostering collaboration and exploring corporate innovation. Incubators should adopt a triple helix model of innovation, involving academia, industry, and government to foster synergy rather than competition in the innovation ecosystem. The players' collaboration will significantly contribute to the social and economic development in Nairobi city county and Kenya as a whole. Nairobi city county can utilize the triple helix model for private-public partnership, involving private sector investment, financial support, and mentorship services. Startups are encouraged to join ASSEK, ACIH, and independent incubation centers for access to physical infrastructure, subsidized office space, and internet connection, without relying on external grants. Exploring commercial opportunities with corporations, public service organizations, and collaborating with national and county governments can help foster the digital economy and innovation. The government can repurpose Huduma and Biashara facilities for informational and physical incubation of startups, similar to the Makeni innovation hub in Makeni county. Corporations like banks can offer value-added services by providing physical infrastructure to startups within their branch network. The Kenyan government plans to provide Konza Tech's physical infrastructure to top Kenyan startups, encouraging business incubators to specialize in specific sectors like health and agriculture business fintech. The Nairobi County Chief Officer Digital Economy and Startups should collaborate with elected leaders to decentralize business incubation services to specific wards, addressing unique local issues. This will provide tailored services for startups in different localities. Additionally, business incubators can partner with universities for specialized research in health, agriculture, and climate change.

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