






# “South African business incubators and reducing the SME failure rate – A literature review”

<b>AUTHORS</b>	Jabulile Msimango-Galawe   Elona N. Hlatshwayo  
<b>ARTICLE INFO</b>	Jabulile Msimango-Galawe and Elona N. Hlatshwayo (2021). South African business incubators and reducing the SME failure rate – A literature review. <i>Problems and Perspectives in Management</i> , 19(2), 194-205. doi: <a href="https://doi.org/10.21511/ppm.19(2).2021.16">10.21511/ppm.19(2).2021.16</a>
<b>DOI</b>	<a href="http://dx.doi.org/10.21511/ppm.19(2).2021.16">http://dx.doi.org/10.21511/ppm.19(2).2021.16</a>
<b>RELEASED ON</b>	Wednesday, 02 June 2021
<b>RECEIVED ON</b>	Monday, 21 December 2020
<b>ACCEPTED ON</b>	Thursday, 22 April 2021
<b>LICENSE</b>	 This work is licensed under a <a href="https://creativecommons.org/licenses/by/4.0/">Creative Commons Attribution 4.0 International License</a>
<b>JOURNAL</b>	"Problems and Perspectives in Management"
<b>ISSN PRINT</b>	1727-7051
<b>ISSN ONLINE</b>	1810-5467
<b>PUBLISHER</b>	LLC “Consulting Publishing Company “Business Perspectives”
<b>FOUNDER</b>	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

65



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

© The author(s) 2021. This publication is an open access article.



## BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10,  
Sumy, 40022, Ukraine  
[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 21<sup>st</sup> of December, 2020

**Accepted on:** 22<sup>nd</sup> of April, 2021

**Published on:** 2<sup>nd</sup> of June, 2021

© Jabulile Msimango-Galawe, Elona N. Hlatshwayo, 2021

Jabulile Msimango-Galawe,  
Ph.D., Senior Lecturer, Faculty of  
Commerce Law and Management,  
Wits Business School, University of  
the Witwatersrand, South Africa.  
(Corresponding author)

Elona N. Hlatshwayo, Ph.D. Candidate,  
Lecturer, Faculty of Commerce  
Law and Management, Wits  
Business School, University of the  
Witwatersrand, South Africa.



This is an Open Access article,  
distributed under the terms of the  
[Creative Commons Attribution 4.0  
International license](https://creativecommons.org/licenses/by/4.0/), which permits  
unrestricted re-use, distribution, and  
reproduction in any medium, provided  
the original work is properly cited.

**Conflict of interest statement:**

Author(s) reported no conflict of interest

Jabulile Msimango-Galawe (South Africa), Elona N. Hlatshwayo (South Africa)

# SOUTH AFRICAN BUSINESS INCUBATORS AND REDUCING THE SME FAILURE RATE – A LITERATURE REVIEW

## Abstract

Small business failure is one of the biggest challenges faced by developing countries, and business incubators have been touted as a solution to reducing the failure rate of these small and medium-sized enterprises (SMEs). Thus, the number of business incubators has escalated worldwide, including South Africa. Consequently, significant time has been devoted to researching business incubators and their role in SME success. However, the effectiveness of these incubators is still in question, thus a study is being conducted to determine how effective business incubators are in reducing the failure rate of SMEs.

The findings show that there are some improvements in SMEs that have been incubated or supported, but not enough to make a dent on the failure rate at the country level, as the failure rate has stubbornly remained the same. One of the concerning key findings is that there is a misalignment between the goals of business incubators (BIs) and the SMEs' needs. SMEs are looking for access to finance and access to markets, while BIs are offering office space and other support services.

BI and SME goals need to be more aligned if we are to effectively enhance small business development interventions and reduce current failure rates. More empirical research is still needed to measure and quantify the effectiveness of BIs to SME failure rates, as no research has attempted to link a business incubator to both the success of individual SMEs and the country's SME failure rate.

## Keywords

business incubators, small business failure, small and medium-sized enterprises, entrepreneurship, enterprises and SME support

## JEL Classification

L25, L26, L53, M13

## INTRODUCTION

Small and Medium Enterprise (SME) sector is seen as a key driver for economic growth, job creation and poverty alleviation in South Africa (BER, 2016). As a result, the growth of SMEs is a subject of interest in the country, and the democratic government has formulated policies and introduced various initiatives to boost the sector to achieve the desired impact on the economy. Even though these initiatives have not fully produced the desired outcome, some progress has been made within the SME space. For instance, the number of SMEs increased by 3%, from 2.18 million in 2008 to 2.25 million in 2015 (BER, 2016).

Moreover, their contribution to gross value added increased from 18% in 2010 to 22% in 2015 (BER, 2016). However, a lot still needs to be done to realise the National Development Plan (NDP) 2030 targets, which include the creation of 11 million new employment opportunities in South Africa, with 90 percent of these jobs expected to be generated within the SME economy (NDP, 2013). As a result, the SME sector remains a priority policy issue for the national government to address poverty issues.

Business incubators have been enlisted as one of the critical players necessary for the support and subsequent success of SMEs. Consequently, business incubators have emerged in large numbers to support and grow sustainable and profitable SMEs (Lose & Kapondoro, 2020; Masutha & Rogerson, 2014a). However, the effectiveness of these programs is still questionable, and the fact that there is no standard measure to assess their effectiveness accurately exacerbates the problem.

The challenge South Africa continues to face is the high failure rate of SMEs coupled with low early-stage entrepreneurial activity and, as a result, the economic contribution of SMEs is lower than expected. This is the case even though the number of business incubators grew significantly in the past 5 to 10 years. Business incubators (BIs) aim to improve the survival and success rate of SMEs and consequently reduce the failure rate of SMEs in the country, but so far, the outcomes are not desirable (Herrington et al., 2017; Seed Academy, 2019) as the failure rate remains persistently high.

The role of BIs is to provide support to SME owners so they can grow and sustain their businesses. Empirical research on business incubation success is minimal, and this can be attributed to the fact that it is challenging to collect longitudinal data of incubated and non-incubated SMEs to critically assess their effectiveness (Lukeš et al., 2019). Most countries have embraced incubators in their policies as a response tool for encouraging entrepreneurship. However, because of the limited research that focuses on measuring the effectiveness of incubators, their effectiveness is still debatable. van Weele et al. (2019) state that the success of the business incubators is to a large extent determined by the success of the SMEs that have been supported. Despite the high failure rate of SMEs in South Africa, the business incubator space continues to grow at a rapid rate, without a systemic measure of their success (Fernandez et al., 2019; Nicotra et al., 2017).

Therefore, the objective of the study is to investigate the role of business incubators in reducing the failure rate of SMEs in South Africa. This will be done by analyzing the trends and progress made by business incubators on the survival rate of SMEs in incubators, post-incubation and the failure rate in the country thereof.

In 2001, there were only three public sector incubators but the number increased sharply to 51 (Masutha & Rogerson, 2014a; Masutha & Rogerson, 2014b). ANDE (2018) reported more than 250 incubator programs in South Africa and further revealed that South Africa's entrepreneurial ecosystem map shows that 340 organizations provide support in the entrepreneurial ecosystem, however Crampton (2019) presents a "definitive" list of business incubators with a total of 58 BIs in South Africa. This inconsistency in reporting the number of BIs in South Africa is highlighted by Hewitt and van Rensburg (2020) who notes that these numbers could not be confirmed. About 150 of the BIs are capacity development providers, and this is inclusive of both public and private organizations operating in the South African economy according to ANDE (2017). Most of the BIs are based in the metropolitan areas and are mainly privately owned.

The duration and activities or services offered by the different BIs vary substantially, making it difficult to measure and benchmark against each other. Although the services provided vary, there are common stages during this time that SMEs have to go through which are pre-incubation, incubation and post-incubation stages with a different kind of support for each phase.

The research questions the study seeks to answer are how effective are business incubators in reducing the failure rate of SMEs in South Africa and whether there is reliable and valid literature or data as evidence of the effectiveness?

## 1. LITERATURE REVIEW

### 1.1. The conceptualization of business incubators

Business Incubators (BIs) are entities that provide businesses with strategic and value-adding interventions to facilitate the success of new ventures and mitigate their potential failure (Hackett & Dilts, 2004b). In the global context, BIs are recognized as essential instruments for promoting entrepreneurship and technological innovation at the SME level (Adegbite, 2001; Schutte & Direng, 2019). BIs consist of an integrated package of services, facilities and mechanisms provided to SMEs to improve their productivity, access to financing, markets, as well as technology (Karim, 2017; Meyer et al., 2016). The providers of business incubation include specialized government agencies, private corporations, non-profit organizations and business associations of which are sometimes referred to as business development service providers (BDSPs) (Hausberg & Korreck, 2018).

BDSPs, accelerators and incubators are names used interchangeably in the industry within the South African context, and not much distinction is made here, but conceptually they are different as explained below (Bergek & Norrman, 2008; Meyer et al., 2016; Pompa, 2013). This study has adopted the term business incubators as is more commonly used than the others and also better understood.

Incubators are firms that enlist young firms at their start-up stage and nurture them to survive and grow to sustainable and successful businesses (Adegbite, 2001; Aernoudt, 2004; Bergek & Norrman, 2008; Hackett & Dilts, 2004a). Typically, start-ups graduate from incubators after one to five years from the time they began the incubation program (Cohen, 2013). Incubators offer accommodation space coupled with shared administrative amenities for start-ups and services such as hands-on business management skills, legal advice, marketing services, research and development, support in refining business operations and providing platforms and opening networks that facilitate access to finance (Cohen, 2013; Hackett & Dilts, 2004b).

Incubators also manage incubatees by monitoring their performance against their business plans to ensure they grow towards financial independence (Adegbite, 2001). Similarly, accelerators are organizations that offer short and fixed-term cohort-based programs to venture firms to facilitate their growth. These programs last about three months (Cohen, 2013). Additionally, accelerators offer seed capital, workspace, mentoring, monitoring, and networking opportunities with successful entrepreneurs, venture capitalists and angel investors to nascent ventures. Further, accelerator programs conclude with public events in which graduates of the program pitch their businesses to potential investors (Cohen, 2013). Hybrids are alliances between centers that exchange and co-develop goods and services to create value, reduce operational costs, by combining resources, organizing information, and safeguarding associated risks (Jolink & Niesten, 2012).

Hybrids function in the following formats:

- a. Demonstration centers that provide the requisite technologies, equipment and knowledge to enable the establishment and growth of enterprises.
- b. Incubation centers that offer business support services to start-ups and existing businesses to facilitate their growth and sustainability.
- c. Innovation support centers that facilitate the commercialization and transfer of technologies to nascent and existing enterprises (Masutha & Rogerson, 2014a).

Enterprise and Supplier Development (ESD) refers to the efforts of buying organizations to improve the capabilities and performance of their suppliers (Krause et al., 2007). These firms engage in this development process to accrue benefits such as timely and reliable delivery of goods and services, high-quality goods, flexibility and reduced costs from their suppliers. They are typically buying organizations engaged in ESD to offer training programs to improve the capacity of their supplier organizations, share information, and in some situations, they make direct financial investments in the supplier operations (Krause et al., 2007).

Therefore, for this study, business incubators encompass all types of developmental support to SMEs.

## 1.2. The history of Business Incubation

The role of BDS has evolved over the years and even more sophisticated with many service offerings. Historically, the first BI was established in the United States of America in 1957, and it offered space and business advisory services to its tenants (Hausberg & Korreck, 2018). In the 1960s and 1970s, business incubators grew, courtesy of government sponsorship to remedy firm failures and unemployment in a bid to grow the economy of the US (Campbell, 1989; Hackett & Dilts, 2004b). In Europe, the first incubator emerged in the United Kingdom in 1975 within the British steel industry to create jobs in the steel closure areas (Karim, 2017; Pompa, 2013). Germany and France followed suit and established incubators in 1983 and 1985, respectively (Aernoudt, 2004). Business incubators were first established to provide space for enterprises to operate rather than building firms. Thus, the success of business incubators was defined in terms of leased space and the ability of tenants to pay up monthly expenses. Later, incubators mobilized resources to grow firms, and success was defined in terms of the incubatee firm expansion and ability to be independent (Smilor, 1987).

In recent years, the focus has been on industry renewal through technology innovation; thus, incubators are sustained as essential tools of entrepreneurship in this sector (Ayatse et al., 2017). Business incubators were established as instruments for diversifying the offerings for purposes of regional economies, but in later years, there was a shift towards increasing regional competitiveness by fostering the growth of technology-based firms (Aernoudt, 2004). However, many incubators in the developed world context reached saturation in the 1990s because most of them offered similar services. The saturation triggered the transition to the development of high-tech economies and sector-specific incubators in the mid-1990s (Karim, 2017). This has further been augmented by the adoption of the BDS concept in developing countries, which account for 40% of business incubators globally (Akçomak, 2009).

In the South African context, business incubation began in 1995 and was established as hives of the industry by the Small Business Development Corporation (SBDC) (Dubihlela & Van Schaikwyk, 2014). These consisted of premises that provided infrastructure such as telephones, electricity and power to SMEs in the townships. Furthermore, they facilitated subcontracting partnerships between large enterprises and small businesses (Buys & Mbewana, 2007). Since then, business development services have evolved into various models, including, accelerators, technology hubs, enterprise supplier development (ESD) programs, university-based incubators, as well as public and private sector incubators (Ntlamelle, 2015; van der Spuy, 2019).

There are various factors, which guide the BDSP model and design; these include the objectives such as growing the economy, poverty alleviation, technological advancement, developing capability in the supply chain and internationalization of SMEs (ANDE, 2018; Dubihlela & Van Schaikwyk, 2014; Masutha & Rogerson, 2014b; Zappala & Rinkunas, 2019). Mrkajic (2017) further developed three models of business incubation from Bruneel et al. (2012), the first generation providing basic infrastructure for its Incubatees, the second generation provides business development capability in addition to the first, the third generation adding market reach development. One of the key challenges in South Africa is that there is a diverse offering of BI models, with first, second and third generation and beyond on the market. This exacerbates the problem of comparing their output. Furthermore; in the South African context, there are other complexities that BDSPs shape their models around, such as geographical locations (urban, rural and township), different risks factors, and cultures (Dubihlela & Van Schaikwyk, 2014; Lose & Tengeh, 2015; Msimango-Galawe & Urban, 2019).

SEDA (2019) gives an overview of the current status of BIs in South Africa, as well as the alignment to the National Development Plan (NDP). This report highlights that the Department of Small Business Development (DSBD) targets to create employment for 90% of the unemployed through SMEs. This goal is supported by a move to have an integrated entrepreneurial ecosystem for SMEs

(SEDA, 2019). The integrated ecosystem includes support agencies of the DSBD, namely, Small Enterprise Development Agency (SEDA), Small Enterprise Finance Agency (SEFA), National Youth Development Agency (NYDA), Technology and Innovation Agency (TIA), as well as the National Empowerment Fund (NEF) (BER, 2016). Through the use of BIs, the government aims to provide space, mentoring, training, administrative, commercial and technical services as well as financial modeling to its SMEs as a means to aid their growth in early years (Masutha & Rogerson, 2014b; Meyer et al., 2016).

Half of the BIs in South Africa are sector agnostic offering multiple business development services (ANDE, 2018). Up to 82% of the existing business incubators are public sector driven, while 18% are private sector driven (Dubihlela & Van Schaikwyk, 2014). However, the South African government has adopted an integrated multi-stakeholder approach to business incubation in the sense that the national, subnational governments and the private sector are all engaged in the incubation programs rolled out across the country by the government (Masutha & Rogerson, 2014b; SEDA, 2019).

### 1.3. The needs of SMEs and the reasons for the establishment of BIs

Akçomak (2009) outlined various reasons for the establishment and maintenance of BIs, including: providing premises and administrative services to reduce start-up operational costs and risks. Additionally, as a means to reduce unemployment levels, foster collaboration between universities and industries through the commercialization of research and technology transfer. Furthermore, enabling networking among firms which further facilitates access to finance, markets and knowledge. In South Africa, the typical key performance indicators for incubators have been summarized as including “number of applications to the incubator, number of incubatees, SME survival rate during incubation, client and SME satisfaction and incubator profitability” (Department of Trade and Industry, 2014, p. 67). It is important to interrogate whether these goals are aligned to the needs of SMEs that join the incubators and how this alignment would result in decreasing SME failure rate.

The SME sector’s current contribution to GDP is 36% and accounts for 55% to 65% of aggregate employment in South Africa (Herrington et al., 2017; SEDA, 2018). However, recently, the country has experienced low economic growth rates, which have adversely affected the SME sector (STATSSA, 2019). SEDA (2019) reported a 9.2% decline in the number of SMEs, which resulted in a 20% decline in SME employment from 8.1million in Q1 2017 to 6.44million in Q1 2018, reflecting a 1.6million loss in employment opportunities. Furthermore, the unemployment rate in South Africa remains high, standing at 38.5% between Q2 and Q3 of 2019, and this is also attributed to the slow economic growth and the fact that large enterprises are downsizing and restructuring (SEDA, 2019; STATSSA, 2019; van der Spuy, 2019). In addition to these declines, 70-90% of South African firms are said to fail in the first three years of establishment (Ayandibu & Houghton, 2017; Mazanai & Fatoki, 2011).

Literature analysis revealed that in the South African context, the challenges of SMEs are many and vary, depending on the province and the level of economic development of that community (Choto et al., 2014; Sitharam & Hoque, 2016). SMEs in South Africa are diverse in their needs due to various factors in their contexts that are at the individual, firm and environmental level, as such, the reasons for SMEs failure will vary (Msimango-Galawe & Urban, 2019; Olawale & Garwe, 2010). The following have been identified in the South African literature as being the top five reasons for SME failure and SME needs; access to finance, access to markets, business support and skills training, access to infrastructure and access to technology (BER, 2016; Dubihlela & Van Schaikwyk, 2014; Seeletse, 2012; Worku, 2016). The South African GEM 2019 report indicated the top three challenges that result in SMEs failing or exiting their businesses as business unprofitability, financing problems and personal reasons. Although these top three reasons are not the same as those suggested by the previous authors; finance still features as one of the key reasons for failure (Herrington & Kew, 2019). This confirms the assertion that the top challenges are very much context-dependent, it is notable that finance features consistently irrespective of the different contexts.

Additional SME challenges reported were low levels of research and development which hampers innovation, stringent labor laws, an inadequately educated workforce as well as high levels of crime (SEDA, 2019). The challenges above lead to the high failure rates (75 to 90%) of businesses within the first three to five years of operation depending on which statistics one refers to (Ayandibu & Houghton, 2017; Mazanai & Fatoki, 2011). Furthermore, the survival rates of start-ups are low, and this is because many of the small businesses tend to be necessity-driven as opposed to opportunity-driven entities (BER, 2016).

Recent studies from the developing world context indicate that incubated SMEs perform better than those who are not incubated, and the survival rate is better than the national average and the jobs added per SMEs are supporting evidence to that argument (Akçomak, 2009; Al-Mubarak & Busler, 2013; Lose & Tengeh, 2015; Masutha, 2013).

BIs are expected to address the challenges faced by SMEs, and this led the researchers to investigate what entrepreneurs view as success as these are the things expected from business incubators. In the South African context, entrepreneurs cited financial support, networking opportunities and marketing support as key to the success of their businesses. They view these as the top three factors that can help them move their businesses to the next level (Seed Academy, 2017).

According to the C4G (2018) report, BIs in South Africa influence the performance of SMEs in different ways as detailed below.

BIs enhanced the revenue growth of SMEs, mostly the smaller enterprises, this is because generally micro-businesses grow faster than larger businesses and they operate from a lower base of revenue. Furthermore, although over 90% of SMEs receiving BIs improved their processes, improved processes did not necessarily lead to significant improvements in revenue margins. The best performing BIs did not necessarily perform well with regards to improving the processes, revenue growth and margins of the SMEs they were supporting. This is partly attributed to poor communication between BIs and their client SMEs with regards to the need's assessment and expectations. With re-

gards to the type of BI programs offered, BIs that have a set curriculum for SMEs over a defined period produced the best results for start-ups which are at the early stage of growth. On the other hand, bespoke BIs that offer only a specific service that an SME has applied for created the best results for businesses that were at a later stage of development. The support that SMEs value the most include support for business strategy, access to finance, and people training and development. SMEs indicated that the factors that significantly impacted the performance of their businesses included improved knowledge and know-how with regards to business strategy, financial budgeting and planning, marketing and regulatory issues (C4G, 2018).

Despite the positive findings cited above, some researchers argue that BIs are ineffective. Schwartz (2008) conducted a study on the post-incubation success of SMEs and found that when firms exit the protective environment of a BI, their likelihood to fail would increase despite the time spent at the BI. These findings are corroborated by data in South Africa, which show that the dropout rate of businesses before graduation from the business incubation program ranges from 10% to 30% (Masutha, 2013). Furthermore, Lose et al. (2016) highlight that institutional incompetence can hinder the success of incubatees such as lack of managerial skills. In the Nigerian context, many of the incubatee firms were reluctant to exit the incubator program, and only 30% graduated after a six-year period (Adegbite, 2001).

Research suggests that various factors lead to the above failures such as the lack of clear missions for setting up business incubators, poor implementation of selection, entry and exit criteria for incubatees, inadequate funding for BIs, as well as inadequate managerial capacity and lack of entrepreneurial skills of managers (Lose & Tengeh, 2015). In other situations, business incubators were established to achieve political or donor funding goals such as putting up real estate investment as tangible evidence for public policy for economic growth and innovation, yet this may not translate into business incubatees' success (Tavoletti, 2013). In South Africa, the incubatee dropout and post-exit failure are attributed to factors such as the lack of entrepreneur discipline and effort, lack of procurement opportunities, low demand for lo-

cal products, presence of cheap imports, non-compliance, financial mismanagement by an entrepreneur and the fact that some entrepreneurs are job seekers (Lose & Tengeh, 2015; Masutha, 2013).

Obviously, what entrepreneurs call their biggest needs, such as access to market, access to finance, and business skills, are not necessarily what BIs emphasize in their programs, so the misalignment continues and interventions not as effective as they were meant to be.

#### 1.4. SMEs failure rate and introduction of business incubators

Two decades after the establishment of BIs in South Africa, the SME economy has made significant progress. For instance, technology stations, which are deemed as cost-effective instruments for supporting SMEs have facilitated the establishment of new technology-based enterprises (Meyer et al., 2016; van der Spuy, 2019). Moreover, they have enhanced links between universities and the industry, thus contributing to the placement of university students in industries (Kavhumbura, 2014). They also led to partnerships between universities and local and provincial governments (Masutha & Rogerson, 2014b).

However, there is no consistent approach on when and what to use as a measure for the success of SMEs that have been incubated, whether it is financial viability (Worku, 2016) or employment creation, (Lukeš et al., 2019). Although BIs report a high success rate in their incubated SMEs, this is not reflected in the failure rate of SMEs in South Africa (SEDA, 2019; van der Spuy, 2019). This study argues that an ideal situation is to have SMEs go beyond survival mode and scale. Schwartz (2008) argues that post-incubation success is key and overlooking this would imply that post-incubation success was not an objective of the incubation.

Dubihlela and Van Schaikwyk (2014) argue that the effectiveness of a BI is seen in its contribution to the economy; when considering this and the NDP goals for SMEs, the creation of employment can be considered as a measure of the impact of incubated SMEs. This points to the fact that there is an economic benefit in having BIs as research

suggests that those supported create jobs and have better survival rates. However, this benefit still needs to be measured and quantified concerning economic growth. Despite the reported positive impact of BDS in South Africa, many incubatee firms were still confronted with impediments such as the lack of funds, lack of credit facilities, poor support from the incubators, limited access to technology, inability to communicate effectively with incubator managers, as well as crime and corruption that retarded their growth during incubation programs (Lose et al., 2016). Therefore, these studies posit that further impact on the reduction of the SME failure rate can be achieved if BIs can improve on the factors highlighted above as opposed to using the number of incubatees supported (Msimango-Galawe & Urban, 2019; Olawale & Garwe, 2010; Wyckham et al., 2012).

SMEs continue to be the backbone of any economy, so their success is critical to economic growth. Therefore, it was important to investigate the success of business incubators in reducing the failure rate of this important sector.

## 2. GENERALIZATION OF THE MAIN STATEMENTS

Measuring and quantifying the effectiveness of business incubators in supporting SMEs is critical in a world where SMEs are identified as key contributors to economic development. In South Africa, SMEs are expected to create most of the job opportunities, reduce poverty and address inequality challenges, and this is the case with other emerging economies that have similar issues (NDP, 2013). This study embarked on a literature review to investigate the effectiveness of BDS in improving the success rate of SMEs, consequently reducing the SME failure rate in South Africa as this is deemed very important if the country is to achieve any of the SME goals mentioned above. This study further investigated if BIs and SME were aligned in what was offered and what was expected respectively, taking into consideration the need of SMEs and potential critical success factors for BI effectiveness (Hewitt & van Rensburg, 2020).



For any country to know if they are making progress on their SME policies and all the initiatives they have introduced to develop the SME sector, standard key performance indicators are needed that can be measured consistently across the board.

In this case, measurement the effectiveness can assist in linking the support offered, the progress of the beneficiaries and the improvement in the country's failure rate. So far no studies have tried to link the three (support from BIs, needs of SMEs and reduction of the country's SME failure rate) and determine the relationships and impact on the outcome, which is the failure rate and economic growth. For a country to be able to monitor and evaluate its progress in SME support, clear performance indicators are needed that will assist in quantifying the progress and effectiveness of all interventions. South Africa currently relies heavily on the support of both private and public incubators to advance the SME agenda and reduce failure, so, this study focuses on business incubators.

### 3. DISCUSSION

The study sought to establish how effective Business Incubators are in reducing the failure rate of SMEs in South Africa. The review of literature revealed that SMEs in South Africa have common needs that drive them to join BI programs. These SME needs include business strategy support, access to finance, access to market, and people training and development in a bid to develop their businesses (C4G, 2018). In the South African context, there are many BI models, ranging from the first-generation model that provides premises and infrastructure only to those that provide business support, virtual support and access to market (C4G, 2018).

Understanding the BI models available in South Africa and the needs of the SMEs is critical to provide solutions for BIs in their bid to grow SMEs and reduce the failure rate thereof. Furthermore, it is important to look at the key performance indicators of BIs, including the number of applications to the incubator, number of incubatees, SME survival rate during incubation, client and

SME satisfaction, and incubator profitability (Department of Trade and Industry, 2014). The literature reviewed presents a misalignment between the KPIs of business incubators and the needs of the SMEs that they develop.

This has a critical impact on the focus of BIs, since the BIs should cater to the needs of the entrepreneurs they serve in order to support their development. Furthermore, the purpose and mission of the incubators should be transparent and aligned to entrepreneur needs so that they can provide the right type of services for entrepreneurs. This factor also influences the incubator's selection, entry, and exit criteria (Akçomak, 2009). Recent evidence has shown that entrepreneurs across rural and urban areas need more than just the first-generation model of incubation (Lose et al., 2020). With the COVID-19 lockdowns in 2020, those incubators who could not deliver their services virtually became obsolete as they could not deliver their support; it is therefore pertinent that BIs consider their incubation models and include services that enable entrepreneurs to thrive in these uncertain market conditions (Lose et al., 2020).

The innumerate amounts of challenges faced by entrepreneurs have driven SMEs to seek business incubation to address their shortfalls, but the questions remain: Are these interventions effective? Are they providing the right support to enable SMEs to address the said challenges? Until these questions are reliably answered the effectiveness and quality of services offered by BIs remain questionable as there seems to be a mismatch from what is offered to what is needed. As much as progress has been made and some studies show a better survival rate of SMEs, which have been incubated, there is still a lot to be investigated. Studies specific to business incubation suggest that these interventions are making a difference, while economic indicators tell a different story, especially in South Africa.

The objective of the study was to answer the question: How effective BIs are in reducing the failure rate of SMEs in South Africa. The study found that there is some positive effect that BIs are making, however, the question of effectiveness, specifically in the reduction of the national

SME failure rate, is still not answered. The lack of quantifiable measures for BI effectiveness also makes it difficult to measure and make conclusive findings.

The mismatch between SME needs and BI goals and KPIs presents a critical challenge for the

reduction of the failure rate of SMEs in South Africa. Although there is a slight overlap, the misalignment is to do with the top two SME needs, access to finance and access to markets, as cited above. It is recommended that BI goals and programs be more aligned with the reported SME needs to be more effective.

---

## CONCLUSION

The literature reviewed painted a blink picture in terms of measuring the effectiveness of business incubators. Most BIs have a self-reporting system in which their success is reported according to the number of SMEs they supported and graduated from their program, and nothing is about meeting the needs of SMEs or aligning their needs to their beneficiaries' needs. Due to the lack of empirical studies, it is difficult to conclude on how effective BDS is in reducing the failure rate, but given the literature reviewed in this paper, there is a clear misalignment between BIs and SMEs.

There are many studies (C4G, 2018; Herrington et al., 2017; Seed Academy, 2019) that show that the biggest need for SMEs is access to markets and access to funding, but these are not the primary focus of BDS providers, thus misalignment and ineffectiveness exist.

The limitation of this study is that only a literature review was used to obtain results, and the articles reviewed were mostly reports and articles that used primary data from cross-sectional designs to generate results. It will be beneficial for future research to consider conducting longitudinal studies over a longer period observing the performance of SMEs who have been incubated, those who are still in incubation, and those who have never been incubated.

Furthermore, quantifiable measures need to be developed that can be used to objectively measure the effectiveness and success of BIs. These measures should encompass both incubators and incubatees to be reliable and meaningful.

The research questions the study sought to answer were: How effective are business incubators in reducing the failure rate of SMEs in South Africa? and Is there any reliable and valid literature or evidence to support effectiveness?

This study concludes that there is insufficient objective convincing evidence that business development services or business incubators are effective in meeting the needs of entrepreneurs and therefore overall failure rates in South Africa. But there are guiding factors that have been identified that are critical success factors for incubators to be successful and aligned with the beneficiaries.

## AUTHOR CONTRIBUTIONS

Conceptualization: Jabulile Msimango-Galawe, Elona N. Hlatshwayo.

Formal analysis: Jabulile Msimango-Galawe, Elona N. Hlatshwayo.

Investigation: Jabulile Msimango-Galawe, Elona N. Hlatshwayo.

Methodology: Jabulile Msimango-Galawe, Elona N. Hlatshwayo.

Writing – original draft: Jabulile Msimango-Galawe, Elona N. Hlatshwayo.

Writing – review & editing: Jabulile Msimango-Galawe.

## REFERENCES

1. Adegbite, O. (2001). Business incubators and small enterprise development: the Nigerian experience. *Small Business Economics*, 17(3), 157-166. Retrieved from <https://link.springer.com/article/10.1023/A:1011801018398>
2. Aernoudt, R. (2004). Incubators: tool for entrepreneurship? *Small Business Economics*, 23(2), 127-135. <https://doi.org/10.1023/B:SBEJ.0000027665.54173.23>
3. Akçomak, İ. S. (2009). *Incubators as tools for entrepreneurship promotion in developing countries* (WIDER Research Paper). Retrieved from <https://ideas.repec.org/p/unm/unumer/2009054.html>
4. Al-Mubarak, H. M., & Busler, M. (2013). The effect of business incubation in developing countries. *European Journal of Business and Innovation Research*, 1(1), 19-25. Retrieved from <https://www.eajournals.org/journals/european-journal-of-business-and-innovation-research-ejbir/vol-1-issue-1-march-2013/the-effect-of-business-incubation-in-developing-countries/>
5. ANDE. (2017). *State of the Small & Growing Business Sector: 2016 Impact Report*. Aspen Network of Development Entrepreneurs. Johannesburg: Aspen Institute. Retrieved from <https://www.andeglobal.org/blogpost/737893/278888/State-of-the-Small-Growing-Business-Sector-2016>
6. ANDE. (2018). *The Aspen Network of Development Entrepreneurs – South Africa: A knowledge brief of south africa's incubator and accelerator landscape*. Johannesburg: Aspen Institute. Retrieved from <https://www.andeglobal.org/blogpost/737893/303707/A-Knowledge-Brief-of-South-Africa-s-Incubator-and-Accelerator-Landscape>
7. Ayandibu, A. O., & Houghton, J. (2017). The role of Small and Medium Scale Enterprise in local economic development (LED). *Journal of Business and Retail Management Research*, 11(2), 133-139. Retrieved from [https://jbrmr.com/cdn/article\\_file/i-26\\_c-262.pdf](https://jbrmr.com/cdn/article_file/i-26_c-262.pdf)
8. Ayatse, F. A., Kwahar, N., & Iyortsuun, A. S. (2017). Business incubation process and firm performance: an empirical review. *Journal of Global Entrepreneurship Research*, 7(1), 2. <https://doi.org/10.1186/s40497-016-0059-6>
9. BER. (2016). The Small, Medium and Micro Enterprise Sector of South Africa. In *Bureau for Economic Research: Commissioned by SEDA* (pp. 35). Stellenbosch: Stellenbosch University.
10. Bergek, A., & Norrman, C. (2008). Incubator best practice: A framework. *Technovation*, 28(1-2), 20-28. <https://doi.org/10.1016/j.technovation.2007.07.008>
11. Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2012). The Evolution of Business Incubators: Comparing demand and supply of business incubation services across different incubator generations. *Technovation*, 32(2), 110-121. <https://doi.org/10.1016/j.technovation.2011.11.003>
12. Buys, A., & Mbewana, P. (2007). Key success factors for business incubation in South Africa: the Godisa case study. *South African Journal of Science*, 103(9-10), 356-358. Retrieved from <http://www.scielo.org.za/pdf/sajs/v103n9-10/a0110310.pdf>
13. C4G. (2018). *2018 Catalyst For Growth Annual Report: The Role of Business Development Support (BDS) on South African Performance*. Retrieved from <http://catalystforgrowth.org/ecosystem-reports/>
14. Campbell, C. (1989). Change Agents In The New Economy: Business Incubators and Economic Development. *Economic Development Review*, 7(2), 56. Retrieved from <https://www.semanticscholar.org/paper/Change-Agents-in-the-new-economy%3A-Business-and-Campbell/d9af67433cbeabb624ee5a318ef47617f7ea067a>
15. Choto, P., Tengeh, R. K., & Iwu, C. G. (2014). Daring to survive or to grow? The growth aspirations and challenges of survivalist entrepreneurs in South Africa. *Environmental Economics*, 5(4), 93-101. Retrieved from [https://businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/6128/ee\\_2014\\_04\\_Choto.pdf](https://businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/6128/ee_2014_04_Choto.pdf)
16. Cohen, S. (2013). What do accelerators do? Insights from incubators and angels. *Innovations: Technology, Governance, Globalization*, 8(3-4), 19-25. [http://dx.doi.org/10.1162/INOV\\_a\\_00184](http://dx.doi.org/10.1162/INOV_a_00184)
17. Crampton, N. (2019). *The definite list of South African Incubators for start-ups*. Retrieved from <https://www.natfingroup.co.za/2018/09/16/the-definitive-list-of-south-african-business-incubators-for-start-ups/>
18. Department of Trade and Industry. (2014). *South Africa Business Incubator*. Retrieved from <https://www.za.undp.org/content/south-africa/en/home/library/other-publications/sa-incubator-handbook.html>
19. Dubihlela, J., & Van Schaikwyk, P. J. (2014). Small Business Incubation and the Entrepreneurial Business Environment in South Africa: A Theoretical Perspective. *Mediterranean Journal of Social Sciences*. <https://doi.org/10.5901/mjss.2014.v5n23p264>
20. Fernandez, M. T., Santos, J. L., & Jiménez, F. J. B. (2019). Performance of business incubators and accelerators according to the regional entrepreneurship ecosystem in Spain. *Investigaciones Regionales*, 43, 41-56. Retrieved from <https://ideas.repec.org/a/ris/invreg/0392.html>
21. Hackett, S. M., & Dilts, D. M. (2004a). A real options-driven theory of business incubation. *The Journal of Technology Transfer*, 29(1), 41-54. Retrieved from <https://link.springer.com/article/10.1023/B:JOTT.0000011180.19370.36>
22. Hackett, S. M., & Dilts, D. M. (2004b). A systematic review of business incubation research. *The Journal of Technology Transfer*, 29(1), 55-82. Retrieved from <https://link.springer.com/article/10.1023/B:JOTT.0000011181.11952.0f>

23. Hausberg, J. P., & Korreck, S. (2018). Business incubators and accelerators: a co-citation analysis-based, systematic literature review. *The Journal of Technology Transfer*, 45(1), 151-176. <https://doi.org/10.1007/s10961-018-9651-y>
24. Herrington, M., Kew, P., & Mwanga, A. (2017). *GEM South Africa Report 2016/2017. South Africa: Can small businesses survive in South Africa?* Cape Town: University of Cape Town. Retrieved from <https://www.gemconsortium.org/report/49833> (accessed August, 2018).
25. Herrington, M., & Kew, P. (2019). Global entrepreneurship monitor. In. Cape Town: University of Cape Town.
26. Hewitt, L. M., & van Rensburg, L. J. J. (2020). The role of business incubators in creating sustainable small and medium enterprises. *The Southern African Journal of Entrepreneurship and Small Business Management*, 12(1), 9. <https://doi.org/10.4102/sajesbm.v12i1.295>
27. Jolink, A., & Niesten, E. (2012). Recent qualitative advances on hybrid organizations: Taking stock, looking ahead. *Scandinavian Journal of Management*, 28(2), 149-161. <https://doi.org/10.1016/j.scaman.2012.03.001>
28. Karim, I. (2017). Typology on Entrepreneurship Support in Emerging Markets. *Journal of Entrepreneurship and Management*, 6(3), 52-78. Retrieved from <https://search.proquest.com/openview/4127892d5a5a3da509d6e6fcd991aed6/1?pq-origsite=gscholar&cbl=2030933>
29. Kavhumbura, V. O. (2014). *Beyond Godisa: Critical Success Factors for Business Incubators in South Africa* (Electronic Dissertation). Retrieved from <http://wiredspace.wits.ac.za/handle/10539/17027>
30. Krause, D. R., Handfield, R. B., & Tyler, B. B. (2007). The relationships between supplier development, commitment, social capital accumulation and performance improvement. *Journal of Operations Management*, 25(2), 528-545. <https://doi.org/10.1016/j.jom.2006.05.007>
31. Lose, T., & Kapondoro, L. (2020). Competencies for business incubators in a disruptive context: The case of south african business incubators. *Academy of Entrepreneurship Journal*, 26(4). Retrieved from <https://www.abacademies.org/articles/competencies-for-business-incubators-in-a-disruptive-context-the-case-of-south-african-business-incubators-9844.html>
32. Lose, T., & Tengeh, R. (2015). The Sustainability and Challenges of Business Incubators in the Western Cape Province, South Africa. *Sustainability*, 7(10), 14344-14357. <https://doi.org/10.3390/su71014344>
33. Lose, T., Maziriri, T. E., & Madinga, W. (2016). Assessing the Impact of Incubation Programme to Small and Medium Enterprises Development in the Western Cape Province of South Africa. *International Journal of Small Business and Entrepreneurship Research*, 4(4), 16-29. Retrieved from <https://www.eajournals.org/wp-content/uploads/Assessing-the-Impact-of-Incubation-Programme-to-Small-and-Medium-Enterprises-Development-in-the-Western-Cape-Province-of-South-Africa.pdf>
34. Lose, T., Rens, V., Yakobi, K., & Kwahene, F. (2020). Views from within the incubation ecosystem: Discovering the current challenges of technology business incubators. *Journal of Critical Reviews*, 7(19), 5437-5444. <https://doi.org/10.31838/jcr.07.19.632>
35. Lose, T., Yakobi, K., & Kwahe-ne, F. A. (2020). A grounded theory analysis for remodelling business incubation in the context of the COVID-19 pandemic. *Academy of Entrepreneurship Journal*, 26(4). Retrieved from <https://www.abacademies.org/articles/a-grounded-theory-analysis-for-remodelling-business-incubation-in-the-context-of-the-covid19-pandemic-9910.html>
36. Lukeš, M., Longo, M. C., & Zouhar, J. (2019). Do business incubators really enhance entrepreneurial growth? Evidence from a large sample of innovative Italian start-ups. *Technovation*, 82-83, 25-34. <https://doi.org/10.1016/j.technovation.2018.07.008>
37. Masutha, M. (2013). *Small business incubators in South Africa: Emergence, geography and local impacts*. University of Johannesburg. Retrieved from [https://ujcontent.uj.ac.za/vital/access/manager/Repository/uj:13834?site\\_name=GlobalView](https://ujcontent.uj.ac.za/vital/access/manager/Repository/uj:13834?site_name=GlobalView)
38. Masutha, M., & Rogerson, C. M. (2014a). Small business incubators: An emerging phenomenon in South Africa's SMME economy. *Urbani izziv*, 25, S47-S62. <http://dx.doi.org/10.5379/urbani-izziv-en-2014-25-supplement-004>
39. Masutha, M., & Rogerson, C. M. (2014b). Small enterprise development in South Africa: The role of business incubators. *Bulletin of Geography. Socio-Economic Series*, 26(26), 141-155. Retrieved from [https://www.academia.edu/9928237/Small\\_Enterprise\\_Development\\_in\\_South\\_Africa\\_The\\_Role\\_of\\_Business\\_Incubators](https://www.academia.edu/9928237/Small_Enterprise_Development_in_South_Africa_The_Role_of_Business_Incubators)
40. Mazanai, M., & Fatoki, O. (2011). The Effectiveness of Business Development Services Providers (BDS) in Improving Access to Debt Finance by Start-Up SMEs in South Africa. *International Journal of Economics and Finance*, 3(4). <https://doi.org/10.5539/ijef.v3n4p208>
41. Meyer, N., Meyer, D. F., & Kot, S. (2016). Best Practice Principles for Business Incubators- A Comparison between South Africa and the Netherlands. *Journal of Advanced Research in Law and Economics*, 5(19). [https://doi.org/10.14505/jarle.v7.5\(19\).17](https://doi.org/10.14505/jarle.v7.5(19).17)
42. Mike Herrington, P. K. (2019). *Global Entrepreneurship Monitor*. Retrieved from <https://www.gemconsortium.org/report/gem-2018-2019-global-report>
43. Mrkajic, B. (2017). Business incubation models and institutionally void environments. *Technovation*, 68, 44-55. <https://doi.org/10.1016/j.technovation.2017.09.001>
44. Msimango-Galawe, J., & Urban, B. (2019). An integrated approach to SME risk assessment- A focus on endogenous and exogenous risk factors. *African Review of Economics and Finance*, 11(1), 142-177. Retrieved from <https://www>

- [ajol.info/index.php/aref/article/view/187627](http://ajol.info/index.php/aref/article/view/187627)
45. NDP. (2013). *National development plan vision 2030*. National Development Commission. Retrieved from <https://www.gov.za/issues/national-development-plan-2030>
  46. Nicotra, M., Romano, M., Del Giudice, M., & Schillaci, C. E. (2017). The causal relation between entrepreneurial ecosystem and productive entrepreneurship: a measurement framework. *The Journal of Technology Transfer*, 43(3), 640-673. <https://doi.org/10.1007/s10961-017-9628-2>
  47. Ntlamelle, T. (2015). *The efficacy of SMME incubation as a strategy for enterprise development in South Africa* (Electronic Dissertation). Retrieved from <https://core.ac.uk/download/pdf/188769876.pdf>
  48. Olawale, F., & Garwe, D. (2010). Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. *African Journal of Business Management*, 4(5), 729-738. Retrieved from <https://www.semanticscholar.org/paper/Obstacles-to-the-growth-of-new-SMEs-in-South-A-Olawale-Garwe/f250c6b0d5928e4b454a6f3b2785752a810e3d10>
  49. Pompa, C. (2013). Literature review on the impact of incubation investment training on start up companies. *Economic and Private Sector Professional Services and Applied Knowledge Services*. Retrieved from [https://assets.publishing.service.gov.uk/media/57a08a21e5274a27b2000437/Literature\\_Review\\_on\\_the\\_Impact\\_of\\_Incubation\\_Investment\\_Training20.pdf](https://assets.publishing.service.gov.uk/media/57a08a21e5274a27b2000437/Literature_Review_on_the_Impact_of_Incubation_Investment_Training20.pdf)
  50. Schutte, F., & Direng, T. (2019). Incubation of entrepreneurs contributes to business growth and job creation – Botswana case study. *Academy of Entrepreneurship Journal*, 25(3). Retrieved from <https://www.abacademies.org/articles/incubation-of-entrepreneurs-contributes-to-business-growth-and-job-creation-a-botswana-case-study-8573.html>
  51. Schwartz, M. (2008). Beyond incubation: an analysis of firm survival and exit dynamics in the post-graduation period. *The Journal of Technology Transfer*, 34(4), 403-421. <https://doi.org/10.1007/s10961-008-9095-x>
  52. SEDA. (2018). SMME Quarterly Update – 3rd Quarter 2017. Small Enterprise Development Agency.
  53. SEDA. (2019). *SEDA Annual Report 2019*. Small Enterprise Development Agency.
  54. Seed Academy. (2017). *The real state of entrepreneurship survey*. Retrieved from [https://www.seedengine.co.za/wp-content/uploads/2018/03/Seed-Academy\\_Real-State-of-Entrepreneurship-Survey-Results-2017.pdf](https://www.seedengine.co.za/wp-content/uploads/2018/03/Seed-Academy_Real-State-of-Entrepreneurship-Survey-Results-2017.pdf)
  55. Seed Academy. (2019). *The real state of entrepreneurship survey*. Retrieved from <https://www.seedengine.co.za/media/real-state-of-entrepreneurship-survey-2019/>
  56. Seeletse, S. M. (2012). Common causes of small businesses failure in the townships of West Rand district municipality in the Gauteng Province of South Africa. *African Journal of Business Management*, 6(44), 10994-11002. Retrieved from <https://academicjournals.org/journal/AJBM/article-full-text-pdf/FE7C2AB16898>
  57. Sitharam, S., & Hoque, M. (2016). Factors affecting the performance of small and medium enterprises in KwaZulu-Natal, South Africa. *Problems and Perspectives in Management*, 14(2), 277-288. Retrieved from [https://businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/7185/PPM\\_2016\\_02cont2\\_Sitharam.pdf](https://businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/7185/PPM_2016_02cont2_Sitharam.pdf)
  58. Smilor, R. W. (1987). Managing the incubator system: critical success factors to accelerate new company development. *IEEE Transactions on Engineering Management*, 3, 146-155. <https://doi.org/10.1109/TEM.1987.6498875>
  59. STATSSA. (2019). *STATS SA Q3 report 2019*. Retrieved from <http://www.statssa.gov.za/publications/P0211/P02113rdQuarter2019.pdf>
  60. Tavoletti, E. (2013). Business incubators: effective infrastructures or waste of public money? Looking for a theoretical framework, guidelines and criteria. *Journal of the Knowledge Economy*, 4(4), 423-443. Retrieved from <https://link.springer.com/article/10.1007/s13132-012-0090-y>
  61. van der Spuy, S. J. H. (2019). The state of business incubation in the Northern Cape: A service spectrum perspective. *The Southern African Journal of Entrepreneurship and Small Business Management*, 11(1). <https://doi.org/10.4102/sajesbm.v11i1.271>
  62. van Weele, M. A., van Rijnsoever, F. J., Groen, M., & Moors, E. H. M. (2019). Gimme shelter? Heterogeneous preferences for tangible and intangible resources when choosing an incubator. *The Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-019-09724-1>
  63. Worku, Z. (2016). Barriers to the growth of small, micro and medium-sized business enterprises in the Vaal Triangle region of South Africa. *African Journal of Science, Technology, Innovation and Development*, 8(2), 134-141. <https://doi.org/10.1080/20421338.2015.1128135>
  64. Wyckham, R. G., Wedley, W., & Culver, C. E. W. (2012). The Needs of Small Business Owners: Perceptions of Entrepreneurs and Service Providers. *Journal of Small Business & Entrepreneurship*, 16(1), 21-39. <https://doi.org/10.1080/08276331.2001.10593296>
  65. Zappala, F., & Rinkunas, M. (2019). Accelerators and Incubators. *Academic Entrepreneurship for Medical and Health Scientists*, 1(2). <https://doi.org/https://repository.upenn.edu/ace/vol1/iss2/1>