

## Navigating the Role of Business Incubators: A Review on the Current Literature on Business Incubation in South Africa

Thobekani Lose<sup>1</sup>, Zinzi Nxopo<sup>2</sup>, Eugene Maziriri<sup>3</sup>, Welcome Madinga<sup>4</sup>

**Abstract:** Business incubators (BIs) are a significant tool in promoting the development of entrepreneurial firms, technology-based growth firms and economic growth in South Africa. The study reviewed the current literature on business incubation in South Africa. BIs in South Africa emerged as a popular strategy in the 1990s and most of the current literature was established in the same period. However, the current literature is still limited. The aim of this paper is to provide an overview of existing knowledge on the role and effectiveness of business incubation in supporting the development of new small startup businesses. The quantitative and qualitative literature published by the academic and practitioner communities is reviewed. The searches indicated that incubation has encouraged many studies in South Africa. The studies can be categorised under the following themes: the role and contribution of incubators, success factors for business incubation, obstacles, and the relationship between incubators and entrepreneurship. The areas for further research are suggested. Two major areas that new research can explore focus on the creation of the model and self-sustainability of BIs.

**Keywords:** entrepreneurship, success factors, challenges for business incubators, entrepreneurial skills

**JEL Classification:** M13; O2; O31

---

<sup>1</sup> PhD Fellow, Faculty of Management Sciences, Department of logistics, Vanderbijlpark, Vaal University of Technology, Gauteng Province, South Africa, Address: Private Bag X021, Vanderbijlpark, 1911, Andries Potgieter Blvd., South Africa, Corresponding author: thobekanilose@gmail.com.

<sup>2</sup> Lecturer, Faculty of Business, Department of Entrepreneurship & Business Management, Cape Peninsula University of Technology, Cape Town, South Africa, E-mail: nxopoz@cput.ac.za.

<sup>3</sup> MBA Candidate, Faculty of Management Sciences, Department of Human Resources Management, Vanderbijlpark, Vaal University of Technology, Gauteng Province, South Africa, Address: Private Bag X021, Vanderbijlpark, 1911, Andries Potgieter Blvd., South Africa, E-mail: euginemaziriri@yahoo.com.

<sup>4</sup> Lecturer, Department of Marketing Communication, AAA School of Advertising, Cape Town, South Africa, Address: AAA House, 6th Floor, 112 Long Street, Cape Town City Centre, Cape Town, South Africa 8001, E-mail: welcome.madinga@gmail.com.

## **1. Introduction**

Sithole and Rugimbana (2014) point out that the term incubators is used to explain an organization that develops and promotes an entrepreneurial idea from initiation and commercialization. Wanger (cited in Buys & Mbewana, 2007) point out that following the independence in 1994, business incubation in South Africa appeared in 1995 when the Small Business Development Corporation (SBDC) formed ‘hives of industry’. The hives played a crucial role in facilitating the needs required by small firms. However, hives were not business incubators (BIs) in the current practice and there was no incubation phase for a firm to move out of the hives (Buys & Mbewana, 2007). Business incubators can provide incubated firms with a conducive work environment and help emerging businesses to survive (Tilana, 2015; Kavhumbura, 2014). Thus, in South Africa incubators are viewed as having a significant impact on economic growth and development (Mothibi, 2014; Lose, 2016). By helping incubatees to create employment, BIs can be a significant tool to reduce poverty and inequalities in South Africa. Lose and Tengeh (2015) point out that in developing countries, there has been increasing interest in the study of business incubation as a significant economic and social phenomenon. Tengeh and Choto (2015) and Van der Zee (2007) share similar views that BIs play a critical role in the success of any organization. Business incubation continues to receive attention globally, including in South Africa. This study aims to review the current literature on BIs in South Africa and suggest areas for further study.

### **1.1. Problem Statement**

In South Africa, limited research has been conducted on the performance of a business incubator in terms of internationally recognized standards (Cullen, Calitz & Chandler, 2014). Ndabeni (2008) concurs that in South Africa the incubation process is a recent phenomenon and is still evolving. Lose and Tengeh (2015) are of the view that the concept of business incubation is fairly recent in developing countries and still developing in South Africa. Overall, there is an important knowledge gap concerning business incubation in the country and in particular, little is known about the geography, organization and operations of BIs across the country (Masutha, 2014).

## **2. Objectives of the Study**

This study aims at unpacking the current literature on BIs in South Africa. Furthermore, the study will provide direction for fruitful future research.

### **3. Literature Review**

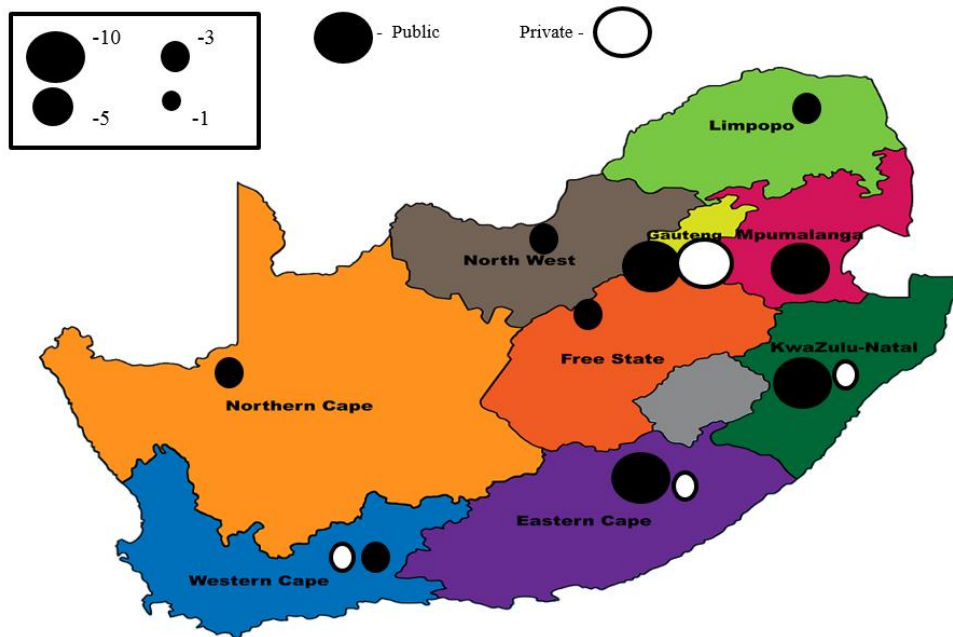
#### **3.1. Definition of Business Incubation**

The literature contains various definitions in an attempt to characterize BIs. Cullen, Calitz and Chandler (2014) and Chirambo (2014) define BIs as a business development tool that is used to grow entrepreneurial venture by providing a platform for enterprises to build their foundation. Along the same lines, Lose (2016) and Ndabeni (2008) refer to BIs as organizations that provide and facilitate a protected environment to start-up, and exiting businesses by providing a comprehensive range of shared services with the aim to minimize start-up failure. Hence, Masutha and Rogerson (2014) and Dubihlela and Van Schaikwyk (2014) point out that BIs are one of the strategic tools for helping entrepreneurs during their start-up phase. These authors also point out that in both developed and developing countries, incubation is viewed as a vehicle to reduce the high mortality of incubated business. Drawing from the foregoing definitions, BIs are mainly for the purpose of promoting and fostering the development of new and existing businesses in South Africa (Mothibi, 2014; Lose, Maziriri, Madinga, 2016). Masutha (2015) and Diedericks (2015) deduce that incubators provide small businesses with technical and business consultancy services and targeted infrastructural support services. Therefore, the performance of the incubator should be measured based on the number of incubatee graduates and jobs created.

#### **3.2. Studies on business incubations in South Africa**

To identify current business incubation related articles, engines for academic literature such as Internet searches were conducted through the use of a combination of key words such as business incubators, incubation, incubatees, entrepreneurship and South Africa. This yielded 41 papers, journal articles, theses and dissertations covering the period between 2006 and 2016. For each selected article, the researchers examined its literature and research opportunities. The searches indicated that BIs has encouraged many studies in South Africa. Thus, most of the studies could be categorized under the following themes: the role and contribution of incubators; success factors for business incubation; obstacles; and the relationship between incubators and entrepreneurship.

**3.3 Provincial distribution of different institutional forms of business incubators in South Africa**



**Figure 1. Map of South Africa showing provincial distribution of BIs**

*Source: Adapted from Masutha and Rogerson (2014)*

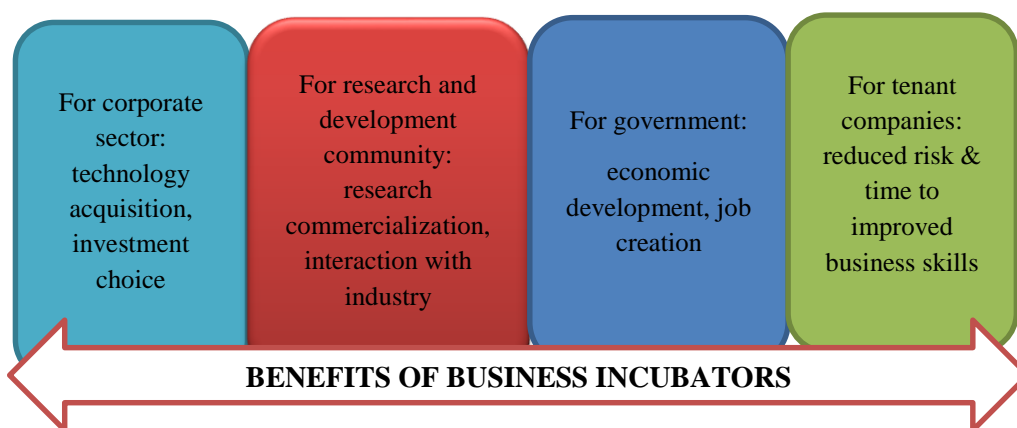
Figure 1 shows the distribution of both public and private sector incubators on a provincial basis. It indicates the government’s attempt to distribute such incubators across all provinces. The largest clusters of BIs are currently located in the provinces of Gauteng and KwaZulu-Natal, followed by Eastern Cape, Western Cape and Mpumalanga. Together, these five provinces account for 90.2 percent of all BIs. The provinces that are relatively sparse in respect of BIs are Limpopo, North West, Free State and Northern Cape.

**3.4. The role and benefits of business incubators**

According to Ndabeni (2008), Lesakova (2012), Masutha and Rogerson (2014), Lose & Tengeh (2015) and Choto (2015), the main role of BIs is to accelerate the successful development of enterprises, by providing various business support services and resources. In addition, BIs are being established in order to address the problem of entrepreneurial venture failure and helping to reduce failure rate (De Beer, 2012; Muyengwa, Dube, Battle & Masinga, 2014). Therefore, a business incubator is described as an organization that facilitates and provides a protected

environment to new, early and exit stage businesses by providing support to small and medium-sized enterprises, equipping them with the necessary skills.

Chiromo, Muyengwa and Makuvaza (2014), note that networking experiences between business owners is imperative. Thus, businesses learn from each other and support each other professionally. Figure 2 summarizes the benefits of BIs, as identified by Ndabeni (2008).



**Figure 2. Benefits of business incubators**

*Source: Adapted from Ndabeni (2008)*

Mostly government agencies, the private sector and higher learning institutions establish BIs in South Africa. The majority of BIs focus on the high technology incubatees (Buys & Mbewana, 2007). Thus, the development of BIs demonstrate “that the right kind of business environment is increasingly being acknowledged as an important factor contributing to the success of SMMEs and the local economy” (Dubihlela & Van Schaikwyk, 2014:264). Therefore, both incubators and incubatees have the best chance to improve and create more jobs opportunities in South Africa.

### **3.5. Factors contributing to the success of business incubators**

BIs are essentially organizations that help to increase survival rates of innovative start-up companies and support the entrepreneurial ventures. However, like business incubatees, incubators also face a number of challenges (Lose & Tengeh, 2015; Tengeh & Choto, 2015). Thus, many researchers have scrutinized the factors that contribute to the success of business incubation. Buys and Mbewana (2007) and Ndabeni (2008) argue that the factors that contribute to the success of business incubation are as shown in Figure 3.



**Figure 3. Factors that contribute to the success of business incubation**

*Source: Adapted from Buys and Mbewana (2007) as well as Ndabeni (2008)*

According to Buys and Mbewana (2007) and Ndabeni (2008), the identified factors in Figure 3 are the most important influences on success of incubation in South Africa. If an incubator has fewer than 13 of these factors it means that they lack too many elements to be considered successful. The researchers, therefore, identify that these factors all have positive interactions with the success of the business incubator.

### 3.6. Challenges of Business Incubators in South Africa

BIs, like any type of business, face challenges in servicing incubatees in order to carry out a rational assessment of why incubation programs are not completed. Choto (2015) and Lose (2016) suggest that there is a need to look at it from all perspectives, which is from both the BIs and incubatees side.

Table 1.1 summaries the challenges that BIs face in running their business ventures, as identified by Lose and Tengeh (2015) and Choto (2015) in the current literature.

**Table 1.1 The set of 4 potential challenges for business incubators**

1.	Access to advanced technology-based prototype
2.	Lack of funding and sponsorship
3.	Geographic area
4.	Lack of entrepreneurial skills.

*Source: Adapted from Lose and Tengeh (2015) as well as Choto (2015)*

### **3.6.1. Access to advanced technology-based prototype**

According to Lose (2016) and Lose & Tengeh (2015), BIs in South Africa have limited access to advanced technology-based facilities (prototype). Thus, incubatees that promote innovation and technological products will not complete the incubation programme. In addition, a study conducted by Ramluckan (2010) revealed that the STP incubators performs poorly in terms of technology transfer.

### **3.6.2. Lack of funding and sponsorship**

BIs also face a challenge of obtaining funds and sponsorships shortages when servicing incubatees, as most BIs are not self-sufficient. The main funders for business incubators in South Africa are the Incubation Support Programme (ISP) within the Department of Trade and Industry (DTI) and SEDA Technology Programme (STP) (Lose & Tengeh, 2015). Hence, there is still a need to mobilize the private sector to fund BIs.

### **3.6.3. Geographic area**

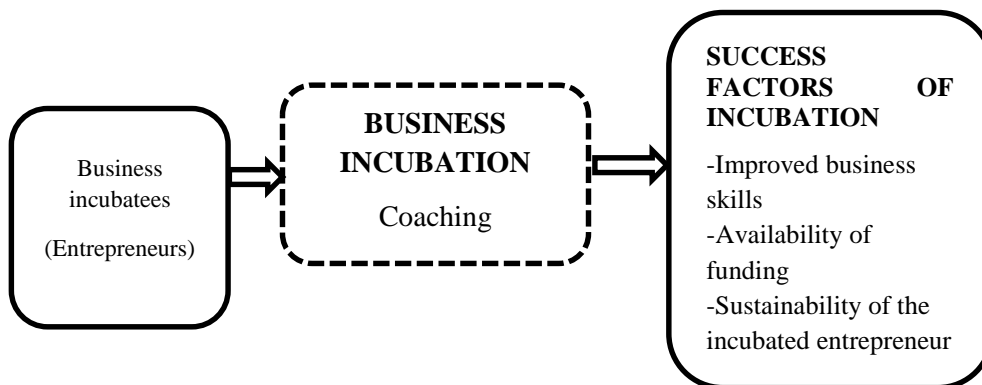
According to Buys and Mbewana (2007), a good location for incubators allows incubatees to access the geographic area to obtain needed services such as the supporting infrastructure. Hence, it is advisable for BIs to be located close to incubatees to able to reach some of the entrepreneurs in need of their services (Masutha, 2015).

### **3.6.4. Lack of entrepreneurial skills**

Some BIs in developing still experiencing a lack of managerial and entrepreneurial skills to contribute fully in the SMEs success (Lalkaka, 2002; Akcomak, 2009). The selection criteria and attraction of adequately skilled management is a critical factor to the success of every business incubator (Cullen, Calitz & Chandler, 2014). Thus, BIs face the challenge of equipping incubatees because of lack of commitment from the incubation management. Ramluckan (2010) also reveals that incubators require management that is proactive, with good business skills.

### 3.7. The relationship between incubators and entrepreneurship

Bergek and Norman (2008) and Marimuthu and Lakha (2015) describe a business incubator as a guidance to newly established organizations, the main purpose of which is hatching to minimize SMEs failure rate and unemployment. Hence, the same hatching idea is applied to the incubating of small businesses to speed up new-venture creation and increase their chances of survival. Lalkaka and Shaffer (1999) and Masutha & Rogerson (2014) identify the objective of incubators as helping to promote venture creation and developing the economy by nurturing incubatees through providing numerous services. Ntlamelle (2015) mention that BIs provide a comprehensive range of shared services and enterprise-development assistance. De Beer (2012) and Choto (2015) conclude that in order for incubators to contribute fully towards entrepreneurship, it is essential to establish the association between the two and the way they fit together. Based on the above-reviewed literature, the conceptual model in Figure 4 was developed.



**Figure 4. Conceptual model**

*Source: Authors own compilation*

### 3.8. Recent empirical studies done in South Africa on business incubation

In South Africa, recent research has been examined on business incubation in various contexts by focusing on the evaluation of the effectiveness of business incubation programs (Lose & Tengeh, 2016); assessing the impact of incubation programmes on small and medium enterprise development in the Western Cape province of South Africa (Lose, Maziriri & Madinga 2016); the relevance and challenges of BIs that support survivalist entrepreneurs (Tengeh & Choto 2015); small BIs in South Africa: emergence, geography and local impacts (Masutha, 2015), The importance and effectiveness of assistance programs in a business incubator (Marimuthu & Lakha 2015); critical Success factors for BIs in South Africa (Kavhumbura, 2014), Factors for BIs in South Africa networking skills of government-funded incubator managers as perceived by incubatees (De Beer, 2012) and the performance of the BIs in South Africa Ramluckan (2010).



#### **4. Research Opportunities on Business Incubator**

This research lends itself to many opportunities for further studies in business incubators. Therefore, new research could explore the creation and self-sufficiency of BIs in South Africa. New studies should explore why South African universities lack BIs, and the barriers to BIs. Why do entrepreneurs choose to join the incubation programmes in South Africa? What are the conditions that inhibit the entrepreneurial behaviour by BIs? This research proposes that future research should look into developing and testing a suitable business model for South African incubators. One major area that new research could focus on would be to determine critical factors that affect the growth of incubatees in South Africa. There is also a need to conduct a similar investigation on business incubation's current literature and future opportunities. Another interesting area for future research might be to consider how business incubation programs can positively influence and create entrepreneurial ventures.

Business incubators emerged as a popular operational strategy to guide new venture creation in the 1990s and most of the current literature was established during the same time period. However, the result of BIs is still vague. Future study should point out gaps in the current literature and examine the link between incubation programme implementation and firms' performance metrics by analysing data. Also, the impact of incubatees on employment creation and economic development in South Africa should be examined. Future research should include the measuring and quantifying of strategic incubation outcomes in relation to key performance criteria to developing value-adding metrics. Another interesting area for future research might be to consider the role of human resource practice in the performance of BIs.

In addition, there is also a need to conduct a similar investigation on the impact of managerial competencies and financial skills on the failure for both incubatees and incubators. Future research should examine the impact of market competition on the failure of incubates and the role that economic factors play in the failure of incubated businesses. Another interesting area for future research might be to provide recommendations on how to mitigate the high number of small business failures in South Africa.

#### **5. Limitations**

The study focused on current literature and research opportunities of the business incubator. Furthermore, it is not possible that all the studies on BIs have been taken into consideration, despite an in-depth Internet search by the researchers.

## 6. Conclusion

This paper has sought to review current literature relating to business incubation for small startup businesses. The study proposed areas for future research opportunities not limited to the following: the need to develop a robust, operational stable, set of comparable performance indicators not absolute performance measures for business incubation. The literature on business incubation needs to be integrated more effectively within established areas of research such as cluster theory, regional innovation systems, entrepreneurship, investment, and firm growth. Hence, it is important for the private sector and institutions of higher learning to promote business incubation programmes. The current study supports incubators receiving more attention in South Africa and holds the belief that incubators are a proven strategic tool for small start-up businesses.

## 7. References

- Akcomak, İ.S. (2009). Incubators as tools for entrepreneurship promotion in developing countries (No. 2009.52). *Research paper/UNU-WIDER*.
- Bergek, A., & Norman, C. (2008). Incubator best practice: *A Framework. Technovation*, 28, 1, 20-28.
- Buyis, A. J. & Mbewana, P. N. (2007). Key success factors for business incubation in South Africa: the Godisa case study. *South African Journal of Science*, 103(9-10), 356-358.
- Chirambo, F. M. C. (2014). An exploratory study on the performance of business incubators in South Africa. *Masters Thesis*. Johannesburg. University of the Witwatersrand.
- Chiromo, F., Muyengwa, G. & Makuvaza, J. (2014). Investigation Of The Impact Of Networking Among Tenants In The Seda Limpopo Jewellery Incubator In South Africa. In *Balkan Region Conference on Engineering and Business Education*, 1(1), 23-26.
- Choto, P. (2015). The impact of business incubators on survivalist entrepreneurs in the Cape Metropolitan area. *MTech Thesis*. Cape Town. Cape Peninsula University of Technology.
- Cullen, M., Calitz, A. & Chandler, L. (2014). Business Incubation in the Eastern Cape: A Case Study. *International Journal for Innovation Education and Research*. 2(5):76-89.
- De Beer, A. C. (2012). Networking skills of government-funded incubator managers as perceived by incubatees. Master's Thesis. Pretoria: University of Pretoria.
- Diedericks, R. (2015). Incubator services that small service organisations require from a university business incubator. *Doctoral dissertation*, North West. North-West University.
- 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*, 5(23):264-269.
- Kavhumbura, V. O. (2014). Beyond Godisa: critical success factors for business incubators in South Africa. *Master's Thesis*. Johannesburg. University of the Witwatersrand.
- Lalkaka, R. (2002). Technology business incubators to help build an innovation-based economy. *Journal of Change Management*, 3(2):167-176.
- Lalkaka, R. & Shaffer, D. (1999). Nurturing entrepreneurs, creating enterprises: Technology business incubation in Brazil. In *International conference on effective business development services*. 2-3.

- Lesáková, L. (2012). The Role of Business Incubators in Supporting the SME Startup. *Acta Polytechnica Hungarica*, 9(3):85-95.
- Lose, T. (2016). The role of business incubators in facilitating the entrepreneurial skills requirements of small and medium size enterprises in the Cape metropolitan area, South Africa. **MTech Thesis**, Cape Town. Cape Peninsula University of Technology).
- Lose, T. & Tengeh, R. K. (2015). The Sustainability and Challenges of Business Incubators in the Western Cape Province, South Africa. *Sustainability*, 7(10), 14344-14357.
- Lose, T., & Tengeh, R. K. (2016). An evaluation of the effectiveness of business incubation programs: a user satisfaction approach. *Investment Management and Financial Innovations*, 13(2), 370-378
- Lose, T., Maziriri, E.T. & 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.
- Marimuthu, M. & Lakha, P. A. (2015). The importance and effectiveness of assistance programs in a business incubator. *Problems and Perspectives in Management*, 13(3), 79-86.
- Masutha, M. (2015). Small business incubators in South Africa: Emergence, geography and local impacts. *Master's Thesis*. Johannesburg. University of Johannesburg.
- Masutha, M. & Rogerson, C. M. (2014a). Small business incubators: An emerging phenomenon in South Africa's SMME economy. *Urbani Izziv*, 25, S47.
- 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.
- Masutha, M. & Rogerson, C. M. (2015). Business Incubation for Small Enterprise Development: South African Pathways. In *Urban Forum* (Vol. 26, No. 2, pp. 223-241). Springer Netherlands.
- Mothibi, G. (2014). The Influence of Business Incubation Services on the Performance of Small Medium Enterprises in the South African Tourism Industry. In *European Conference on Management, Leadership & Governance* (p. 569). Academic Conferences International Limited.
- Muyengwa, G., Dube, P., Battle, K. & Masinga, E. (2014). An Enterprise Development Initiative: Incubation in the South African Motor Body Repair Sector. In *Balkan Region Conference on Engineering and Business Education* 1(1), 41-46.
- Ndabeni, L. L. (2008). The contribution of business incubators and technology stations to small enterprise development in South Africa. *Development Southern Africa*, 25(3), 259-268.
- Ntlamelle, T. (2015). The efficacy of SMME incubation as a strategy for enterprise development in South Africa. *Master's Thesis*. Johannesburg. University of the Witwatersrand.
- Ramluckan, S. (2010). An exploratory case study on the performance of the SEDA business incubators in South Africa. *Master's Thesis*. Stellenbosch: University of Stellenbosch.
- Sithole, N. & Rugimbana, R. O. (2014). Commercialisation of research and technology: A multiple case study of university technology business incubators. *African Journal of Business Management*, 8(16), 641.
- Tengeh, R. K. & Choto, P. (2015). The relevance and challenges of business incubators that support survivalist entrepreneurs. *Investment Management and Financial Innovations*, 12(2), 150-161.
- Tilana, L. (2015). The impact of business incubation in shaping the entrepreneurial mindset among incubates. *Master's Thesis*. Johannesburg. University of the Witwatersrand
- Van der Zee, P. (2007). Business incubator contributions to the development of businesses in the early stages of the business life-cycle. *Master's Thesis*. Pretoria: University of Pretoria.