



Journal of Management and Research (JMR)

Volume 8 Issue 2, December 2021

ISSN(P): 2218-2705 ISSN(E): 2519-7924

Journal DOI: <https://doi.org/10.29145/jmr>

Issue DOI: <https://doi.org/10.29145/jmr/82>

Homepage: <https://ojs.umt.edu.pk/index.php/jmr>

Article: **SMEs, Economic Growth, and Business Incubation
Conundrum in South Africa: A Literature Appraisal**


Author(s): Vuyani Rens, Chux Gervase Iwu, Robertson Khan
Tengeh, Emmanuel Ekale Esambe

Affiliation: Cape Peninsula University of Technology, South Africa

Article DOI: <https://doi.org/10.29145/jmr/82/08>

Article History: Received: November 15, 2021
Revised: December 23, 2021
Accepted: December 28, 2021
Available Online: December 31, 2021

Citation: Rens, V., Iwu, C. G., Tengeh, R. K., & Esambe, E. E.
(2021). SMEs, economic growth, and business
incubation conundrum in South Africa: A literature
appraisal. *Journal of Management and Research*, 8(2),
214–251.

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A publication of the
Dr Hassan Murad School of Management,
University of Management and Technology, Lahore, Pakistan

SMEs, Economic Growth, and Business Incubation Conundrum in South Africa: A Literature Appraisal

Vuyani Rens, Chux Gervase Iwu*, Robertson Khan Tengeh and Emmanuel Ekale Esambe

Faculty of Business and Management Sciences
Cape Peninsula University of Technology, South Africa

Abstract

Despite the South African government's desire to encourage economic growth through the growth of small and medium enterprises (SMEs), attempts to ameliorate the difficulties encountered by SMEs are often hindered by a lack of resources, one of which is business incubation. This study employed a descriptive literature review to declutter the varying concerns of SME growth and development with respect to the roles of business incubators (BIs) and the government. It also expounded that by filtering the role of both BIs and the government, some clarity could be provided regarding the challenges faced by SMEs in South Africa. The findings suggested that at present, the volatility of SMEs makes them an unreliable partner for the South African government. This is due to the fact that the government is failing them, in one way or the other, through limited and failed support systems. Moreover, BIs are also unable to help them because of their excessive reliance on government funding.

Keywords: business incubation, business incubators (BIs), government support, small and medium enterprises (SMEs)

Introduction

Despite all the challenges SMEs currently face, they play an imperative role in a country's socioeconomic growth by contributing towards job creation while improving industrial and economic diversity, thereby driving economic growth (Ramasobana et al., [2017](#); Gongxeka, [2020](#); Civelek et al. [2021](#)). SMEs are estimated to contribute about 60% of employment in South Africa and 50% of its Gross National Product (GNP); moreover, they generate 52% to 57% of the Gross Domestic Product (GDP) (Muriithi, [2018](#); Kibuuka & Tustin, [2019](#)). These statistics depict how important

*Corresponding Author: iwuc@cput.ac.za

SMEs are in the growth of the economy, production of goods and services and creation of new markets in South Africa. Unfortunately, the failure rate of SMEs is high in the country. This is because they face numerous challenges which hinder them from delivering the required benefits.

The failure rate of SMEs in South Africa varies. Ramasobana et al. (2017) stated that the failure rate is approximately 70% to 80%. Muriithi (2018) noted an approximately 50% to 90% failure rate of SMEs. According to (Ramasobana et al., 2017; Muriithi, 2017), contributing factors towards the high failure rate include poor management of finances and poor marketing practices, insufficient electricity supply, inadequate access to funding, poor management competency and capability, negative perceptions, lack of access to reliable data, lack of support from the government and corruption. Leboea (2017) added the following as some of the challenges SMEs face: technological capabilities, skilled labour, characteristics of entrepreneurs, globalisation, macro-environment factors, political-institutional factors, socio-cultural factors, access to external financing, government laws and lack of infrastructure. Despite the government support provided through the Department of Small Business Development, Muriithi (2018) reported that the government has neglected the criticality of a conducive business and legal environment by imposing ambiguous protocols for accessing financial and other support.

We contend that these challenges necessitate a thorough evaluation so that appropriate remedies can be identified, especially as their existence contributes to fractured socioeconomic growth and sustainability of the nation. We, nonetheless, acknowledge the efforts of the government through its various agencies – for example, Small Enterprise Development Agency (SEDA) and Small Enterprise Finance Agency (SEFA) – in promoting and assisting small businesses and entrepreneurs by equipping them with the necessary technical knowhow to become competitive. SEFA focuses on SME development and sustainability through various engagements, such as providing financial loans of R500 to R5 million. Its services include asset finance, bridging loans, term loans, structured finance solutions, a credit guarantee scheme, and special funding for land acquisition. On the other hand, SEDA offers incubation services, quality control and conformity standards, as well as technology transfer and

support. Even though these services are presumably available, there have been claims of unnecessary political meddling (Muriithi, [2018](#)).

Drawing from the above introductory note, the continued existence of SMEs depends on the eradication of the challenges they face. Dealing with these challenges necessitates intense government and other stakeholder support, including providing a focused business incubator ecosystem. In fact, several researchers (Lose, [2019](#); Hillemane et al., [2019](#); Yusubova et al. [2019](#); Lose et al. [2020](#); Lose & Khuzwayo, [2021](#)) have indicated the utility of business incubators (BIs) in ameliorating these challenges. This paper aims to draw from a thorough appraisal of the selected literature to unpack the realities of sustaining SMEs for the economic growth of South Africa against the backdrop of limited resources, with a focus on business incubation. It should be noted that BIs confront several challenges on their own. Essentially, this paper's contribution is three-fold. Firstly, it clarifies the cluttered narratives of SME-business incubator-government nexus by filtering the roles of both BIs and the government in South Africa. Secondly, it foregrounds the significant relationship realm of SMEs, BIs, and the government. Thirdly, it adds to the growing literature on SME sustainability in developing economies.

The paper progresses as follows. Firstly, we explain the methodological steps taken to write this paper. Following their description is a detailed discussion of some of the challenges SMEs face. Thereafter, the theoretical background of business incubators, including their roles and challenges, is stated. We conclude by drawing from the extant literature some important policy implications of this paper and also provide future research directions.

Method

This paper adopts the descriptive literature review methodology. We used carefully selected literature as a springboard to declutter the varying concerns of SME growth and development from the confusing narratives around the role of BIs and the government. This contributed towards filtering the different roles of both BIs and the government. This approach was derived keeping in view a wide range of researches, such as (Guzzo et al., [1987](#); Silverman, [2016](#); Etim & Iwu, [2019](#); Sharma et al. [2021](#)), which explored the advantages of this qualitative approach when used as a

methodological tool to reveal an interpretable pattern from the existing literature.

Table 1

Summary of Literature Sources Used

Source type	Quantity
Journal articles	76
Books	3
Thesis	19
Conference papers	1

The review was not limited to journal articles only (See Table 1), even though the likes of Podsakoff et al. (2005) believe that only journal articles should be reviewed in serious research. To ensure that the pool of literature reviewed in this study necessarily reflected academic quality, a systematic approach described by (Opute et al. 2020; Opute et al. 2020; Irene, 2019) was followed in analyzing peer-reviewed publications, where the contents had been adequately referenced. Thus, to prove the adequacy of the sources chosen for this study, we adopted the counsel of Dey (2005) who argued that the conditions for selecting certain documents or focusing on specific topics ought to reflect the study's goals. We were confident that this approach would assist us in achieving the objective of this paper and in uncovering current materials (Harb & Abu-Shanab, 2020) related to South Africa, SMEs, BIs and the government's role in solving the problems faced by SMEs in South Africa.

Challenges Faced by SMEs

Notwithstanding the support SMEs get from the government, some of them fail within three years of operation (Chimucheka & Mandipaka, 2015). As previously indicated, certain factors are responsible for their failure. For instance, Kowo et al. (2019) stated that SMEs fail to strategise their business operations. A critical aspect of strategy is location, as argued by (Chimucheka & Mandipaka, 2015). They viewed location and business environment as indispensable for the survival of a business. If a business is poorly located, it may affect profit maximisation (Chandra et al., 2020).

High taxes may force SMEs to close (Kowo et al., [2019](#)). Corruption is also viewed as among the significant factors that impact the survival of SMEs (St-Pierre et al., [2015](#); Mustafa & Yaakub, [2018](#)).

Some of the challenges SMEs face include a lack of structure and business management skills needed to manage risk (Mustafa & Yaakub, 2018). Foregrounding business risk, Mashwama, Aigbavboa and Thwala (2018) worried that the prevalence of petty crime in general and pilfering in particular can affect the growth of a business. There is also the concern of an inadequate technology infrastructure which hampers connectivity (Vincent & Zakkariya, [2018](#)). Mustafa and Yaakub ([2018](#)) stated that BIs offer internet connectivity to SMEs that are unable to afford it, thereby helping them to innovate their marketing strategies. Some of these challenges are explained below in detail.

Inadequate Access to Funding

Lack of credit access is the most pressing challenge SMEs face. Common sources of business financing among SMEs include personal savings, family, friends, and credit lenders (Chimucheka & Mandipaka, [2015](#)). Credit lenders such as banks are less willing to assist SMEs financially because of the high risk and precarious returns (Rahman et al., [2016](#)). Additionally, SMEs struggle to obtain financing from credit lenders due to the rigorous conditions associated with obtaining finance (Saari, [2020](#)). Saari ([2020](#)) explained that the application process to access loans is rigid and it takes time for financial institutions to verify the loan applications of SMEs. Moreover, loans are sometimes issued when they are no longer needed or when their purpose has expired. Ramachandran and Yahmadi ([2019](#)) also highlighted the challenge of the delayed disbursement of loans and the fact that their procedure is complicated. Mashwama et al. ([2018](#)) added that financial institutions prefer offering loans to low-risk clients and also charge high banking costs to SMEs.

Inadequate access to funding is, therefore, one of the most significant challenges faced by SMEs (Rahman et al., [2016](#)). Chimucheka and Mandipaka ([2015](#)) noted that because SMEs fail to meet the requirements of financial institutions, they adopt alternative ways of obtaining finance, such as government grants, incubation and personal loans. In sum, the most

common challenge that SMEs face is inadequate access to finance, which hampers their innovativeness and sustainability (Rahman et al., [2016](#); Vincent & Zakkariya, [2018](#); Ramachandran & Yahmadi, [2019](#)).

Management Issues

There is common agreement among scholars that SMEs have inadequate resources. Also, the skills which SMEs possess are not efficacious to conduct their business operations (Chandra et al., [2020](#)). Reportedly, some SMEs are reluctant to invest in skills and knowledge that may contribute towards the improvement of their workforce (Musa & Chinniah, [2016](#)), resulting in them facing severe management issues (Rahman et al. [2016](#)). According to Chandra et al. ([2020](#)), the owners and managers of SMEs have inadequate business knowledge and lack the requisite managerial experience. Rahman et al. ([2016](#)) supported the notion that SMEs face management issues and often tend to rely more on their own experience.

Notwithstanding the management issues SMEs face, researchers have highlighted some of the challenges that lead to poor management by SMEs, namely insufficient funds to enrol their employees in educational programmes, lack of practical skills, lack of theoretical knowledge, poor planning capacity, inadequate skills to do market research and inadequate access to management programmes (Chimucheka & Mandipaka, [2015](#); Musa & Chinniah, [2016](#)). Furthermore, with regards to the management issues confronting SMEs and their role in undermining the success of a business, it cannot be ignored that SMEs' managers lack commitment, which leads to mismanagement (Mashwama et al., [2018](#)).

Owing to their poor management experience, SMEs suffer huge losses and are often forced to close. The reasons for shutting down include the lack of business education, training and skills (Eniola et al., [2015](#); Mashwama et al., [2018](#)). With reference to business education, Mashwama et al. ([2018](#)) noted that curriculum design poorly contributes towards the skills development of entrepreneurs. Other researchers have identified some of the challenges SMEs face including the lack of financial and management skills, lack of formal education, difficulty in balancing home and business duties, poor business framework, external factors, and inadequate experience (Chimucheka & Mandipaka, [2015](#); St-Pierre et al., [2015](#)). Some

SMEs shut down because they fail to identify the challenges faced by them (Rahman et al., [2016](#)).

Lack of Government Support

Among the many documented challenges faced by SMEs is the lack of government support. St-Pierre et al. (2015) explained that inadequate government support is related to complex and stringent government policies. Moreover, the process of applying for government support is often poorly defined and executed. Mashwama et al. ([2018](#)) stated that government programmes are weak and do not adequately portray its commitment to assist SMEs. Government support and policies are often incompatible and inconsistent, hindering the expansion of SMEs (Kowo et al., [2019](#)). (Vincent & Zakkariya, [2018](#); Kowo et al., [2019](#)) noted that government policies are inconsistent and complex and due to their complexity, aspiring entrepreneurs tend not to pursue their business ideas.

Bureaucracy is viewed as among the prime barriers to SME development and new venture creation in South Africa (Meyer & Meyer, [2017](#)). Meyer and Meyer ([2017](#)) further explained that inadequate support from the government in South Africa restricts the growth of businesses. The SME economy can easily be crashed or promoted by regulatory frameworks created by the government (Muriithi, [2017](#)). However, the efforts of the government for SME development cannot be left unnoticed. The government of South Africa has established some agencies to assist SMEs but SMEs are unable to identify these agencies (Ramraj, [2018](#)). Leboea ([2017](#)) stated that SMEs struggle to deal with the government and they lack the capacity, in general, to comply with South African legislation because of its complexities, which poses a threat to these SMEs. SMEs cannot cope with complex regulations in the country because these have become too challenging to comply with (Gamba, [2019](#)). Muriithi ([2017](#)) believes that some factors which negatively affect the growth of SMEs include inequitable competition, adverse tax systems, complex rules and regulations and an immoderate environment.

Government's role to facilitate the growth of SMEs remains pivotal. The government of a country creates a favourable or unfavourable environment for SME development (Muriithi, [2017](#)). Ramraj ([2018](#)) concurred that the

services offered by various governments tend not to be aligned with the needs of SMEs; in simple terms, governments offer services within their capacity and not those needed by the SMEs. Managing these challenges may flag the need to design a proper regulatory framework to fully support and promote SME development (Gamba, [2019](#)). Lack of support from the government not only affects SMEs adversely; indeed, it also paves the road to their failure (Muriithi, [2017](#)).

Technological Capabilities

The importance of technological capabilities cannot be overlooked. Tinarwo ([2016](#)) stated that SMEs have insufficient knowledge of the most recent technologies. Rahman et al. ([2016](#)) ascertained that SMEs find it challenging to access modern technologies, which makes it difficult for them to keep up with the fast-growing economy. Technological capabilities can be categorised in different ways, such as the use of mobile phones and blogs; however, some SMEs do not have adequate access to information communication technologies (Chimucheka & Mandipaka, [2015](#)).

While technology is considered crucial in driving the knowledge economy, SMEs are beset by technology constraints including limited access to the most appropriate technologies, as well as the lack of skills and knowledge needed to utilise these technologies. These constraints force SMEs to be left behind in a rapidly evolving economy (Avevor, [2016](#); Mustafa & Yaakub, [2018](#)). Some government policies are not favourable for adopting new technologies, which appears to challenge SMEs' performance (Eniola et al., [2015](#)). Notwithstanding the technology constraints and their impact on SMEs, technological capabilities can assist SMEs to innovate and remain competitive (Eniola et al., [2015](#)).

Lack of Proper Infrastructure

Choto ([2015](#)) delineated infrastructure (such as roads, water and electricity) as the basic requirement for the functioning of a business. Various studies (Eniola et al., [2015](#); St-Pierre et al., [2015](#); Tinarwo, [2016](#)) note that SMEs lack the appropriate infrastructure needed to operate their businesses. Moreover, SMEs suffer from transport, telecommunication, and electricity deficits and these factors limit their survival (Chimucheka & Mandipaka, [2015](#)). St-Pierre et al. ([2015](#)) observed that SMEs face expensive rentals and

lack basic infrastructure facilities, such as water, electricity supply, and telecommunications systems. Various factors, such as lack of access to proper infrastructure, the internet, lack of resources, and inadequate access to capital are sources of significant concern and cannot be ignored (Vincent & Zakkariya, [2018](#)). (Choto, [2015](#); Mashwama et al., [2018](#)) added that the lack of infrastructure incurs high costs, such as poor roads lead to damaged goods, which results in high substitution costs.

Lack of proper infrastructure includes bad roads, weak telecommunications, and shortages of electricity (Ndiaye et al., [2018](#); [Iwu, 2021](#)). Moos and Sambo ([2018](#)) argued that South Africa's economy is failing because of a lack of infrastructure, access to resources, and skills deficiency. It has been observed that proper infrastructure plays a pivotal role in SME development (Gongxeka, [2020](#)). A shortage of appropriate facilities results in firms accepting high costs of some services and close substitutes for these utilities, such as generators coming at a price (Gamba, [2019](#)). The need for roads, water supply, telecommunication, electricity supply and other utilities poses a severe challenge to SME advancement (Moos & Sambo, [2018](#); Ndiaye, [2018](#); Gamba, [2019](#); Gongxeka, [2020](#)). Rightfully so, proper infrastructure is regarded as a lucrative investment and it is seen as an equivalent of any other form of capital. Access to appropriate infrastructure improves the standard of living through better output and sustainable economic development (Moos & Sambo, [2018](#)).

Legal and Regulatory Constraints

(Eniola et al., [2015](#); Mustafa & Yaakub, [2018](#)) stated that since SMEs face regulatory and legal constraints, so applying for business formalization becomes cumbersome for them. Any attempt by business owners / SMEs to consult private agencies for assistance is understandably hampered by the exorbitant legal / consultancy fees (Avevor, [2016](#)). The inability to wade through the complex process of registering a business results in business owners operating 'illegally', furthering their incapacity to secure funding from financial institutions (Chimucheka & Mandipaka, [2015](#)). Arguably, SMEs in Africa face more complex regulatory issues, especially high taxes, than any other region across the globe (Ramraj, [2018](#)).

There has been extensive research on legal and regulatory constraints that hold back SME development over the past years Amentie et al. ([2016](#)).

What keeps emerging is the fact that the success of SMEs is constantly compromised by an equal distribution of resources and complex regulations (Sitharam & Hoque, [2016](#)). Moos and Sambo ([2018](#)) concurred that an onerous regulatory environment is viewed as a factor that discourages entrepreneurial uptake. The legal and regulatory constraints create bottlenecks for entrepreneurial activities in South Africa Ramraj ([2018](#)) and add to the challenges - including licensing and requirements needed for registration – that SMEs face (Mmasi, [2019](#)). Besides these challenges, SMEs have to contend with immoderate operation rates, high insurance premiums and high licensing fees (Amentie et al. [2016](#)). A supportive regulatory framework induces low administrative complexity, affordable taxes, and a conducive business environment for SMEs (Ndiaye et al., [2018](#); Gongxeka, [2020](#)). Furthermore, there is common agreement among scholars, researchers and policymakers that legal and regulatory constraints must support new venture creation (Leboea, [2017](#); Kumalo, [2018](#); Moos & Sambo, [2018](#); Ndiaye et al., [2018](#); Mmasi, [2019](#); Gongxeka, [2020](#)).

Theoretical Background of Business Incubation

In the field of medicine, an incubator is a tool used to protect babies (born prematurely) from harm. However, in business terms, newly established ventures are supported by business incubators (BIs) which offer them an array of business support services (Wolniak & Grebski, [2018](#)). Masutha and Rogerson ([2015](#)) concurred that BIs support both newly established entities and the existing ones. Additionally, Masutha and Rogerson ([2015](#)) suggested that the notion of incubation is about offering inclusive support, such as networking opportunities. Thus, BIs serve to stimulate SME growth by helping SMEs to deal with different challenges (Schiopu et al., [2015](#)).

There is no common definition for business incubation as the use of the term varies from country to country (Allie-Edries & Mupela, [2019](#)). Selected definitions of business incubation are briefly discussed below:

Business Model / Programme / System Approach

Obaji et al. ([2016](#)) defined a BI as a model that is used to provide financial assistance and technical support to newly established ventures. This model focuses on accelerating the growth of SMEs. An important insight gained from the above definition is the underpinning value of a

model, implying that it can be adapted and implemented in diverse contexts. Ramar and Muthukumaran (2019) added that BIs are programmes aimed to effectively develop SMEs by offering them coaching, training and by developing their business network. Van der Spuy (2019) defined a BI as a critical system that supports new venture creation. Finally, Al-Shamaileh, Saatci, and Eyamba (2020) defined a BI as a mechanism used to assist SMEs and encourage entrepreneurship. Terms such as model, programme, critical system and mechanism have a common element, that is, a BI is as much a mental process as it is a physical structure. Therefore, these definitions tacitly oppose the notion of an incubator to be defined only as a physical organization.

Organisational / Institutional Approaches

Al-Kasasbeh et al. (2017) defined BIs as organisations created to assist SMEs to thrive and prosper through the provision of targeted resources, infrastructure and mentorship. A similar approach was proposed by Rogerson (2017), who defined a BI as a business institute that provides business support to emerging SMEs, until they become operationally independent. Tembe (2018) also viewed BIs as institutions that offer SMEs the business skills required for their growth and sustainability. What unites these two definitions is the strong similarity between an organization and an institution.

Service, Vehicle or Facilitatory Approach

Some definitions seek to unite the two broad approaches discussed above. For example, Bose and Goyal (2018) explained that BIs offer SMEs various services, namely facilities, mentorship, access to modern technologies, as well as tangible and intangible resources. Also, Allie-Edries and Mupela (2019) viewed BIs as vehicles that drive economic growth by offering newly formed ventures a series of services, such as funding, technical knowledge and business knowledge. Meanwhile, Mavi, Gheibdoust, Khanfar and Mavi (2019) explained that BIs are facilitators that provide incentives and grants to SMEs and facilitate their growth. These three definitions highlight the physical and the abstract nature of BIs and contribute towards a deeper understanding of what it takes to establish them.

According to Mrkajic (2017), business incubation started in the late

1950s in the USA, with only 12 BIs operating across the country. Mrkajic (2017) also identified three generations of business incubation:

- The first generation (1960s–1980s) focused on infrastructure, value creation, leveraging economies of scale and office space.
- The primary focus of the second generation (1980s–1990s) was on the development of business capabilities, mentoring, educational learning and coaching.
- The third generation (early 2000s) focused on market research development, financial resources, networking, technological facilities, and professional assistance.

Furthermore, Hausberg and Korreck (2018) stated that BIs started in the 1950s and gained popularity during 1960s and 1970s. The concept of BI was very successful in the USA, prompting other countries around the globe to adopt its philosophy. In South Africa, business incubation commenced in 1995 Choto (2015) and has continued to evolve since then. The idea of business incubation proved so attractive that it led to the evolving of the fourth generation of BIs after 2010, which focuses on offering more than business services (Lose, 2019). The fourth generation incubators, known as virtual business incubators or VBIs, emerged in 2010. Their primary objective is to assist SMEs by using the internet of things (IoT) and to offer them technological amenities (Lose, 2019).

Different Types of Incubators

According to Lose (2019), BIs play a pivotal role in creating value for the incubates. There are different types of BIs, namely technology business incubators (TBIs), business incubators (BIs), university-based incubators (UBIs) and virtual business incubators (VBIs). All of them are vital components of the business ecosystem for technology-based start-ups in modern economies (Lose, 2019). TBIs support SMEs by bringing together technological entrepreneurship with high-tech venture creation (Hillemane et al., 2019).

The connection between incubators and SMEs is based on the fact that incubators encourage start-ups through coaching, mentoring and facilitating ingress to intellectual property (Wann et al., 2017). UBIs are organisations designed to speed up national economic development by helping start-ups

in their growth and development process, especially those based on new technology (Wann et al., [2017](#)). VBIs provide SMEs with virtual services that increase their competency and improve their performance and quality of service (Qambar, [2018](#)).

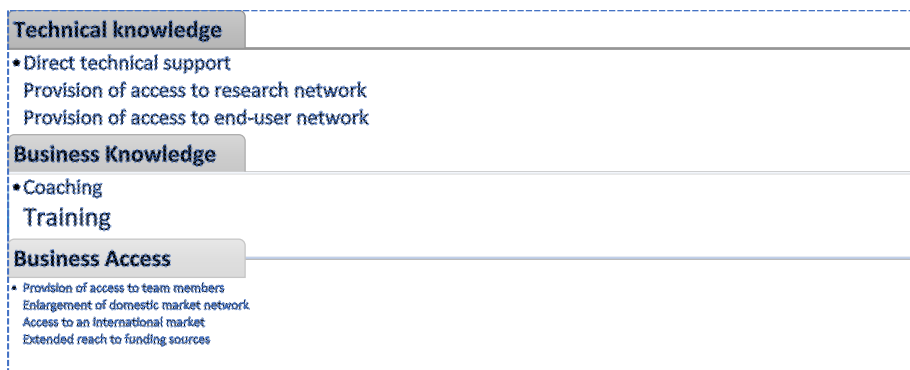
Role of Business Incubators (BIs)

Different characterisations of the varied roles of BIs do suggest that BIs, by their very make-up, can assist SMEs to stay operational for extended periods, despite their lack of capacity. Harima et al. ([2019](#)) stated that BIs offer four types of knowledge: entrepreneurial, organisational, technological, and complementary market knowledge. BIs embed this knowledge in their incubation programmes, equipping incubatees with the understanding of how to establish and gain market share and become competitive. However, Lubas ([2019](#)) categorised the role of BIs into three dimensions, namely infrastructure (office space, shared resources), business support (coaching and training) and access to networks (professional services and finances). This categorisation is somewhat consistent with that of Yusubova et al. ([2019](#)), who argued that BIs offer three core services: technical knowledge, business knowledge, and access to market. It is our view that given the lack of infrastructure and limited business acumen, the intervention of BIs is significant. Newly established SMEs are sometimes in need of business support to drive their purpose.

The figure below, adapted from Yusubova et al. ([2019](#)), articulates the role of BIs in mitigating the challenges faced by SMEs.

Figure 1

Role of business incubators (BIs) (Yusubova et al. [2019](#))



The challenges that BIs confront are discussed below.

Discussion: Challenges Faced by BIs

BIs are well-positioned to tackle socioeconomic problems by providing growth opportunities to SMEs. SMEs should help to address socioeconomic challenges by providing innovative, sustainable and effective socioeconomic solutions. Essentially, BIs are part of the value chain designed for addressing the socioeconomic challenges faced by a country. Their impact becomes important in this regard despite the consensus among scholars, in the light of considerable evidence, that they are beset with challenges (Tengeh & Choto, [2015](#); Muriithi et al., [2018](#); Nani, [2018](#)). This section addresses these challenges – namely access to funding and sponsorship, lack of business skills, access to advanced technology-based facilities, competent and motivated management, quality of entrepreneurs, geographical area, stringent government policies, stakeholder support, mentorship, and sustainability.

Access to Funding and Sponsorship

The establishment of BIs has been called into question due to a shortage of funds and lack of resources (Bigirimana et al., [2015](#)). BIs ought to have the capacity to induce sponsorship through good management skills, effective use of resources and by assisting SMEs (Tengeh & Lose, [2015](#)). However, with BIs having limited access to funding and sponsorship, they struggle to sufficiently assist start-ups (Tengeh & Choto, [2015](#)). Therefore, to reasonably support SMEs, considering their important role in economic development, BIs need funds (Choto, [2015](#)). Muriithi ([2018](#)) explained that limited access to funding and sponsorship can be mitigated through government intervention by prioritising incubatees to gain access to funding and sponsorship. In developing countries, BIs require endorsement from governments, especially in their first year of operation (Lose, [2016](#)).

In South Africa, the concept of incubation is still developing with most incubation programmes depending on public financing. In South Africa, SEDA, STP and DTI are the main public funders (Lose, [2019](#)). BIs funded by the government are Not for Profit Organisations (NPOs), which is why they are funded by these public departments (Lose, [2016](#)). One of the most vital measures BIs have at their disposal is to attract the attention of

sponsors, who tend to grant finance when they see that the incubation programme is of good value to those in need and the incubated have the potential to achieve their goals and objectives (Muriithi et al., [2018](#)). The concept of incubation is evolving in both developing and developed countries; however, the next generation of incubation will be driven by profit due to the challenges and complexities associated with obtaining funding (Tengeh & Lose, [2015](#); Lose, [2016](#)).

Lack of Business Skills

Following the difficulty in accessing adequate funds, BIs are bereft of quality human capital (Dlamini, [2021](#)). As a result, they often fail to identify and offer programmes that meet the needs of incubatees (Tengeh & Choto, [2015](#)). Considering the lack of human capital, BIs thus lack the capacity to provide entrepreneurial education and this results in poor financial management, poor resource mobilisation and poor business management on the part of the incubatees (Lose, [2016](#)). Could this be the reason why Lose ([2016](#)) argued that the failure of BIs to deliver is driven by a lack of entrepreneurial background on the part of the workforce, which makes it difficult for BIs to support SMEs, fully. BIs face numerous challenges while assisting SMEs during the incubation period and preparing them for the competitive market after they graduate from the programme (Choto, [2015](#)).

Considering BIs' lack of specialised skills and competent management, it is not surprising that incubatees have reported a mix of negative experiences during incubation (Dlamini, [2021](#)). With such negative experiences, it is likely that BIs are perceived as ineffective, with a poor work ethic and lacking in entrepreneurial skills (Nkwini, [2008](#)). BIs, therefore, need managers who have adequate managerial and financial skills to perform their duties. Equally so, BIs should consider employing or even engaging people with an entrepreneurial background to deliver the necessary support required by the incubatees (Aladejebi & Oladimeji, [2020](#)).

Limited Access to Advanced Technology-based Facilities

Today's business transactions are almost always conducted using technology. Owing to the shortage of funds, BIs struggle to have the state-of-the-art facilities (Muriithi et al., [2018](#)). Due to this fact, BIs fail to

perform because some of the services require technology-based facilities, therefore, the needs of SMEs are not fulfilled (Lose, [2016](#)). Tengeh and Lose ([2015](#)) concurred that BIs are best known for assisting SMEs with infrastructure, business services and modern technologies; this is why BIs should have advanced technology-based facilities to serve the needs of SMEs. Failure to gain access to modern technology inhibits the ability to develop products (Muriithi et al., [2018](#)). Lose ([2019](#)) states that latest technologies are expensive and the inadequate access of South African BIs to tangible and intangible resources hinders their creativity and innovation for incubated SMEs.

Existing literature indicates that gaining access to resources and having a restricted right to entry to technology-based facilities is one of the major challenges faced by BIs (Nkwinika, [2018](#)). Shrivastava ([2018](#)) maintained that for BIs to succeed, modern forms of technology are required because technology makes it easier to gain access to critical information and also makes it easier for BIs to provide their offerings in a more germane way, concerning the ever-changing environment. Aladejebi and Oladimeji ([2020](#)) posited that the activities of BIs are limited due to restricted access to the latest technology-based facilities. BIs are best known for offering access to advanced technologies, to promote innovation, and to improve the development of SMEs, yet they themselves have inadequate access to scientific and technological facilities (Kuryan et al., [2018](#)). Limited access to advanced technology-based prototypes makes it difficult for BIs to access funding and attract sponsorship. It induces them to offer services that are within their capacity, rather than what is needed by incubatees (Aladejebi & Oladimeji, [2020](#)).

Access to science and technology-based facilities remains the most crucial element in incubation programmes; however, incubatees have indicated a limited access to technology-based facilities in incubation programmes (Abdullahi, [2017](#)). Rose ([2017](#)) suggested that one way of mitigating limited access to science and technology-based facilities is by creating more science parks, where the interconnectivity of technical activities would flow and create a space for innovation. Notwithstanding the role of modern technology in creating a conducive environment, the

existing literature fails to address this issue and lack of access to scientific and technological facilities remains a matter for attention (Abdullahi, [2017](#)).

Competent and Motivated Management

Tengeh and Lose ([2015](#)) stated that management that is not competent and motivated can affect the performance of a BI, adversely. However, Choto ([2015](#)) and Tengeh and Choto ([2015](#)) observed that BIs face management issues while serving incubated SMEs and the appointed management should at least have entrepreneurial skills, business background, management skills and the ability to lead. To mitigate these issues, BIs should appoint qualified individuals, organise educational programmes for the existing management, and appointed managers should also have the ability to lure sponsors (Tengeh & Lose, [2015](#)). Essentially, the success of BIs depends on proper management; however, the appointment of qualified management warrants quality management of resources and provision of quality services to SMEs (Muriithi et al., [2018](#)). The appointed management should set goals, observe those goals, and should be compensated well to inspire performance (Lose, 2019). Generally, a properly managed BI has a good chance to lure sponsorship and investors (Muriithi et al., [2018](#)).

To achieve the goals of the incubator, the competence and the quality of management play an important role. This suggests that the services offered by BIs are expected to be impacted by their management's skills (Abdullahi, [2017](#)). Ndagi ([2017](#)) argued that the effectiveness of BIs relies mostly on committed and capable managers. Furthermore, incubator managers are obligated to pilot a team, maintain the incubator's essential networks, and make sure that the staff delivers services, effectively. Alzaghal and Mukhtar ([2017](#)) claimed that the success and the competitiveness of an incubator depends on competent management. Moreover, incubator governance plays a pivotal role in the incubation process because it is important for incubated entrepreneurs to be aware of what is expected of them regarding performance, daily activities, policies and whatever the BIs offer.

It is still a matter of concern for some BIs when it comes to attracting and selecting professionals who are adequately skilled to oversee the different business tasks within the incubation (Shrivastava, [2018](#)). Above

all, Ahmad and Thornberry (2018) recommended three basic qualities incubator managers should have, namely they must be extroverted, should have entrepreneurial experience and most importantly, must be good communicators.

Quality of SMEs

There is common agreement among researchers that the success of BIs relies on the standard of incubated SMEs, taking into consideration the aspiration of SMEs to succeed and the desire to acquire knowledge and skills (Bigirimana et al., 2015; Choto, 2015; Tengeh & Choto, 2015; Lose, 2019). It cannot be overemphasised that BIs need to use appropriate criteria to enrol SMEs for incubation, suggesting that incubated SME personnel should be goal-driven, result-orientated, enthusiastic, risk-takers, and should have organisational skills, leadership and entrepreneurial qualities (Lose, 2019).

The literature suggests that there is a lack of quality among the owners of small businesses and entrepreneurs. Opondo (2017) suggested that entrepreneurs emanate from different backgrounds, which influences the way they operate their businesses. Abdullahi (2017) noted that there is a lack of high-quality entrepreneurs in incubation programmes and the critical success factor in incubation is the orientation and background of entrepreneurs. Reasons such as poor entrepreneurial background, frail business philosophies, poor education, deficiency of presentation abilities and absence of motivation leading to poor enactments contribute to the quality of entrepreneurs (Opondo, 2017). The selection criteria used by BIs for incubatee admission are very poor and little attention is given to the alignment of the vision and the objectives of incubatees (Mahmood et al., 2015). Ample research found a weak connection between rigid selection criteria and incubator achievement and noted that the success of BIs rests on the quality of the incubated entrepreneurs (Nkwinka, 2018). However, Rose (2017) noted that the success of incubation hinges on the following factors: knowledge, skill, willpower, and an entrepreneur's ability to take risks.

Political associations are used more than meritocracy when incubatees are admitted to incubation programmes. Subsequently, the likelihood of the

business to succeed declines (Mahmood et al., [2015](#)). Entrepreneurs need adequate knowledge and a suitable skill set in order to take calculated risks to succeed.

Geographical Area

In South Africa, SMEs are situated in distant geographic areas; hence, BIs are faced with the challenge of being out of reach of SMEs which need their services (Choto, [2015](#); Tengeh & Choto, [2015](#)). Notwithstanding the fundamental goals of BIs, in Africa at large, they are faced with the challenge of accessing SMEs in rural areas and developments in South Africa make it difficult for them to assist BIs, remotely (Lose, [2019](#)). A conducive BI location is one where there is adequate access to technical and business knowledge (Choto, [2015](#); Tengeh & Choto [2015](#)).

A distant location of BIs makes it difficult for SMEs to access them. Opondo ([2017](#)) argues that SMEs are then unable to adequately receive incubation services. Existing literature recognises that insufficient technical support for SMEs indicates the need for the establishment of incubation programmes. However, a gap still exists, particularly in rural areas, in gaining access to BIs which is caused by geographic dispersion and the physical space between BIs and SMEs (Barnes, [2018](#)). Opondo ([2017](#)) suggested that BIs should locate themselves centrally within the reach of SMEs so that they may be able to access their various services easily without the need for long-distance travelling. Above all, the success of BIs sometimes depends on their geographical location and it is important for them to locate themselves in areas where they can easily access incubation resources (Nkwinika, [2018](#)).

Mentorship

Muriithi ([2018](#)) suggested that BIs need to be mentored because some of them are start-ups, which face a similar challenge as potential incubatees. The need for mentorship within the BI ecosystem has been emphasised in literature (Choto, [2015](#); Tengeh & Choto, [2015](#); Lose, [2019](#)), as it creates a good chance for a BI to succeed. Success is measured as the likelihood of a BI existing for a considerable length of time (Muriithi, [2018](#)). Given that the failure of BIs to offer requisite services is often blamed on mentorship deficiency, Lose ([2019](#)) suggested that BIs should be on the lookout for

liberal, generous, and patient mentors. Therefore, BIs need to enrol in mentorship programmes to enhance their business management skills and venture processes (Muriithi, [2018](#)).

Managing resources effectively and efficiently can be a daunting experience for some incubators, which calls for mentorship (Alzaghal & Mukhtar, [2017](#)). Concerning incubation, mentorship comprises a process of supervision through several activities, namely resource management and product development (Van der Spuy, [2019](#)). Rose ([2017](#)) viewed mentoring as a process that permits the transmission of knowledge, social capital and psychological support needed for business development or personal growth. Alzaghal and Mukhtar ([2017](#)) ascertained that mentoring is essential simply because it helps to create new ideas, while feedback from mentors is considered one of the ways to promote business development. Moreover, mentors need to respond with versatility to the desires of mentees and the ever changing environment, in order to gain credibility amongst them (Rose, [2017](#)). Given the role that mentorship plays in supporting BIs, it is considered as an imperative service that BIs themselves should offer to entrepreneurs (Alzaghal & Mukhtar, [2017](#)). While BI sustainability may rely on beneficial mentorship opportunity, lack of skilled mentors and their availability has been noted in the literature (Nkwinika, [2018](#); Schutte & Direng, [2019](#)).

Sustainability

The issue of sustainability and growth for BIs remains a matter of concern; both sustainability and growth remain major issues that hinder the capacity of BIs to attain their goals (Muriithi, [2018](#)). In simple terms, growth is measured by the total number of graduates in incubation programmes and the overall revenue per annum. With low graduate numbers, BIs are unable to sustain themselves (Tengeh & Lose, [2015](#)). The growth and sustainability of BIs rely on their ability to recruit management who can attract sponsorships, partnerships, raise funds and manage resources, effectively (Muriithi, [2018](#)). The ability to acquire sponsorships guarantees cash flow from stakeholders (Tengeh & Lose, [2015](#)). Lastly, the incubated SMEs might miss the point of being part of the incubation programme if BIs fail to sustain themselves (Muriithi, [2018](#)).

Aladejebi and Oladimeji (2020) described sustainability as a process whereby an incubator ‘maintains and sustains’ itself. Several factors support BI sustainability. As reported earlier in this paper, issues of finance accessibility, availability of useful mentors, and committed incubates drive BIs to purposeful existence. Therefore, BIs should foreground sustainable business models to attract these elements (Long et al., 2018). The overall number of graduates and the total annual turnover in incubation programmes also determine the success of BIs (Aladejebi & Oladimeji, 2020). However, designing a framework for sustainability can be a complex and challenging process replete with barriers, such as low financial reward and complex legislative provisions (Long et al., 2018).

Sustainability is always an issue of note for BIs, especially those supported by the government (Ogutu & Kihonge, 2016). The ability of BIs to raise funds and recruit a competent and motivated management flags a positive sign in creating sustainability for them. To remain economically *viable*, they have to seek shareholders that can commit a sustainable financial plan (Nkwinika, 2018). In essence, BIs should seek self-sustainable practices as these enable their co-existence with SMEs during the incubation programme (Ogutu & Kihonge, 2016).

The following table summarises the key challenges for South African BIs.

Table 2

Challenges Faced by Business Incubators

Sources	Challenges
Milne (2020)	Lack of funding, unclear funding sources, undue influence of funders.
Lose (2019)	Access to qualified staff, lack of entrepreneurial skills, access to funding and sponsorship, geographical areas, lack of commitment of entrepreneurs, government policies, mentorship, help from stakeholders, quality of entrepreneurs, competent and inspired leadership, networking, financial sustainability and access to advanced technology-based prototypes.
Nani (2018)	Unconducive economic environment, lack of access to knowledge of science and technology, inadequate financial

Sources	Challenges
	resources, unavailability of qualified staff and lack of adequate infrastructure.
(Muriithi et al., 2018)	Lack of professional management personnel, sustainability and growth, technology, funding, mentorship and absence of the right variety of entrepreneurs.
Lose et al. (2016)	Access to advanced technology-based prototypes, lack of resources and patronage, geographic area and lack of entrepreneurial skills.
Lose (2016)	Support structures, advanced technological facility, self-sustainability, and relevance of entrepreneurial skills.
Lose and Tengeh (2015)	Access to business management, lack of entrepreneurial skills, competitiveness, access to technological-based services, access to finance and sponsorship.
Tengeh and Choto (2015)	Inconsistent stakeholder support, quality of entrepreneurs, lack of funding, geographic area, skills, supportive government policies, competent and motivated management, lack of commitment, mentorship.
Choto (2015)	Geographical area, skills, lack of financing, quality of businesspeople, inconsistent stakeholder support, strong government approaches, competent and motivated management, lack of commitment and mentorship.

It is evident from the above table that the challenges faced by BIs have received significant attention of researchers.

Conclusion

We conclude by drawing from varied perspectives in the extant literature presented in this study to point out some important policy implications of this paper as well as future research directions.

Policy Implications

In developing countries such as South Africa, BIs are constrained by stringent government policies. Government policies should be designed to actively support BIs because their success relies on these policies (Mahmood et al., [2015](#); Lose, [2019](#)). (Choto, [2015](#); Tengeh & Choto, [2015](#)) supported

the notion that the success of BIs relies on supportive government policies, which should not inhibit them from assisting SMEs. In South Africa, the government established the Department of Small Business Development as an avenue to support economic growth (Lose, [2019](#)).

The term ‘government policy’ depicts an effort made by the government that aims to regulate a particular environment. Its relevance to business incubation lies in promoting entrepreneurship and creating a conducive business environment for entrepreneurs (Obaji et al., [2016](#)). Li et al. ([2020](#)) stated that government policies play an active part in obstructing and or furthering the development of SMEs, although these regulatory policies are essentially meant to ameliorate business activities and improve the performance of SMEs. Abdullahi ([2017](#)) stated that there is a need to align government policies with the role of BIs, so that they can effectively offer their services. Government policies should be designed, therefore, to create and sustain environments that are beneficial for incubation (Nkwinika, [2018](#)).

There is substantial evidence that stringent government policies make business incubation inefficient and important resources may be lost (Obaji & Olaolu, [2020](#)). Li et al. ([2020](#)) asserted that erratic government policies pose a serious threat to the development of SMEs, which becomes a barrier to entrepreneurship advancement. In South Africa, the success and failure of BIs are dependent on policies set up by the government and the effectiveness of incubators is determined by these policies (Rose, [2017](#)).

Supportive government policies lead to the success of BIs and permit incubators to effectively assist entrepreneurs (Olaolu, [2018](#)). It has been suggested that government should look into its regulatory policies in order to improve the standard of incubation and SME development (Li et al., [2020](#)). Well-thought out government policies enhance the performance of BIs towards incubated entrepreneurs (Obaji et al., [2016](#)).

Practical Implications

Consistency and cooperation from various stakeholders, such as the government, community and investors, are of paramount importance for increasing the serviceability of BIs (Choto, [2015](#); Tengeh & Choto, [2015](#); Lose, [2019](#)). For BIs to survive, management should be able to attract and maintain a good relationship with sponsors (Muriithi et al., [2018](#); Lose

[2019](#)). There is sufficient evidence that incubation is still evolving in South Africa, while support for BIs is still weak. It is, therefore, important for stakeholders to be consistent when assisting BIs.

Some researchers have noted that different academic disciplines attribute a different meaning to the term ‘stakeholder’ (Grama-Vigouroux et al., [2020](#)). The entrepreneurial journey needs stakeholder support to enhance innovation and entrepreneurial actions (Liu, [2020](#)). The participation and support of stakeholders are crucial for the success of incubators (Ndagi, [2018](#)). Considering the importance of stakeholders in incubation, it is necessary to understand that stakeholders differ with region and incubator type (McAdam et al., [2016](#)). (Ndagi, [2018](#); Nkwinka, [2018](#); Shrivastava, [2018](#)) are of the understanding that reliability and collaboration with stakeholders are of paramount importance. Conversely, incubation programmes should cultivate stakeholder support.

(Rose, [2017](#); Milne, [2020](#)) noted that it is important to align incubators and stakeholders and to come up with a plan to function as a cohesive unit with the same objectives. Literature recognises multiple stakeholders to sustain competitive advantage (McAdam et al., [2016](#)). Incubators have a role in developing programmes that perfectly fit the communities. This is mainly achieved when incubators have access to proper infrastructure, funding and entrepreneurial networks, which derive from well-grounded stakeholder relationships (Rose, [2017](#)).

Liu ([2020](#)) argued that stakeholders may support SMEs to discover new opportunities and assist incubators in overcoming their entrepreneurial confinements through stakeholder relationships. Grama-Vigouroux et al. ([2020](#)) defined stakeholders as any collective or individual which can affect or can be affected by the success of the company’s aims. Further, stakeholders can be categorised as internal and external. Internal stakeholders supervise the organisation, while external stakeholders comprise the company’s customers, suppliers, wholesalers, societies, the state and regulators. Shrivastava ([2018](#)) stated that clarity regarding consistency and cooperation from all stakeholders is important.

Moving Forward

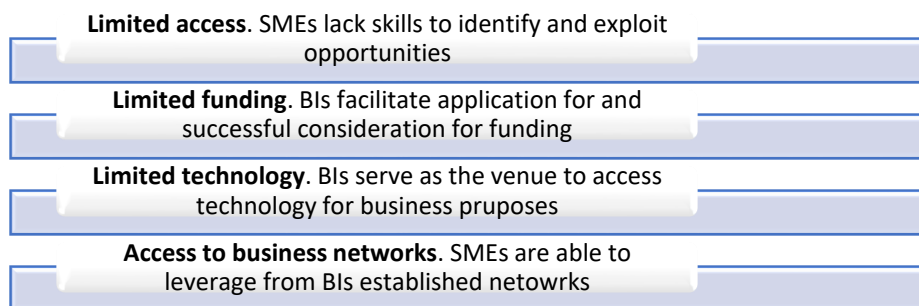
The concept of business incubation is still evolving in South Africa (Choto, [2015](#); Lose et al., [2016](#)). In 1994, the South African government

committed itself to encourage entrepreneurship in order to mitigate the SMEs' mortality rate, which was achieved through business incubation (Masutha & Rogerson, [2015](#); Rogerson, [2017](#); Madlala, [2018](#); Tembe, [2018](#)). Like other nations, the South African government followed the methodological approach of embracing business incubation to restructure and empower the economy and alleviate poverty (Masutha & Rogerson, [2015](#)). In South Africa, business incubation is supported by the Small Enterprise Development Agency (SEDA) in conjunction with SEDA Technology Programme (STP), the Department of Small Business Development, and the Department of Trade and Industry (DTI) through its Incubation Support Programme (ISP) and Small Enterprise Finance Agency (SEFA) (Rogerson, [2017](#); Madlala, [2018](#)). Government contribution cannot be overlooked; indeed, the South African government plays a pivotal role in assisting BIs by providing business services and incubation support (Madlala, [2018](#)). Notwithstanding government interventions, the policies put in place are still too complex for BIs to negotiate (Rogerson, [2017](#)).

Considering that SMEs join incubation programmes because they have limited skills, limited funding, limited technology, and inadequate access to business networks (Lose, [2016](#); Choto, [2015](#)), the role of BIs in supporting SMEs becomes instructive. Lose's ([2016](#)) depiction of the reasons (see Figure 2) for joining BIs emphasises the need for providing proper support to SMEs.

Figure 2

Reasons why SMEs join BIs (Lose, 2016)



Considering the challenges and constraints SMEs face and following the methodological approach of Bilal and Mqbbali ([2015](#)), it is crucial to note

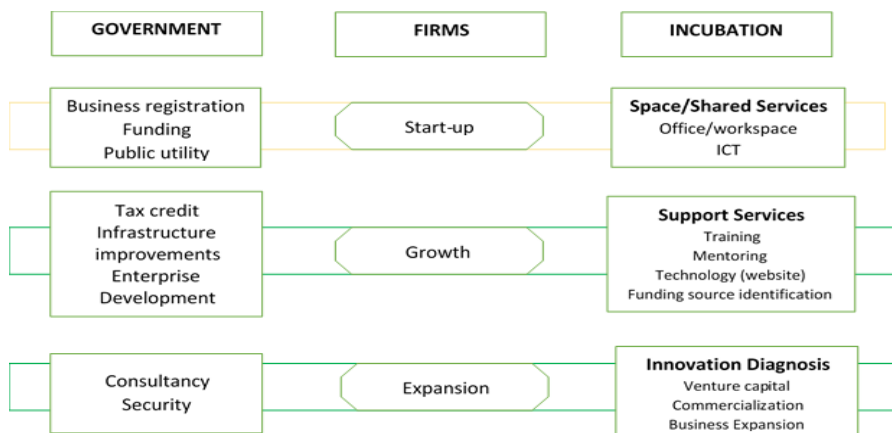
the following significant relationship realm for SMEs, BIs, and the government:

- The government, through BIs and other agencies, should offer proper training programmes to SMEs that assist with business operations and sustainability;
- The government should ensure that the environment for business start-ups and growth is attractive and conducive;
- The government should eradicate complex policies and applications for operating licenses;
- The government should strive to continuously improve its support systems for SMEs by providing the newest technology, educational programmes and legal protection;
- The government should entice other stakeholders to join in by offering continuous support to SMEs and encouraging entrepreneurship.

Against the backdrop of the above suggestions, it is prudent to consider the following framework (Figure 3) for future research and practice opportunities. Essentially, any decluttering attempt must start with the notion of a firm intending to exist for long, but with the support from incubators, government, and the private sector to make it happen. After all, understanding how to unravel the challenges faced by SMEs requires the support of both the public and private sector (including incubators).

Figure 3

Opportunities for Research and Practice



Therefore, we argue that a robust incubation process must be aligned with the scope of deliverables within a particular business incubation scheme for a stable SME ecosystem.

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