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THE ROLE OF BUSINESS INCUBATORS TOWARDS PROMOTING SMALL BUSINESS GROWTH IN GAUTENG PROVINCE.

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This dissertation is submitted to the faculty of Humanities, in fulfilment of the requirement for the degree of Masters of Arts (MA) in Development Studies

Submitted: October, 2017
Plagiarism Declaration

I declare that this is my own written work, submitted in fulfilment for the attainment of a Master’s Degree in Development Studies. All works used in reference to this Dissertation have been referenced accordingly. This work has not been submitted anywhere else, in that matter. I am aware of the consequences of plagiarism, and the penalties thereof.

Signed: Mary Awuor Opond Date: 

[UNIVERSITY OF JOHANNESBURG]
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I dedicate this work to my son Mark, who had to endure long periods of my absence as I worked on this dissertation.
Abstract

Business incubation is one of the avenues to improve the dismal performance of small businesses in South Africa. This paper aimed to explore the ways in which business incubators promote small business growth in Gauteng Province. The research questions in this dissertation revolved around social networks within the incubators, technology transfer and relationship between incubation management and the partners. The dissertation was qualitative and adopted an explorative research design to guide the study. In-depth interviews were conducted with twenty-five participants across five business incubators in the region, of which five participants were incubator managers. The results indicated that the support services provided by the business incubators were crucial towards the development of small businesses. Furthermore, these services acted as motivation for entrepreneurs to access incubation facilities. Entrepreneurs also placed a high value on the interaction with incubation management. This dissertation concluded by noting that while business incubation results in positive outcomes for small businesses, their services needed to be tailored to fit the needs of entrepreneurs at the different stages in the incubation process. Also, there still existed a gap in the literature on theoretical framework and the assessment of incubation facilities.
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Chapter 1: Introduction: Overview and Rationale of Study

1.1. Introduction

South Africa has made remarkable achievements since attaining its liberation in 1994. Currently, the country is the second largest economy in Africa, with sophisticated world-class infrastructure, industries and financial sector (Ndambeni, 2008). While the country has an impressive overall reputation, globally, it is grappling with myriads of socioeconomic challenges. Some of these issues date back to the apartheid era, which segregated South Africans on the basis of their skin colour. Subsequently, unequal resource distribution, racial inequality, and poverty still affect the country almost three decades post-liberation. In light of this, the government has aimed to correct the past mistakes, through attempting to build a united nation, for all South African citizens to pursue their dreams and livelihoods (Malefane, 2013).

One of the objectives of the South African state is to establish South Africa as a developmental state. At the centre of the developmental state agenda, is to have a state which is concerned with improving its socio-economic development (Mkandawire, 2001). This concept borrows a leaf from the success of the East Asian tigers who adopted certain reforms that led to rapid economic growth within their societies. Similarly, the pursuit to be recognised as a developmental state involves South Africa’s ruling elite spearheading this agenda through the formulation of relevant ideologies and tasking the bureaucratic administration to implement this objective. Several strides have been made, in the policy development and institutional front. One of the approaches identified by the government as significant to this objective is through supporting small businesses (Masutha et al, 2014).

Small businesses are recognised throughout the world as a force to be reckoned with in economic and social development. The past three decades have seen the global shift in policies surrounding entrepreneurship and small business development. Small businesses have emerged as an alternative for various stakeholders to achieve their objectives. Generally, these businesses are considered as an avenue for creating employment opportunities, bridging the inequality gap between the first and second economies (informal sector), promoting innovation,
investing in local development, and poverty alleviation (Mazzarol, 2006; Rogerson, 2009; Maye, 2014). Therefore, the government recognises the critical role of SMMES in South Africa and has adopted several initiatives, including the adoption of friendly policies and establishment of structures to promote the growth of this sector. Business incubators are among the structures established to support small businesses. This chapter is an overview on the motivation of this study, research questions and the structure of the study.

1.2. Research background

The concept of business incubation emerged in 1956, with the first model of incubators providing physical location and administrative services to struggling entrepreneurs (Lesakova, 2012). The models of incubators have evolved, with the development of technology, infrastructure and government objectives throughout the world. These facilities are considered to be useful towards economic development. The growing trend in business incubation suggests that there are multiple benefits which nascent enterprises gain from the incubation process, resulting in their growth and survival past the first year in operations. Thus, business incubators help nascent companies to be competitive in the cut-throat market. The idea of incubation is to provide assistance to emerging businesses in terms of infrastructure, technical assistance and capacity building, finances, in some cases (Bollingtoft and Ulhoi, 2005; Hackett et al, 2004, Grimaldi and Grandi, 2005). These are some of the issues small businesses grapple with that force them to go under. Furthermore, by monitoring these businesses in the facilities, incubation management are able to identify businesses at risk and develop turn around strategies for these businesses. Thus, for the small enterprises, business incubators are problem solvers. These facilities are a recently discovered new phenomenon and judging from the government investment in the facilities, it can be deduced that they are positively improving small business’s performance (Ndabeni, 2008).

The focus on business incubation as a development tool is a global trend, as more countries are looking to improve entrepreneurial skills and capacities. Business incubators have been seen to provide this opportunity. These facilities operate
across different sectors and are supported by various partners. While there is no set definition on business incubators, the services they provide have been used as a means of categorising them. Business incubators are considered as a safe environment for small businesses to grow at a steady pace, while providing them with necessary management skills, resources, technical expertise, mentorship and networks so they can improve their survival in the competitive market environment (Hackett, et al, 2004, Bollingtoft and Ulhoi, 2005; Grimaldi, et al, 2005). These facilities further promote entrepreneurship culture (O’ Donnel, 2004), legitimise small businesses (Grimaldi and Grandi, 2005) and promote technological innovation and transfers. Thus, for emerging businesses, incubators are seen as problem-solvers.

While business incubation is a recent phenomenon in Africa, South Africa has the highest number of business incubators in the continent (Ndabeni, 2008). These incubators have evolved over time, within different political backgrounds and institutions to cater for entrepreneur needs accordingly. There currently are fifty seven (57) incubation centres across the country, with a majority being in Gauteng region, as part of the government’s plan to strengthen the SMME sector and promote commercialisation (SEDA, 2015/16).

1.3. Research problem

Despite heavy investments in small business development programs financially and through policies which are friendly to small businesses, South Africa is still struggling with a “weak job-creating capacity”, resulting in high unemployment, widening the inequality gap (Global Entrepreneurship Monitor, 2016). Furthermore, while there are positive attitudes pertaining to entrepreneurship in the country, the entrepreneurial activity in the country remains considerably poor. According to The Global Entrepreneurship Monitor (GEM) report (2013), South Africa had the lowest percentage of Total Entrepreneurship Activity (TEA) of 10.6 percent in comparison to its Sub-Saharan counterparts who had an average of 27 percent.

At the same time, out of the 10.6 percent that has embarked on business, 4.9 percent of these businesses are no longer in existence. The high failure rates could be attributed to: lack of perception of opportunities, poor quality of education, lack of
entrepreneurial culture, a growing reliance on government and an influx of necessity-driven entrepreneurs instead of opportunity driven ones (Department of Trade and Industry, 2008, Masutha and Rogerson, 2014). In contrast to the national statistics, business incubators claim an eighty percent success rate for businesses which have received support from the facilities within the first two years of trading (Small Enterprise Development Agency, 2010). The emerging question, therefore, is ‘how do incubators promote small business growth? Also, in what ways do these incubators add value to nascent firms as compared to those operating without support?

1.4. Aim of the study

This study was interested in finding out how business incubators operated and the techniques they used to improve their tenants’ business expertise and the extent which they assisted their tenants to grow successful businesses. Furthermore, the notion of business incubators as an important agent of promoting the State’s ideology of economic development was explored. This was through the use of in-depth interviews with twenty business incubator tenants and five incubation managers across five business incubators in Gauteng region.

1.5. Research objectives

To explore the influence of business incubators in developing small businesses in Gauteng region.

1. To establish the ways through which incubators supported their tenants.
2. To investigate the social networks created by business incubators in terms of facilitating the growth of small businesses.
3. To investigate the extent to which technology transfer added value to small business growth.
4. To establish the impact and relationship of donor community and other financiers on the performance of business incubators in South Africa.

1.6. Research questions

1. In what ways do business incubators support their tenants?
2. How have the social networks created by business incubators facilitated the growth of small businesses?
3. How does technological transfer add value to small business growth?
4. How does the relationship between donor community and other financiers affect the performance of business incubators in South Africa?

1.7. Significance of the study

Most literature on business incubation focused on incubator operations, services provided and the best practices. However, limited research existed on the relationship linkages within these facilities and the influence on incubator operations. This study, therefore, sought to address this gap by exploring the perceptions of incubator tenants and managers on the role of business incubators in promoting small business development in Gauteng region. This dissertation would be helpful to individuals, entrepreneurs, and organisations in business incubation or those interested in establishing new incubation facilities as it provided a new angle in the incubation process.

1.8. Format of the study

This study consisted of six chapters. The first chapter provided an overview and rationale for studying business incubation performance in the Gauteng region. In addition, it included the research question and sub-questions and significance of the study. The second chapter reviewed existing literature on business incubation. This chapter begun with the small business definition, their importance. The chapter also unpacked the concept of business incubation, through discussing the various types of incubators, roles, and success factors. The last theme in this chapter looked at global incubation trends including business incubation in South Africa.

Chapter three focused on the theoretical framework adopted in this research. The theory of a developmental state was first discussed, in relation to the government’s interest in business incubation. This was followed by the real options theory, where the incubator management’s selection was explored. The chapter ended with
explanations on the nature, extent, and value of interaction in the business incubator, according to the social network theory.

Chapter four provides a detailed methodology process followed in this study. This included the: research design, paradigms, data collection and analysis methods, ethical clearance and limitations. Presentation of findings and discussion of the same was provided in chapter five. This was a breakdown of the responses from the field. The data was broken down into themes identified from the literature review and those that emerged during data collection. Chapter six, which was the final chapter of this dissertation provided a summary of the research. The contribution of this study to business incubator process in South Africa and recommendations were presented.

1.9. Conclusion

This chapter introduced a topic of study in this dissertation, which is the role of business incubators towards promoting small business growth in Gauteng. It also gave a breakdown of the aims, objectives and significance of the study. Furthermore, it provided an overview of the business incubators in South Africa. The next chapter further looked into literature on business incubation internationally and in South Africa, to provide more insight on its operations and factors that are associated with the success of these facilities. The existing literature was to provide justification and support for the research questions investigated in this dissertation.
Chapter 2: Business incubators: The problem-solver for small businesses?

Introduction

This chapter discusses small businesses, their significance and the challenges they face. It then proceeds to discuss literature on the role of business incubation, the different types of incubators, and the global trends towards incubation. One of the sections focuses specifically on business incubation in South Africa. Partnerships and challenges will also be discussed here, with a conclusion at the end of the chapter. Small businesses are considered as highly important towards economic development for several reasons. In South Africa however, these businesses are performing dismally despite the support accorded by the government. Hence business incubators are seen as an ideal support for the small businesses.

2.2 Defining small businesses

There is no set definition for small businesses. Researchers interchangeably use the terms ‘small businesses’ and medium enterprises to refer to businesses which are run by individuals, with a limited number of resources and low annual turnover rate (Schaper and Volery, 2004; Reinecke and White, 2004). Defining small businesses is important, particularly for policy makers and other actors who support these businesses, as it enables them to establish a regulations and tax brackets for these businesses. Also, it is for various actors to set up a criterion for accessing support within these brackets.

The National Small Business Act (Act No.102 of 1996) defines small businesses in South Africa based on their annual turnover and number of employees. Currently, the annual turnover of these businesses is between 1-64 million Rands. In addition, the Act stipulates that small businesses are those that employ between 11 to 50 people, while medium enterprises employ 51-200 people, micro businesses have 1-5 employees and very small businesses 6-10 employees. Most small businesses in South Africa operate in the manufacturing, agriculture, catering, accommodation, tourism and informal sectors (Department of Trade and Industry, 2008).

2.3 Importance of small businesses
In a dynamic global economy, small businesses are increasingly becoming a force to be reckoned with. They are actively involved in local and national economic development. Some researchers refer to these businesses as the “main engine” of economic growth (Bernier, 2005; Lewis, Massey Ashby, Coetzer and Harris, 2007). These businesses are an avenue for innovation, by using new technologies which make it easier for these firms to overcome barriers and penetrate the competitive market environment. Innovation and expansion gives small businesses a chance to create more employment, and compete in the market with even larger firms. Moreover, enterprises provide employment, reduce poverty, bridge inequality gaps, create new business opportunities, improve living standards and promote local economic development. Furthermore, SMMEs provide a variety to the economy. They have the advantage of being able to try new ideas on their customer base as they are flexible and closer to the customer base. Large organisations have red tape and are limited to products and services they can put in the market. Ndabeni (2008) notes how small businesses promote competition through innovation and improving products. This is because they are more flexible and have capacity to respond to changes in the competitive environment with more agility and vigour than established large firms.

The SMME sector in South Africa has undergone lots of excitement, challenges, criticism, and transformation in the past two decades (Ndabeni, 2008). Political and economic transformations in the country have significantly impacted these enterprises. Furthermore, the global, and technological challenges as well as the rise of virtual firms has significantly impacted these businesses. Despite these changes, the SMME sector in South Africa has significantly grown, and almost doubled in the last past (Rogerson, 2004).

Furthermore, the sector has become diverse with entrepreneurs focusing on different options. This change is also experienced in the informal sector which is characterized by a lot of survival activities (Masutha et al, 2014). While diversity exists, these businesses have different challenges, in terms of their operations, technical requirements and market. As a result, streamlining a generic support for the businesses is impossible and somehow insufficient. This sector also includes emerging entrepreneurs who have often face challenges in penetrating the markets.
Various attempts have been made towards promoting small business growth. (Department of trade and industry, 2001).

Despite their relevance in the society, these businesses, especially nascent firms, face various challenges that limit their potential to thrive and contribute meaningfully to the economy. These challenges could be attributed to: lack of perception of opportunities, poor quality of education, lack of entrepreneurial culture, a growing reliance on government and an influx of necessity driven entrepreneurs instead of opportunity driven ones (GEM, 2014, DTI, 2008, Masutha, et al., 2014). South Africa has an increasingly low or poor entrepreneurial activity, with Total Entrepreneurship Activity (TEA) rate of 10.6 percent, the lowest in comparison to its Sub-Saharan counterparts who have an average of 27 percent. Also, the number of failed businesses is higher than that of emerging firms, with very few adults involved in establishing and running businesses, with the GEM ranking the country at position 61 out of 65 economies in the continent (GEM, 2016).

The past twenty-one years has seen the transformation of the SMME landscape in South Africa through several initiatives adopted by the government to promote the growth of small businesses. Business incubators represent one avenue the government and the private sector have adopted towards supporting small businesses. Extensive literature on business incubators (Lesakova, 2002, Grimaldi and Grandi, 2005, Lewis, et al, 2007, Ratinho et al, 2010) confirm their importance towards developing new start-ups and supporting knowledge based economies. They help to develop new businesses and ensure they can sustain themselves for long in the cut-throat market environment.

2.4 Defining Business Incubators

The idea of business incubators is similar to the common use of incubators to preserve eggs and protect premature babies from harsh environments as they develop (Lesakova, 2012). Similarly, business incubators provide emerging businesses with a safe supportive environment so they can survive and grow during this period when they are very vulnerable, until they are able to stand on their own (Ratino, et al, 2010). Literature on business incubation can be classified into two
categories: academic and industrial categories. Studies under the academic category focus on the evolution of business incubators and specific elements which are attributed to the process of business incubation (Hughes et al, 2007). The industrial category on the other hand is much more concerned with the business incubators’ positive contributions to the economy and small businesses, through best practices and evaluations in these firms (Hughes, et al, 2007; Dee, et al, 2011).

Despite the multitudes of existing literature on business incubation, there is no set definition of a business incubator. Several researchers define incubators based on the services offered and objectives. Hughes et al, (2007:155) define business incubators as facilities which “house young firms to help them develop quickly into competitive businesses”, while Hackett and Dilts (2004:57) note that “A business incubator is a shared office space-facility which seeks to provide its incubatees with strategic value-adding intervention systems of monitoring and business assistance.” Emergent entrepreneurs often struggle with accessing the necessary resources to improve their businesses. Further definitions of business incubators are outlined in Table 2.1. These definitions have evolved overtime, as the incubation sector continues to grow.

Table 2.1. Definition of business incubators

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Plosila and Allen (1985)</td>
<td>“A small business incubator is a facility which promotes the early stage development of a for-profit enterprise.</td>
</tr>
<tr>
<td>Smilor and Gill (1986)</td>
<td>“The business incubator seeks to effectively link talent, technology, capital, and know-how in order to leverage entrepreneurial talent and to accelerate the development of new companies.”</td>
</tr>
<tr>
<td>Allen and Bazan (1990)</td>
<td>“An incubator is a network or organisation providing skills, knowledge and motivation, real estate experience, provision of business and shared services.”</td>
</tr>
<tr>
<td>Author(s) and Year</td>
<td>Definition</td>
</tr>
<tr>
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</tr>
<tr>
<td>Allen and McCluskey (1990)</td>
<td>“An incubator is a facility that provides affordable space, shared office services and business development assistance in an environment conducive to new venture creation, survival and early stage growth.”</td>
</tr>
<tr>
<td>Hackett and Dilts (2004)</td>
<td>“A business incubator is a shared office-space facility that seeks to provide its incubatees (i.e. portfolio- or client or tenant companies) with a strategic value adding intervention system (i.e. business incubation) of monitoring and business assistance.”</td>
</tr>
<tr>
<td>Hughes, Ireland and Morgan (2007)</td>
<td>“A business incubator is a facility that houses young, small firms to help them develop quickly into competitive business.”</td>
</tr>
<tr>
<td>Eshun (2009)</td>
<td>“A business incubator is an environment formally designed to stimulate the growth and development of new and early stage firms by improving their opportunities for the acquisition of resources aimed at facilitating the development and commercialisation of new products, new technologies and new business models. Business incubation is also a social and managerial process aimed at supporting the development and commercialisation of new products, new technologies and new business models.”</td>
</tr>
<tr>
<td>American National Business Incubation Association NBIA (2010)</td>
<td>“A business incubator is a business support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services. These services are usually developed or orchestrated by”</td>
</tr>
</tbody>
</table>
incubator management and offered both in the business incubator and through its network of contacts. A business incubator’s main goal is to produce successful firms that will leave the programme financially viable and freestanding. These incubator graduates have the potential to create jobs, revitalise neighbourhoods, commercialise new technologies, and strengthen local and national economies.”

Entrepreneur (2014)  

“Business Incubator is an organization designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services that could include physical space, capital, coaching, common services, and networking connection.”

Key concepts that emerge from the above definitions of business incubators is that business incubators exist to help entrepreneurs solve their business development problems (Ratino, et al, 2010). These facilities provide support to their tenants in the form of: administrative support, networks, physical space at subsidised rates, equipment, technical advice and financial support. These services are aimed at providing support to nascent firms within a short period of time, while cushioning them from cut-throat market competition. Other business incubators provide laboratory services, for the businesses, depending on the industry sector they operate in. Thus, by solving challenges faced by nascent entrepreneurs, business incubators lead to the increased survival chances through increased knowledge base and capabilities (Ratinho and Groen, 2009).

Business incubators operate in a similar environment with other SMME support mechanisms such as science parks, business accelerators and industrial parks. In fact, these organisations have been interchangeably been referred to as business incubators (Lesakova, 2012). As a result, further confusion exists in defining these facilities based on similarity in the scope of support provided to small businesses. A
key distinguishing characteristic for business incubators is that they consolidate their resources, skills, services under one roof (Phan, et al, 2005). This allows nascent firms to limit their operational costs and focus on developing their business. Thus, business incubators according to Bollingtoft and Ullhoi (2005:269), are avenues for enhancing entrepreneurship.

Although business incubators started off as resource sharing initiatives, these roles have evolved over time to include business support like training, consultations and networking (Peters, et al, 2004; Chan and Lau, 2005 Bollingtoft and Ulhoi, 2005 Bergek and Norman, 2008). Lesakova (2012) further notes that business incubators are specifically designed to offer their services through their networks, based on their programme and outcomes. They also provide an opportunity for emerging entrepreneurs to launch their businesses as not all businesses have resources and expertise to take their business to the next level and be successful.

Business incubators provide support mechanisms to improve the SMMEs and entrepreneurial growth. This is by offering supplementary services to new firms (Hackett and Dilts, 2004, Tamasay, 2007). As such business incubators are part of a dynamic process aimed at developing successful enterprises. Adegbite (2001) notes that the core function of incubators is to increase survival rates of small businesses as a tool for economic development, incubators limit failure rates through offering support services to businesses. Thus, as enterprise development tools, business incubation as a concept results in successful firms, business increase, innovation and job creation.

2.5 Types of business incubators

The definitions of incubators indicate the multidimensional aspects of business incubators. Thus, the classification of these facilities varies in terms of their service delivery methods, structure, funding, ownership and clients they serve. In addition, these incubators serve different industries, and can therefore not be classified under the same roof (Masutha, 2013).

*Traditional incubators*, also referred to as classical incubators provide tenants with operational space, administration, finances and technological expertise among
others (Lewis, et al, 2007, Lesakova, 2012). Traditional incubators mostly provide generalised incubation support to diverse businesses. These incubators aim to promote innovation, entrepreneurship and economic growth. Their sole focus is on the business assistance to start up companies and not investment. The advantages of traditional incubators are: that incubatees have an environment to interact with each other, easier service provision by incubator management as clients are within proximity and services consolidation under one roof (Triantafyillopoulou, 2006).

However, these incubators incur a lot of expenditure on operations of the physical site and administration. This may lead to poor service provision as they may have inadequate funds to assist their tenants. In addition, the focus is on businesses within the plant more often that incubator managers and owners forget that they also need to grow as a business and align themselves according to changes in the economic environment (Triantafyillopoulou, 2006, Lewis, et al, 2011). They may also experience funding challenges especially if the incubator is a new one as well.

Virtual incubators focus on producing knowledge, capacity building, research, innovation, and incubation and technology transfers. These incubators are established by high large “multidisciplinary consultancies”, with expertise on e-economy and commerce (Triantafyillopoulou, 2006, Lalkaka, 2002). They provide technical expertise, capacity building for businesses regularly in the form of online discussions, symposiums and published research. They are therefore suitable for businesses transitioning into the market and not entry level businesses.

Virtual incubators are less expensive to operate as they exist virtually. These incubators are profit-oriented, with income coming from investment in companies. They only have a central location for administrative and coordination purposes, mostly located in science parks, universities, and research institutions. Furthermore, they are not located within the same geographical scope as their clients who may be in distant locations and spread-out locally or internationally. The disadvantage to virtual incubators lies in the fact that their clients are spread all over. This makes it difficult for their clients to effectively network. Also, peer learning is a bit delayed and they may have financial constraints (Lalkaka, 2002).

Technology incubators are similar to virtual incubators, in that they support technology-oriented firms. They are located near universities and research
institutions, and provide support to small firms through advanced technologies, laboratories, equipment and capital to develop the small businesses into commercial products and accelerate their growth in the market (Lalkaka, 2002, Triantafyillopolou, 2006). They are also sector-focused. Tenants within these incubators have the advantage of interacting with the experts within their respective fields, access to latest technology and even partnership opportunities, making them different from the traditional incubators.

2.6 Evolution of Business Incubators

Business incubators are a relatively new phenomenon, which emerged in 1950s (Lesakova, 2012). The first incubator was in the US, and focused on early stage development. It provided space, administration services to tenants and at that time they weren’t particularly required to graduate. The 1980s saw a shift with incubators being defined by their functions and industry trajectory, with the 1990s research on incubators identifying best practices of various case studies conducted by researchers on what they deemed as successful incubators (Lesakova, 2012). This was based on services provided by the incubators and the characteristics which the majority of the incubators then possessed. It is through identification of success characteristics that the definition of business incubators emerged, based on service provision to tenants. The technology burst in the late 90s saw incubators and businesses focused on technology failing at a high rate, bringing into question the efficacy of incubators (Lesakova, 2012, Bollingtoft, et al, 2005).

Two streams of researchers emerged to answer questions arising from efficacy of incubators with the first, focusing on identifying emergent business incubator models within the United States (US) and internationally. The second stream sought to understand international growth of business incubators through cross-national studies. The challenges the second school faced include the fact that there was little literature on business incubators globally, as most research at the time focused on individual countries. In addition, there was unreliable data, varied definitions of success internationally, differences in economic and political structures and incompatibility of and unreliability of data. This significantly hampered empirical evaluations of business incubators in the global sphere (Triantafyillopolou, 2006).
Many researchers now document business incubator performance based on their growth and maturity. This is to demonstrate that business incubators as businesses and service providers that have the capabilities to adapt to the dynamic changing economic landscape, without losing their goals and objectives to provide services to small businesses.

Figure 2.1 below provides a summary of how business incubators concepts evolved with time to cater for the needs of different entrepreneurs in different industries.

![Business incubator model](image)

**Figure 2.1. Business incubator model (CSES, 2002).**

### 2.7 Importance of Business Incubators

#### 2.7.1. Increasing small business survival rate

As with the main objective which is to provide a safe environment to grow small businesses, incubators increase survival rate of small businesses. This is by providing support services crucial to developing nascent firms. These services are aimed at developing start-up firms and reducing costs, giving tenants time to concentrate on developing their business (Bollingtoft and Ulhoi, 2005, Bruneel, *et al* 2012). The support can be divided into two: managerial support, which focuses on business planning, staff recruitment and access to businesses contacts. Technical
support on the other hand deals with providing access to specialised technical knowledge (Hansen, *et al*, 2000, Mc Adam and Mc Adam, 2008, Bruneel, *et al*, 2012). This support is given through specialised service providers who sharpen tenant entrepreneurial skills, by training entrepreneurs. Incubators may in some instances charge a subsidised amount to recover service provision and operational costs while in some incubators; the services are free of charge.

While business incubators provide support services to tenants, controversies exist on the influence of tenant motivations, and individual characteristics towards the success of their ventures. Oakey (2003) argues that motivation shapes the attitudes of entrepreneurs towards their business. Some of the motivations to start businesses are based on the gap in services they have identified within their societies. The argument put forward by researchers supporting this idea is that social problems directly influence an entrepreneur’s potential and entrepreneurial activity (Olsen 2004, Hair 2009). Entrepreneurs live within communities, therefore, they have a social responsibility towards improving their communities (Wallace, 1999). This responsibility is reliant on the entrepreneur’s cultural values and individual views on regarding social needs (Olsen, 2004). Some of the key factors affecting entrepreneurial behaviour include: family and social support system, attitudes, financing sources, employees, customers, suppliers, cultural, political as well as economic environment Oakey, and 2003).

Another significant factor is the educational level of entrepreneurs. A number of studies on entrepreneurship have shown that individuals with a higher level of education are most likely to start businesses (Delmar and Davidsson 2000, Davidsson and Honig 2003, Arenius and Minniti 2005). This is based on the fact that individuals are more likely to start their own businesses if they believe that they have the necessary skills to run a business. This knowledge is not limited to business management. As previously mentioned, the entrepreneur’s social background may dictate the area of specialisation.

Stayaert (2007) further notes that it is important to understand the social environment in which a firm exists. This is because entrepreneurship is both an economic activity and a social phenomenon. Any changes in these sectors have a direct impact on entrepreneurs and their businesses, whether it is negative or
positive. This argument can further be outlined to define entrepreneurs as either survivalist, as they start businesses for survival purposes, due to unemployment while opportunity-driven entrepreneurs are motivated by providing a need which lacks in the community, mostly out of choice. They are innovative and more likely to withstand market hurdles as the business grows, while survivalists may abandon their businesses for other lucrative opportunities (Aidis, et al, 2006).

Another significant issue is regarding the growth of the entrepreneurial firms (Miller and Garnsey, 2000; Oakey, 2003). Skills development is a prerequisite for firm growth. Entrepreneurs ought to refine and develop their skills, aligning them to their business objectives, to be successful. Oakey (2003), stresses that two important skills are needed to ensure success. These are technical management skills and business management skills. Technical management skills are concerned with technical skills in developing new products or services. Business management skills on the other hand are concerned with entrepreneur’s responsibility regarding finance, marketing and human capital areas (Oakey, 2003). Miller and Garnsey (2000) further contend that successful entrepreneurs are those that have the capacity to identify opportunities and mobilize resources that will eventually generate growth in sales and expansion of operations. In most cases, small businesses fail as the entrepreneurs lack the necessary skills required to grow the businesses. The incubation process provides an opportunity for nascent firms to access expertise and administration support at affordable rates and in some cases for free. This gives the entrepreneurs an opportunity to transform their businesses into competitive ventures in the market.

2.7.2. Networking

Bollingtoft, et al (2005) emphasise the importance of incubators towards developing a network of various partnerships to assist emergent businesses. Network support shows the capacity of incubators to build relationships amongst their tenants (Hansen, et al, 2001, Grimaldi, et al, 2005). Networks are based around business relationships with value to the firms. This is through access to new ideas and resources, promoting the credibility and reputations through partnership with reputable partners, facilitating knowledge exchange and collective learning (Mc
Adam, et al, 2008). Incubators therefore can play an intermediary role to tenants, external potential partners, research institutions, customers and suppliers (Bollingtoft, et al, 2005).

In addition, several studies note the positive relationship between social networks and small businesses (Chipika and Wilson, 2006, Otsuka, 2007, Ayako, et al, 2014). Networking allows for small business owners to expand their connections, learn, grow, identify and incorporate diverse viewpoints, learn from other business’ success and failures, form partnerships, access resources, strengthen their connections and encourage innovation (Terzirovski, 2003). This in the end allows for these companies to grow.

Social networks are also important in evaluating interactions amongst various network actors. For small businesses, the networks are beneficial in information gathering and sharing, deterring competition and partnerships, promoting innovation and research. Surin, et al (2013) argues that businesses which exist within large social networks have less time for interaction within the network, which could then affect their performance. Smaller networks on the other hand tend to be more intimate and close allowing for much more discussions which immensely benefit a business. While most research focus on importance of social networks to emerging firms, it is imperative that established businesses maintain links with their networks, if they are to survive and thrive in the cut-throat market.

Networking circles within business incubators create learning opportunities to their tenants. This is through regular information sessions, seminars, and introduction of new clients, setting up network areas and creating client directories. Furthermore, these sessions allow tenants to interact with each other, and share their experiences and challenges in business and consider possible partnership options, and to some extent provide emotional support (Triantafyililopolou, 2006). Therefore, it is important for entrepreneurs to establish and create ties within networks if they are to thrive.

While business incubators provide a space for networking, an entrepreneur is crucial in building relationships within the formal and informal networks, as they are actors and are involved in the execution of project activities (During and Oakey, 1998). Previous research (Jensen and Koenig, 2002; Ren, Au and Birtch, 2009) note that social networks promote strong ties which aid the entrepreneur to obtain information
and financial resources. This is because information in this network is willingly shared, as the entrepreneurs have a common goal.

Networking allows nascent entrepreneurs to improve their business skills. Witt (2004) argues that an entrepreneur’s skills and knowledge determine the value and strength of interactions they engage in within the social networks. This is likely to be influenced by their educational background, with Sungur (2015) noting that educated owners are more likely to explore opportunities which are outside the networks and take advantage of the technical financial support they will get. Groen (2005), further notes that the entrepreneurial networking process requires tenants to actively engage, manage and interact with other actors of their networks within their scope, to exploit new technologies. Thus, the concept of entrepreneurial networking involves the entrepreneur actively building formal and informal relationships to benefit their businesses while being an actor in the same network (During and Oakey, 1998; Hill, et al., 1999). The more networking activities an entrepreneur indulges in, the more their networks expand, centralising their position in the networks (Witt, 2004). This solely depends on the motivations of entrepreneurs as some may prefer to restrict their networking activity.

2.7.3. Legitimising small businesses

Support from incubator can improve a firm’s credibility through association with incubator. Unlike large firms, small businesses are considered to be high risk, hence financial institutions shy away from assisting them. They have limited capital, human resource and poor or lack of access to information. These challenges cripple the proper functioning of these businesses, leading to lower output or failure. Entrepreneurs therefore lack motivation and are reluctant to take advantage of networking opportunities that may come their way, unless it is short term (Sirec and Bradac, 2009). Incubators help in redressing market failure perception of these businesses through managing and supporting these businesses (Grimaldi and Grandi, 2005). They help in reducing doubts from customers, sponsors and suppliers (Bollingtoft, et al, 2005). Also, association of small firms to incubators may aid in market entry as their goods will be certified as quality (Bergrek and Norman 2008).
2.7.4. Promoting entrepreneurship culture

Business incubators establish a shared culture within their tenants based on their goals and objectives. This culture can be transformed into social capital, a benefit which would enable entrepreneurs to learn, share and gain information from each other. Granovetter (2005) argues that strong ties may help entrepreneurs and small firms to gain status by bridging social boundaries and status levels. This is because the culture within which firms operate influences their entrepreneurial behaviour and venture growth. Furthermore, the probability of formation of a social tie increases with the cultural similarity, tastes and interests of actors involved. However, sub groups or cliques which form within the networks may develop their own culture and attitudes towards other groups, leading to isolation. Large networks may also lead to isolation of individuals not properly integrated, leading to untapped skills, with experts not being effectively utilized (O'Donnell, 2004). In communities where entrepreneurial culture is promoted, local economic development improves through income, innovation and more business establishments, as businesses exist within the community in which incubators exist. Therefore, their success is influenced by the surrounding communities and support to their services.

Incubators also work with entrepreneurs who are embedded within the community and have strong ties. Witt (2004), notes that it is important for entrepreneurs to understand and be part of the community structures within which their businesses exist, as it enables them to understand the needs and wants of the community better. It also enables entrepreneurs to draw upon local resources and gain a competitive advantage over other businesses. Furthermore, they know how the local environment is transitioning so they can be able to adapt their businesses according to the changes in the environment.

Understanding and realising the commercial opportunity of businesses is dependent on entrepreneurship as part of a social structure; an entrepreneur’s social upbringing influences to a larger extent their perception of opportunities and threats. Social interaction is therefore necessary for promoting entrepreneurial development (Witt, 2004). The social context in which the entrepreneur operates also plays an important role in nurturing the culture of entrepreneurship. One of the ways is through
embeddedness, where entrepreneurs are being embedded within the social structure of the area they operate in. According to Jack and Anderson (2002), being embedded within the area provided the entrepreneurs with intimate knowledge, contacts, and sources of advice, resources, information, and support. Thus, improving their business performance as the tenants are able to recognise and understand requirements specific to their businesses.

2.7.5. Local economic development

Incubators nurture entrepreneurs who create enterprises and in the long run create direct employment after leaving the incubator and contribute to sustainable economic growth. Start-up entrepreneur tasks may be to create jobs for themselves and save their limited funds and only after graduating will they then grow exponentially to create employment, income and taxes. Businesswise, incubator benefits by acquiring new innovations, supply chain management, new networks and spin-offs. Also help to meet social responsibilities and profit. Incubators have become a universal phenomenon to reckon. Their role has been acknowledged towards economic growth, job creation, innovation and development. This can be seen with the large amounts of financial investments by governments, private companies, research institutions and regional organisations (Chan and Lau, 2005, Lewis, et al, 2007). The growing number of incubators worldwide solidifies the fact that governments, investors and private companies locally and internationally believe that weak businesses need intervention to enable them to grow into firm companies.

Incubators also assist in job creation by creating linkages with other firms locally, and internationally. They also seek to increase employment through the promotion of more traditional business activities with low technology content. This is through the businesses that they grow. These organisations also provide an environment that promotes commercialisation through spin-offs from universities and other research centres. Universities provide incubators with skilled graduates, scientific support and also use incubators to take care of patents and associated legal support (Ndabeni, 2008).
2.7.6. Technology Transfer

Technology incubators increase technical expertise through introducing new technologies and manufacturing lines to small businesses, as they strive to have a niche in the market with their goods and services (Yunos, 2002). Technology and knowledge are key ingredients to wealth creation and business growth. The concept of technology transfer revolves around information transfer and its accessibility to many users in different areas.

Rapid technology advancement has encouraged small and medium businesses to establish, expand and propel to grow their businesses. This is through utilising and accessing new technology to improve their efficiency product design, marketing, communication and sales. Internet age has seen businesses increasingly adopting technology as a marketing tool and avenue for accessing more information pertaining to their businesses, through various online domains, expanding their networks and possibilities. The success is not however, cut across board as some businesses still struggle to adapt to technology advancement and use in their businesses (Yunos, 2002; Ndabeni, 2008).

Incubators offer technology transfer and administrative support to tenants. This support is in the form of securing patents, trademarks and copyrights for their products. Technology incubators focus on technology-oriented businesses and work with technologically driven businesses and those which need to exploit certain technologies. These incubators also work with research institutions, science parks and universities to commercialise spin-offs and develop cluster companies. Valkokari and Helander (2007) allude that through networks within incubators, tenants are provided with the opportunity to improve their production methods, technology and subsequently grow through product expansion.

Unlike traditional incubators they focus on increasing survival rates for small businesses, reducing unemployment and providing administrative support, technology incubators have more specific goals like:

- Creating a conducive environment for technology entrepreneurship.
- Fostering development of cross fertilising technologies like Nano technology or material sciences, to improve productivity and growth.
• Providing an avenue for commercialisation of research conducted by institutions linked with incubation process.
• Strengthening knowledge of the local economy
• Supporting start-up firms with high growth potential (Biggiero, 2001, Lewis et al, 2007).

Furthermore, each network has its own culture. This makes it possible for its actors to interact with each other. While SMMEs' personal and incubator networks may overlap, Biggiero (2001) argues that it is challenging for these firms to effectively take advantage of these networks and utilise them to make a profit.

2.7.7. Knowledge and innovation transfer

Business networks contribute to profitability directly through improving availability of inputs and sharing works and skills growth through knowledge diffusion. Sparrowe, Liden and Kraimer (2001) indicate that businesses which are centrally positioned have the advantage of accessing information earlier, increasing a business’ performance. In larger networks, information may be transmitted slowly, with a high likelihood of information distortion by the time it reaches the relevant individuals. Smaller networks on the other hand easily transmit information fast and accurately. Centrality also allows for transfer of knowledge between the incubator networks and small businesses, promoting innovation while minimizing costs during transfer of resources (Surin, et al, 2013).

Emerging firms rely mostly on their informal networks for support at the beginning. Business incubators therefore give their tenants a chance to grow their firms past survival stage to successful thriving businesses. Innovation is an important ingredient for small business growth. Innovation may be in the form of new markets, products or services, production methods and organisation. Defining characteristics of entrepreneurs is their risk taking in creating new products and services or simply transforming existing services. Entrepreneurs have ideas but may not be able to successfully implement them due to aforementioned issues (Masutha, 2013, Choto, 2015).
Wheelen and Hunger (2002) further state that the network organisation allows entrepreneurs to concentrate on their firm’s competencies, while gathering skills necessary for their business sector. Through networks, entrepreneurs grow their firms by improving on their perception and making better decisions after gathering information, advice and utilising them for the benefit of their firms. Also, networks contribute to the firm’s innovation process, through introduction to new technologies and exposure to different actors and ideas, and information. Incubators therefore, provide small firms with an opportunity to utilise new technologies. On the other hand, too much reliance on the same connections may lead to stagnation of small firms within the incubators or social networks. O’Donnel (2004) notes that the benefits of networks can be measured by the frequency of new information shared in the networks and supportive action.

2.8. Stages of business incubation

Business incubators follow a certain process to select their tenants. This process is sequential, with each stage having different needs. These stages will be discussed below:

2.8.1. Pre-incubation Stage

This is the entry point towards the incubation process. This stage is important as it lays the foundation for the successful business incubation process. This stage is aimed at assisting potential tenants to develop a viable business idea (World Bank, 2010a). If tenants come up with right ideas or businesses are selected by incubators, they are assisted by incubators to grow into stable and performing businesses in the market. The reverse is also true. In that, if weak proposals are selected, they might end up failing when in the competitive market. This step includes application, which includes description of business ideas, and information of the prospective tenant. Also, in this stage, interviews are conducted, and prospective tenants get to meet the incubator management team. Moreover, incubator managers evaluate the technicality and feasibility of proposals. Businesses that are selected then sign their terms of agreement at this stage. This stage is characterised by high uncertainty levels as new businesses are usually considered a risk. A managers’ expertise is
highly needed at this stage as it could determine the future success or failure of the incubator (Hackett, et al, 2004, Lewis, et al, 2007).

2.8.2. Incubation activity stage

The second phase focuses on the activities and interactions relating to tenant business growth, after joining the business incubator. This stage involves an intense process with tenants receiving necessary support services from incubating facility. The tenant’s strategic plan, product development and action timelines are set up by incubator management and tenants (Triantafyillopolou, 2006). In addition, tenants are introduced to the incubators networks. These include: business support skills, finances, markets and customers, local authorities, competitors, sector-based networks and higher education establishments.

In this stage, incubation managers create learning opportunities for their tenants. This is through regular information sessions, seminars, introduction of new clients aimed at introducing tenants to each other, setting up network areas and creating client directories. These sessions allow tenants to interact with each other, share their experiences and challenges in business and also open up on possibilities of partnership, also provides them with emotional support. Tenants also strive to make their first sales to validate their products value proposition. This is to get customer feedback and validate their price allocation/ value proposition. This stage could take between two to three years (Triantafyillopolou, 2006).

2.8.3. Maturity

At the maturity stage, incubation process focuses on the company’s viability and graduation stage. This is a transition phase. This stage, tenant businesses have matured, and grown well enough to become independent and self-reliant. Therefore, they need to graduate from the incubator’s programmes and facilities. This is an important period for the tenants, as their success depicts and confirms the importance of incubation services to businesses. Also, incubator managers, include these businesses in their larger networks, as they monitor and evaluate them.
This stage focuses on arising financial and operational challenges for incubator tenants. It focuses on analysing the various financial requirements needed and approaching other sources for funding like banks and private companies and other venture firms.

Triantafillopolou (2006), notes that firms graduate from the incubator when:

- When they no longer in need of incubator services.
- Tenants have achieved significant revenue growth and profit as per agreed goals and objectives/milestones.
- When tenants requirements needs exceed an incubator’s capabilities.
- Client reaches their maximum period of stay in the incubator.
- Business is acquired by another company.
- If a corporation makes public offering on its stock.
- If a client secures additional funding which will allow it to operate independently.
- Client has an experienced independent management team.
- Has exceeded several employees.

Graduation stage allows the incubator to create space for new firms. While the incubation process takes place within certain timelines, incubator management rarely enforce graduation policies, resulting to tenants prolonging their stay in within the facilities. This may be due to: complacency, cost saving, lack of viable business ideas and uncertainty over whether business will succeed without incubation support. To counter this challenge, Schwartz (2009), suggests that incubation management ought to adopt proactive monitoring of their tenants during the incubation process to identify the specific interventions which may lead to firm growth outside the incubator.

2.8.9. Monitoring and Evaluation

The incubator management embarks on the monitoring and evaluation process to keep abreast with their performance as an incubator and follow up on graduated businesses. The evaluations help incubator management to assess graduate business growth in relation to the incubator’s goals and effectiveness. It also allows the incubator to reorganise and better develop its facilities and services.
(Triantfyillolou, 2006: 54). Thus, the evaluation stage is important as it allows incubation management to pursue different approaches to future tenants. Although business incubator’s main purpose is to support emerging businesses, their success as an institution and entity is directly dependent/related/pegged to the performance/outcomes of their tenants and graduates (Bhide, 2000). Also, the time, funds, expertise and technical assistance are expected to yield great outcomes for businesses (Lewis, 2011: 30). Figure 2.2 provides a summary of the different stages in the business incubation process.

![Figure 1.2. Summary of the business incubation process (own compilation).](image)

### 2.9. Sponsorship and Partnership

Incubator sponsors are organisations who support business incubators financially. They may be the incubator’s parent or host organisation. In other cases, it may be sponsors who simply make financial contributions to the incubator, with no strings attached (White, 2004, Kemp, 2013). Other forms of support include: infrastructure support, capacity-building and mentorship. Incubators are more likely to succeed when supported by a wide range of partners. These organisations rely upon the sponsorship and support of various actors in order to effectively achieve their objective of nurturing small business growth. The major sponsors include: development organisations, governments, academic institutions, private businesses among others.
While the majority of incubators are funded by their partners and networks, there are some which have no sponsorship, forcing the incubators to charge tenants for using the facilities. Incubators which are funded normally have subsidised entry fees for their tenants and offer a wide array of services, leading to their businesses thriving more than the unfunded ones (Lesakova, 2012; Kemp, 2013). Therefore, the success of incubators is largely dependent on the amount of resources at hand and network connectedness. Each partner supporting the incubators may have their various reasons to do so. These facilities are identified by different actors as a means to achieve their objectives. In most cases, the existence of business incubators and other business support programs are embedded within the existing, projects of the various sponsors. Engaging with businesses therefore is seen as an effective strategy to meet several policies, so long as the appropriate, mechanisms for engagement is identified.

Most sponsors are interested in making an impact to the communities. Thus the assistance provided is aimed at ensuring maximum benefits for the groups they are assisting. Small businesses have been identified by various actors as an area with high impact. This is based on the benefits accrued, received from the small businesses. The multiple benefits of small businesses, support to these enterprises is provided through the provision of certain interventions such as finances or capacity building. Business incubators, have been identified as a means to effectively distribute these interventions while helping small businesses. Thus the relationship between business incubator and donors is dependent on the objective of the donors in most cases. This however, may lead to incubators losing their freedom to follow their objectives as they have to meet the donor requirements. Donor motivations usually inform the type of assistance provided to the various facilities.

There are many reasons why sponsors may be interested in promoting small business developments. This will further be discussed below:

The state is interested in job creation and economic growth. Business incubators therefore provide an avenue for the government to pursue these objectives. Governments provide support to incubators by: investing in appropriate infrastructure for incubators, adopting friendly policies which promote small business development, and provide financial support to business incubators to facilitate venture creation.
Governments normally invest in early stages when business incubators are laying their foundation, hence being the major shareholder in most public incubators. Funds are spent on infrastructure development and as subsidies to strengthen and develop small businesses. Also, government may award tenders to promising small businesses. In most cases, governments have been known to be the main stakeholders for incubators. For governments, helps to overcome market failure, generate jobs and income, taxes and a demonstration of political commitment to small businesses (Lalkaka, 2002).

As businesses, incubators are meant to grow and become self-reliant within five years of operation. However, this has been a great challenge. The majority in the developing and developed countries operate on a non-profit basis with income coming from rentals, services provided and mainly state subsidies. Therefore, they are forced to align their goals to that of their parent companies or sponsors. Public sector funding is vital in the developmental stage of incubators as it could take years before they attract private sector funding or other alternative sources of income to cover their operational costs (Triantafilopoulou, 2006).

Regional agencies aim to reduce poverty and respond to economic crises while promoting community development (White and Chacaltana, 2002). They work hand in hand with the government to subsidize costs for emerging businesses and to provide finances where banks or financial institutions are reluctant to provide finances. They are not profit oriented. They are involved in the merger of upcoming or underperforming businesses and are not profit oriented (Kemp, 2013). The European Union (EU) is one agencies that has greatly invested in business incubators. It started to support business incubators in 1980s, with focus on establishing business incubators in lagging areas. In the recent years, it has shifted to focus on incubators providing intensive knowledge for start-up businesses. It also promotes the technological capacity for start-ups by providing grants and aid through incubators.

Academic institutions and research centres are interested in knowledge dissemination innovations. Thus, the relationship with research institutions is a key aspect for business incubators. These institutions provide necessary information,
innovation and transformative technology to assist incubators to transform into greater businesses. They also give incubators the opportunity to realise their research spin-offs and exploit new technologies that are commercially viable (White, 2004). Most successful business incubators in Europe and the US are linked to public universities and private sectors have experience and skills which are valuable to start-up businesses (White, et al, 2002, Kemp, 2013). Research institutes, strengthen interactions between universities and incubators, promote research commercialization and provide/ get opportunities for graduates to utilise their capabilities.

Private sector partnerships are keen on profits, property development, technology transfers and investment opportunities. Therefore, they invest in promising businesses which they can acquire innovations from while making massive profits. Private sponsors invest in established businesses (Triantfyillopolou, 2006). As stakeholders in the incubator, partners are also involved in decision making. Conflicts may arise as each partner may want to pursue their own interests, leading to confusion. To avoid conflict, it is necessary for incubator partners to understand the core operations and business activities as well as the area of operations. Donors engage with businesses through the consultative process, which includes one-off events, with an aim to get information to inform policy. Donors are part of a network and facilitate the information sharing, technology transfer, and further entrenching network strength. Donors also link businesses in order to create new opportunities, fund research, advocacy, expertise and technical support to businesses (Smith, 2016).

The linkages in partnership system are unstructured, with weakest links being those in the universities, research institutes as they mostly produce knowledge. Universities provide a learning environment and promote innovative idea discoveries, which are then taken to incubators to transform into commercially viable products and services. This means that incubators may decide whether or not to pursue the new technology, hence highlighting the weakness of university links. This leads to a disjuncture between knowledge adoptions in incubators. A reason for this could be that the government as a major partner in business incubators, may dictate how they
are run, based on their agenda, thus may to an extent influence the success of incubators. Ultimately, it is important for all stakeholders to agree to work together based on the business incubator’s mission rather than partner’s interests (Ndabeni, 2008).

Incubation is not just about providing basic administration services but also finding necessary resources and creating interactions with the relevant environment. The challenge and question is on how to find resources and the networks and directions to develop the relevant services and selection of the links with local government and potential stakeholders (Triantafyillospolou, 2006).

2.10. Incubator Assessment

Most literature on business incubators focus on the definition of current trends, best practices of incubators and new models, yet ignore the evaluation of these incubators to a lesser degree. Incubator models have changed over time as community needs and natural climate evolved. Interest in incubators has led to discussions on their benefits, and effectiveness amongst researchers and policymakers (Bergek, et al., 2008). Many researchers apply different measurements, perspectives and criteria to assess incubators. Most literature notes that successful incubator measurement should be done at multiple levels, and should include: occupancy rate, the added value of incubator services, number of graduated businesses within incubators, the growth of tenant firms and wealth created (Hackett and Dilts, 2004a, Chan and Lau, 2005). However, there is no standard measurement of incubators due to lack of consensus amongst researchers. Meaning there is no single method for measuring performance and making comparisons (Bergek, et al., 2008; Phan, et al, 2005).

Another problem is that most literature on incubators focus on developed countries and cannot be duplicated in various countries, as policies, political and economic landscapes vary in each country. Lalkaka (2002) emphasise the need to have effective policies which support entrepreneurial growth and developmental stage of a country. More literature on incubators now debate on the effectiveness, evaluation, and incubators as a support avenue to SMMEs. One can then argue that evaluation is key towards understanding better, the responsibilities of incubators in each stage of business growth, incubator cycle.
2.11. Business incubator challenges

2.11.1. Office space

One of the services provided by incubators is office space. These office spaces usually come with machinery in most cases, and are a huge investment for the incubators. Although the provision of physical space and machinery enables the tenants to focus on their businesses and save costs, these services are capital intensive. This is particularly for the traditional incubators where heavy investments are needed for machinery, maintenance, and human capital. In addition, office space in the incubators is limited. This means that the facilities cannot adequately cater for all their tenants, as they can only host a limited number of businesses at a time. As a result, incubator managers resort to tactics such as: giving preference to the most promising businesses at the time of application, charging tenants for using incubator space and facilities, establishing strict incubation periods and also grouping entrepreneurs with similar businesses together. This is in attempts to reduce the costs from their side, while supporting small businesses (Triantafyillopolou, 2012).

Virtual incubators on the other hand have the advantage of operating outside the confines of physical buildings, allowing them to expand their services to a much wider population, beyond the confines of a physical building. However, their virtual existence is a challenge in itself as they do not have a set business model, which they can utilize to cover their costs, making them reliant on income they receive for their services (Lesakova, 2002). Traditional incubators may get rent through leasing their physical structures, a service not available for the virtual, incubators.

2.11.2. Location

Business incubators are centrally located yet their tenants come from different areas. This poses a challenge as some tenants cannot adequately access incubator services, particularly in instances where some tenants reside in rural areas, thus, the ideal suggestion would be for business incubators to be near infrastructure, technology and scientific services. In some instances, incubators are far from the services and access to various services which they need to assist entrepreneurs with, this leads to entrepreneurs outsourcing services, or shifting their businesses to areas closer to services they require. Also impacts the incubator performance
negatively. Buys and Mbewana (2007) note that incubators should be close to areas with access to scientific and technical knowledge and services. However, this is not the case as entrepreneurs are at times forced to travel long distances to access incubator and their facilities and services.

2.11.3. Entrepreneur quality

Entrepreneurs come from different social backgrounds. This impacts the way they operate their businesses. Factors such as poor education, lack of presentation skills, lack of understanding basic business principles and weak business ideas, limit the potential of entrepreneurs and their firms. These issues also may result to a lack of motivation, leading to poor performances. Hence, it is imperative for incubators to identify the various needs of their tenants and provide support to them accordingly, as the success of an incubator dependent on entrepreneur quality. Buys and Mbewana (2007), argue that quality entrepreneurs, are crucial to the performance of business incubators. Hence, incubator managers ought to have a strict recruitment process to select the right crop of tenants, based on the objectives of the incubators.

2.11.4. Sustainability

Incubators are businesses on their own. Therefore, they also need to ensure their survival as they strive to assist small businesses. Incubator growth is determined by the tenants they recruit and graduate within a particular period and the annual turnover (Lose and Tengeh, 2015). Sustainability enables an incubator to be able to continuously support small businesses and improve their performance. Management therefore is tasked with the responsibility of raising funds in order to survive. A lack of funds affects incubator operations negatively, they cannot adequately cater for their tenants. Incubator models are reliant on funding from the state or research institutions, with government mostly funding the bulk part of it. In privately owned businesses, incubators charge fees to their tenants, which in some cases are exorbitant, forcing some to drop out from incubation facilities or only access the incubator for specific needs (World Bank, 2010a). It is against this background that some incubators have to offer different services to suit the needs and pockets of entrepreneurs. Funding may also be unreliable in some cases forcing incubators to shut down as they cannot afford to run their operations. There is an increasing trend
for universities to fund incubators or partners with these facilities to realise the commercialisation of their research.

2.11.5. Competent and motivated management

The key to incubator success is selection of qualified and competent managers to oversee incubator activities. However, this is not always the case, as most incubators do not have experienced management or assistants with the necessary qualifications needed to assist the tenants, or have insufficient experience (Grimaldi, *et al.*, 2005). As a result, have to rely on external mentors to provide training to other tenants, which is costly in the long run. While the external workshops may be beneficial to tenants, the interaction is general, with less monitoring, which may affect the performance of businesses. Furthermore, a shortage of skills within the technical management team in incubators is limiting to entrepreneurs as they are unable to get advice and support accordingly, impacting their business growth and profits. In other cases, the tenants may be forced to outsource these services, limiting their growth prospects as they are really expensive. Thus, incubator success is dependent on the component management with the ability to provide sound supervision and technical support to its tenants (Hackett, *et al.*, 2004a).

2.11.6. Lack of commitment

Entrepreneurs are individuals who come up with ideas for businesses after noticing existing gaps within the society and go ahead to provide the required goods or services to bridge this gap in the market. Other characteristics include: The concept of entrepreneurship revolves around the characteristics or traits shown by those who take a chance and start their own businesses. At the core of entrepreneurship is innovation. Innovation as earlier discussed refers to the process of coming up with new ideas. However, this is not always straightforward as entrepreneurs may decide to join the incubators with little motivation to improve their businesses. In the end, their businesses may end up stagnating within the incubator or even failing as they do not have the required motivation (Buys, *et al.*, 2007). Some entrepreneurs are survivalist entrepreneurs, meaning that they are in business for the sole purpose to survive and not necessarily grow their businesses. Such tenants always abandon
their businesses when other lucrative opportunities emerge, resulting in a waste of incubator resources, in the case where they had already started accessing incubator services. This reiterates the need for incubator managers to carefully select their tenants, as the quality of business selected is reliant on selection process (Hackett, *et al*, 2004b).


Experiences in business incubation differ globally. As mentioned earlier, business incubators are an avenue for government to promote their development agenda, thus different incubation models are adopted to meet these objectives. In the United States of America (USA), business incubators are the fastest growing sector (Adkins, 2001). This is not surprising, as the USA was the first country to adopt incubation support, with its first business incubator in 1956. Business incubation has evolved over the years in the USA from provision of physical space to nascent businesses to promotion of technology transfer. The country experienced a boom in the incubation sectors in the late 1980s and early 1990s. The success of business incubators in the USA has been attributed to the strong financial institutions in the country (Chandra, 2009). This has led to successes of incubation and small businesses. Furthermore, the SMME sector receives massive support from both the, private and public sector, with the government promoting technology transfer, economic profitability and commercialization (Chandra, 2009). The incubators in the USA are linked to academic and research institutions to promote commercialisation and technology transfers (Al-Mubaraki and Busler, 2011).

In Europe, business incubators emerged in the 1990s, and have substantially grown since (Goddard and Chouk, 2008). However, the economic crises in Europe negatively affected the business incubator operations, leading to a decline in establishment of incubators (Goddard, *et al*, 2008). One of the objectives of the European Union (EU) is the establishment of a competitive economy through innovation, with small businesses as one of the drivers to meet this goal (Aerts, *et al*, 2007). However, the failure rate of small businesses is massively high in Europe, with one out of three businesses failing within their first year of operations. Business incubators in Europe are funded by respective governments, are non-profit
enterprises and are sector specific, with the Information and communication technology (ICT) sector, representing a huge percentage of the incubators.

In Australia, business incubators operate in buildings purchased by the national government for incubation purposes. The main aim of these incubators is to minimise costs of business development to nascent businesses and reduce failure rates. Most of the incubation facilities are not-for-profit (Schaper and Lewer, 2009). Focus is on launching successful business and not commercialisation. This is evidence through the fewer linkages to universities and research enterprises (Masutha, 2013).

In Malaysia, government focus is on technology development and incubation. The incubation sector, recognised for its role in the country’s transition from a resource based economy to a manufacturing one (World Bank, 2010a). The business incubation sector in Malaysia is fully integrated in the government’s national development strategy (World Bank, 2010a). In Brazil, business incubation were adopted to address unemployment, reduce poverty and inequality and high mortality rates (Chandra, 2007). Business incubators are an avenue to solve socio-economic challenges. Incubation success in Brazil attributed to the multi-stakeholder engagement, which created a conducive environment for nascent firms and existing businesses (Masutha, 2013, Lalkaka, 2003, World Bank, 2010c). The incubators are located within universities and research centres. The focus is in technology intensive firms, high-tech firms (Lalkaka, 2003, Oliviera and Menck, 2008 Chandra, 2007).

In China, business incubators were established to assist with challenges small businesses faced such as finances, lack of skills and lack of entrepreneurial culture. Business incubators in china receive massive support from the government through this Torch High Technology Industry Development Centre (TORCH) program which promotes the commercialisation and industrialisation of hi-tech products and SMMEs (Rong, 2009). They have a key focus on innovation and technology.

Business incubation in Africa is still in early stages. As such, fewer business incubators exist in the continent, with the majority located in South Africa. Little research on business incubators in Africa is done (Masutha, 2013). Most incubators in Africa focus on ICT, agriculture, manufacturing, processing and textiles (Masutha, 2013).
2.13. Business incubation in South Africa

Small business sector in South Africa is unequally segregated, with formal businesses being run by white and Indians in urban areas while the emerging small firms are owned by blacks and coloureds in informal settlements, townships and rural areas. These firms are mostly survivalist enterprises (Buys, et al, 2000, Rogerson, 2004) and form the second lower part of the economy. Survivalist firms are established by individuals unable to find employment or work in a sector of their choice. These firms are mostly temporary as the owners are looking for better prospects. This unequal structure was inherited from the apartheid regime which was oppressive and divisive.

When the new democratic government was ushered in; in 1994, it was faced with a challenge of uniting the country while at the same time identifying ways to include previously disadvantaged groups in economic development of the country. Small enterprise support institutions in the apartheid regime, were racially structured. They included Coloured Development Corporation and “homeland equivalents (Masutha et al, 2014). Thus new government had the task of merging these various institutions into one, at a time of rapid policy development, the country needed to be included as part of the world. Therefore, small enterprises have been an avenue to address past inequalities and injustices in South Africa.

Currently, the country has an unemployment rate of 26.6 percent (Statistics South Africa, 2016), almost on the same level as in 1994. These statistics are worrying, especially in a country with a high percentage of youth who need to be participating in economic activity and nation building. Thus it is necessary to not only create employment for the youth but also encourage them to start businesses. The government is tasked with the responsibility of ensuring that previously disadvantaged groups can access economic opportunities to improve their livelihoods and participate in the economy as equals. Small businesses also help in reducing poverty, economic restructuring and job creation (Masutha and Rogerson, 2014).
Nevertheless, the South African government is supporting SMMES, in order to meet its objectives of creating an equal society and promoting economic development in the country. Business incubators are an opportunity to improve small business performance and survival rates (Ndabeni, 2008, SEDA, 2010).

Business incubation in South Africa is a recent phenomenon, similar to other African countries. The past two decades have nevertheless experienced massive growth and expansion of business incubators in South Africa. Currently, business incubation industry in South Africa is the largest in Africa (Ndabeni, 2008). Although business incubators in South Africa became popular in the 1990s, there were earlier versions to these facilities. The first incubators operated in old company sites, and were commonly referred to as the “Hives of industry”. They were funded by the Small Business Development Committee (SBDC) and were mostly located in townships (Buys and Mbewana, 2007). Hives were traditional incubators which provided location and subsidised rent for emerging black businesses. Other services include: storage, bookkeeping and electricity (World Bank, 2010). The aim of these hives was to bridge the opportunity gap between large enterprises and nascent ones, through sub-contracting of the latter (Buys, et al, 2000). However, these hives did not contribute into incubator descriptions as graduation was optional for tenants within the hives. So, tenants could stay for as long as they wanted. Graduation is an important aspect in business incubation as it allows firms to operate independently in the market environment (Chandra, 2007).

Hives were replaced by GODISA programme in 2000 (Buys, et al, 2007). GODISA is a Sotho word which means “to help”. It was established by the Departments of Trade and Industry (DTI) and Science and Technology, to create new technology intensive SMMEs. This is through promoting technological innovations, productivity improvement and competitiveness of small businesses. This would lead to more employment opportunities in the country, improving the lifestyle of citizens and GDP. Partnerships were between the Department of Trade and Industry (DTI), Department of Science and Technology and the European Union (EU) (GODISA Trust, 2004/5). Initiatives were characterised by multiple partnerships and stakeholders. The aim was to accelerate development of technology. Partners are the government, NGO and private sector. The intention was to address high unemployment and promote small business development through technology transfer (World Bank, 2010b). The
hives facilitated subcontracting between larger companies and small enterprises. GODISA had twelve incubators across the country. GODISA also promoted the involvement of previously marginalised communities in entrepreneurship.

Further plans by the government to consolidate small business development functions within state agencies resulted in the formation of the SEDA Technology Programme (STP) in 2006. This programme was a merger between the Department of Trade and Industry (DTI), Department of Science and Technology GODISA programme, National Technology Transfer Centre (NTTC), the Technology for Women in Business Programme (TWIB) and Technology Advisory Centre (TAC) (AIN, 2013; World Bank, 2010b). This merger was aimed at increasing small business development and contribution to the economy (Masutha, 2013).

The mission of the SEDA Technology Programme is to develop innovative technology–based platforms that result in the creation of sustainable, globally competitive SMMEs that contribute towards the accelerated growth of our economy. By the end of 2014, STPs had supported 2,349 clients from the projection of 1,710, and created three hundred and forty nine jobs during the quarter under review, while supporting forty three incubators (SEDA, 2014/15). Currently there are fifty seven (57) incubation centres across the country, with a majority being in Gauteng region. The increase in these facilities is attributed to the government's efforts in strengthening the SMME sector (SEDA, 2015/16). STPs support businesses in various sectors. These include: ICT, film, agriculture, clothing, manufacturing construction, jewellery among others. STPs provide new technology to businesses at the level of prototype/ sample development and commercialisation.

To meet its objectives, STP reports to SEDA and has three independent departments. The Business incubation division dealt with establishing new business incubators, and strengthening the capacity of existing incubators. The second division was the quality assurance division which focussed on training, quality controls and evaluations services for all SMMEs at all stages of their existence. The Technology Transfer division dealt with providing latest technologies and training to SMMEs to improve their competency and productivity (Masutha, 2013, Wolfgang, 2011). The STPs are an extension of the GODISA programme goals as they seek to promote small business development through provision of infrastructure, technology
and finances to these entities so they can promote economic growth (Masutha, 2003).

Achievements after the first decade of democratic rule was attributed to the establishment of new systems which supported small business sector, formally neglected in the past regime (Masutha, et al, 2014). On the other hand, this decade came with challenges. These included financial constraints to support businesses and policy, poor policy coordination and implementation, few entrepreneurs from targeted groups benefitted and a lack of skilled workforce. Rogerson (2013) further notes that while the new policies were aimed to support emergent businesses by previously marginalised groups, they ended up benefitting from medium sized businesses which were white owned at the time, further entrenching inequality (Rogerson, 2009, DTI, 2008). Small businesses also performed poorly because of lack of funding, understaffing of institutions and inexperienced staff in the small business field. Also, South Africa had constantly been reliant on the international sphere as it did not have experience or existing policies which it could utilise. As this progressed, policy shifted to disadvantaged groups (Masutha et al, 2014).

In order to tackle these challenges, various initiatives were initiated to promote small business development. Evidence of this is the existing policies on small business development, establishment of departments specially dedicated to assisting small businesses as well as information sessions for skills and capacity building. These include: the Centre for Small Business Promotion, Ntsika Enterprise Promotion Agency and Khula Enterprise, which are facilitated by the Department of Trade and Industry.

There have been changes in the business incubation landscape in South Africa. Arguably, this is expected as the country within the first decade after independence was going through a process of transformation, economically, politically and socially. The changes within business incubators have particularly been guided by the growing need to establish partnerships. Partnerships are considered important in creating opportunities for small businesses to engage, learn and build their capacity in the field of business. The figure 2.3 below is a summary of the SEDA business incubators.
As of 2013, there were 51 business incubators in South Africa, a huge increase in comparison to 2004 where only four business incubators existed. This shows the growing relevance and need for small business incubators. The majority of business incubators in South Africa are publicly funded by the government.

2.14. Policy Landscape

There is one major policy which played a crucial role towards this agenda of nation building. That is the White Paper on National Strategy for Development and Promotion of Small Business which provided guidelines for supporting small businesses (Department of Trade and Industry, 1995; Masutha et al, 2014). The passing of this paper provided a benchmark for the government to adopt policy initiatives and institutions to support small businesses, based on international guidelines (Rogerson, 2004, Malefane, 2013). This paper advocated for the following:

- A legal framework to support SMME initiatives,
- Streamlining existing policies to include previously disadvantaged groups,
Creation of institutions which will facilitate information access, financing, procurement and marketing for small institutions,

Promotion of joint ventures,

Capacity building and strengthening existing institutions, and

Provision of affordable infrastructure for small enterprises.

Improving industrial relations and the labour environment (DTI, 2008).

The White paper was later on reviewed, leading to the establishment of Small Business Development Agency (SEDA) in 2004. The National Small Business Act (Act 102 of 1996) is another important legislation towards small business development. This act provided guidelines to state institutions towards designing policies sensitive to the SMME sector, while at the same time reflecting ‘international best practices’ (Rogerson, 2004, Malefane, 2013). The National Small Business Act of 1996 defined and elaborated on SMMEs categories, stipulating the number of employees, investment and annual turnover bands, based on industry sector, also establishing certain agencies to support SMMEs. This was to focus on giving special support to SMMEs and limiting access to differentiated support programmes.

Other legislation and policies include:

- Constitution of the Republic of South Africa (Act 108 of 1996): The constitution is considered as one of the best in the world. It is the ultimate law in South Africa, which provides equal opportunity to citizens of South Africa while protecting their rights and freedoms as they pursue their interests. It also gives the government the power and legitimacy to pursue ideologies that seek to address socio-economic growth in the country.

- Local Government Municipal Systems Act (32 of 2000): identifies the major principles, mechanisms and processes necessary for municipalities to participate in economic development of local communities. Also encourage participation of citizens in municipal activities.

- The Broad Based Black Economic Empowerment (BBBEE) Act: (53 of 2003): this act caters for previously disadvantaged groups, mostly black citizens. It ensures that economic activities in the country are structured, transformed and inclusive to enable meaningful participation of citizens in the economic
landscape. This is realised through skills development, preferential procurement, and employment equity and business establishment.

- **The National Development Plan (NDP):** this plan provides a long term strategy (vision 2030) for the government towards South Africa’s Development. As per this plan, the government aims to eliminate poverty, reduce inequality, and promote an inclusive economy and achieve greater economic growth. This is by striving to create eleven million jobs by the year 2030, with ninety percent of these opportunities existing within the SMME sector (National Planning Commission, 2011).

The above policies indicate the transformation of the SMME landscape in South Africa, as well as the government’s determination to promote participation of its citizens from previously disadvantaged backgrounds in the economy.

### 2.15. Conclusion

The increasing growth of business incubators is a sign that small businesses are crucial towards economic development despite the high failure rates of small businesses. This chapter has discussed literature on business incubation, the evolution, and cycle of incubators. It touched on the important roles incubators play, including technology transfer, information sharing, promoting business growth, among others. Business engagement is an avenue which donors use to effectively tackle their own objectives. Aside from funding, partnerships with incubators also involve donors being brokers of knowledge and relationships. While incubator’s job description is outlined based on their characteristics and objectives, evaluation of their performance is difficult, due to a lack of concrete guidelines as the sector is relatively new. The section also discussed small business development in South Africa, focusing on historical context, policy formulation and incubator progression in the country. The next chapter discusses the theories on business incubators, in the development context.
Chapter 3: Theoretical constructs towards understanding business incubator operations

3.1. Introduction

This chapter provides a discussion of various theoretical foundations used in this dissertation to explain and understand the importance of business incubators. The theory of a developmental state discusses the role of the state towards promoting economic growth. Social network theory will thereafter be discussed, focusing on the definitions of networks, their relevance, benefits and concept of social capital. The Real Options Theory will lastly be discussed. It will explain the process which incubator tenants are selected and importance of having experienced incubator managers in decision making in the business incubators.

3.2. Theory of a Developmental State

The developmental state concept borrows from the success of the East Asian countries (Japan, South Korea and Taiwan) (Mkandawire, 2001). These countries were previously underdeveloped but went through a period of rapid economic transformation within two decades. This led to debates to explain the fast growth, with financial institutions arguing that the change was due to the adoption of neoliberal policies while researchers argued that state involvement was the key to the success of these countries. The developmental state trajectories emphasize the importance of both infrastructural influences and political commitment. The term “Developmental state” was first coined by Chalmers Johnson, to explain the rapid growth of East Asian tigers (Johnson, 1999). Johnson (1999:6), notes that the Japanese growth was aided by four distinct features: an elite state bureaucracy with qualified manpower, a political system which allows bureaucracy to be proactive and take charge, state intervention in the economy and an institution in charge of the process (Johnson 1999:6). Histories of the East Asian tigers highlight longstanding bureaucratic traditions and direct economic intervention by the state (Evans, 2010).

Central to the notion of a developmental state is the role of the state towards achieving fast socioeconomic development (Mkandawire, 2001, Chang, 2010). Chang (2010), further elaborates that developmental states operate between free and centrally planned economic system. That is, they are neither a capitalist nor
socialist state. The idea of centralizing development within a state is that the state can have a better focus on the process and organization of development process. The state chooses to use features that best serve their interests. The state further intervenes with regulations to meet its objectives. Also, economic growth is attributed to a state which can regulate economic, political relationships that can lead to sustained development (Chang, 2010). In addition, the state plays an important role in bridging the gap between the market, private sector and other important actors to promote, industrialization through well-defined technology policies that will lead to an increase in productivity, job security and industry expansion (Evans 2010; Chibber, 2004).

Mkandawire (2001) further argues that developmental states are dependent on ideological and structural components. The ideology aspect refers to the state’s mission to pursue developmental initiatives (Mkandawire, 2001). These ideologies have been pegged on state involvement in micro and macro-economic development of countries. In order to achieve its objectives, the state has to be legitimate and be able to control its territory to promote its development agenda (Ghani, et al, 2005). The emergence of the development state ideologies was in objection to neoliberalist ideologies which called for less state control in the market. In Africa, the newly democratic states were faced with a responsibility of restructuring their nations, while designing and executing projects which would lead to economic growth and social development of citizens (Mkandawire, 2001). In Asia, state involvement was a means to combat western imperialism and promote national survival. Earlier studies on developmental state focused on the advantages of various developmental policies, with the East-Asian growth based on adopting import substitute industrialisation, leading to export-led growth in their economies (Chang, 2010).

The structural component refers to the state’s capacity to implement policies strategically and effectively to achieve development (Mkandawire, 2001). This is influenced by: institutional, administrative, technical and political factors. A competent bureaucratic state administration is crucial to pursuing development objectives. Literature on developmental states have been shaped by experiences of the East Asian Tigers (Hong Kong, Singapore, South Korea and Taiwan). These countries had autonomous bureaucracy guided by political leadership committed to development. The motivations of these leaders were to catch up to the west in terms
of economic growth, compete regionally and enhance nationalism. Therefore, development was considered a national priority. A strong bureaucracy was also embedded through the uprooting of the traditional elites (Ghani, et al, 2005).

Also, the state must be able to provide consistent economic guidance, plan and empowered to meet its long range of economic policies, without succumbing to external demands. According to Mkandawire (2001), a states’ ability to implement economic policies may lead to legitimacy of the state with greater authority to manage and implement policies, govern and promote transformation in the social and economic spheres.

Governments all over the world have turned to business incubators as avenues of supporting small business development. This is of course in line with their developmental agenda. The small business sector has grown over the years but there has been minimal impact in poverty reduction and employment. This may be attributed to challenges which small businesses face as they strive to compete in a cut-throat market environment. In various parts of the world, governments are taking initiatives to nurture entrepreneurship development, as part of promoting economic development. In Singapore for example, the government is providing strong education and system, infrastructure, internet access to promote technopreneurship (Burnett, 2000, Lalkaka, 2002). In Africa, the concept of a developmental state has not really picked up, with exceptions of South Africa, Botswana and Mauritius, which to some extent have their socioeconomic development reflecting the characteristics of developmental states.

Mkandawire (2001) notes that Africa is lagging behind the development agenda due to the challenges such as massive poverty, wars, high inequality, corruption and lack of funding. Mkandawire further argues that the third world countries are reliant on external funding from the West, weakening their developmental agenda. This argument is further supported by Chibber (2004), who argued that the failure of developmental states in the south are a result of their inability to set up correct institutions to bring about development.
3.2.1. Is South Africa a Development State?

As previously mentioned, a developmental state is centred on the capabilities of a state with ideologies aimed at promoting economic development, and has the administrative capacity to do so. South Africa, in various ways is working towards becoming a developmental state. The country, as compared to its African counterparts has made great strides towards this goal.

South Africa’s ruling elite the African National Congress, (ANC) have repeatedly made commitments towards the construction of a developmental state. This is through the ANC’s manifestos and policy conferences where they pledge to build a developmental state which will invest directly in underdeveloped areas, while addressing issues such as poverty, inequality and unemployment. Also, the party strives to direct private sector investment (ANC 2010). The 1955 Freedom Charter outlined the ANC vision to create a non-racial South African Society where all its citizens had equal rights in healthcare, education, employment among others. Furthermore, the Morogoro Conference in 1969 was the first consultative process towards promoting the vision of equality in resources and the liberation struggle. In 1992, the party released Ready to Govern Document (ANC, 1992). This document was a policy guideline which the ANC would use to attain its vision for a democratic South Africa. The policy document had four main objectives:

- To ensure that all South Africans had social and economic rights in the country.
- To overcome apartheid legacy.
- To improve the lives of South Africans through sustainable economic and infrastructural developments.
- To promote freedom and security for all who lived within the borders of South Africa.

Post-independence, ANC discourse has focused more on refining the vision, and laying out strategies to meet these objectives. Through the eye of a needle (2001), was a document written which emphasised on the importance of selecting the right leaders to head the transformation process.
The new regime post-apartheid inherited a lot of socio-economic problems from the past government. The Apartheid regime was characterized by land dispossession, limited employment opportunities and racial segregation. This segregation was further extended to access of basic resources, resulting to most population receiving poor services while white minority received the better services, and was enforced through brutal force resulting to restricted improvements in their economic status (of the majority of the population (Lewis, 2001; Edigheji 2010: 28).

The ANC’s strategic vision after the first democratic elections in 1994 was to address the injustices of the past regime while attempting to construct a united country, and promote economic growth. One of the priorities was to invest in proper healthcare and education (Butler, 2010:183), areas which had previously been neglected. Wolpe (1995:88) referred to this as an attempt to correct past injustices through “nothing less than a social revolution of the social order.” This meant that the ANC had the burden to radically transform the social arrangements for the past regime in attempts to correct the wrongs.

This led to the adoption of the Constitution of South Africa (Act 108 of 1996) which depicts, embraces the above objectives. The constitution notes that South Africa aims to create a society which is characterised by “Equality, political and property rights, housing, healthcare, education, access to information, access to courts, freedom of expression, and freedom of association” (Potgieter, et al, 2016). As such, it is considered as one of the most progressive constitutions on the world as it has a deep integral focus on human rights.

South Africa has adopted several policies in line with its vision of transforming the country into a developed state. For instance, The Reconstruction and Development Plan (RDP), which was adopted in 1994, immediately after South Africa attained her independence. This policy was people-focused and aimed to address challenges the people faced on the ground. This policy further aimed at policy creating a strong economy, which was dynamic and inclusive of all South Africans (Lewis, 2001, Maserumule, 2001). This was through developing human capacity through education, training, and eradicating racial segregation of citizens. Also, the policy aimed to make South Africa a regional economy creating jobs and protecting worker’s rights while promoting a democratic society. However, this policy heavily
focused on human rights and social aspects, neglecting the reallocation of existing revenues, tax collection and fiscal prudence. Furthermore, the government was insufficiently skilled, thus policy coordination and implementation methods were not used due to a lack of know-how (Maserumule, 2001).

The Growth, Employment and Redistribution (GEAR) was later adopted in 1996, to fast-track South Africa’s economic development. While the RDP was people-focused, GEAR focused mainly on economic growth and development. This policy aimed to: reduce inflation, keep the exchange rate competitive, strengthen and stabilize economy and create employment. This policy was successful in stabilizing the economic sector, reducing government expenditure, promoting better accountability and improved management of public resources and an increased GDP (Maserumule, 2010). However, despite the success in the economic growth, there were low private investment and unemployment was still rampant. Others argued that it increased unemployment to some extent. It failed in addressing the issue of wealth distribution (Gelb, 2007).

The Accelerated and Shared Growth Initiative for South Africa (ASGISA), was adopted in 2006. It acknowledged the difficult challenges of unemployment, poverty and low incomes. This policy sought to reduce poverty by 2010 and half the unemployment rate. The shortage of skills is still a challenge for South Africa in the social and economic development sectors. It further recognized that strict regulations in the SMME sector limited business growth within the country. Various programs were adopted to revamp the public sector and acknowledged the need to have specific investment strategies. The highlight of this policy is that it increased economic growth, increased employment rates, despite existing high unemployment, it also reduced the red tapes in various areas to promote skills development and an improved government spending.

Other policies include The Medium Term Strategic Framework adopted in 2009 (Presidency, 2009b), to reduce poverty and unemployment, New Growth Plan (NGP) in 2010 and the National Development Plan, which is a long-term strategy (vision 2030). These policies are aimed at overcoming structural challenges and contributing to achieving higher developmental growth. The latest policies are improvements of the earlier objectives set to promote South Africa as an economic
powerhouse. These also include improvements in health, universal access to basic services, and eradication of racism and xenophobia. South Africa suffered a setback because of the global economic recession in 2008 which affected the country, resulting to low domestic savings which still pose challenges in macro level of the economy like price collisions and uncompetitive currency limiting employment growth.

On the bureaucracy and institutional front, the South African government has promoted its objectives within the various local government spheres. The local governments promote local economic growth while acting in line with the constitutional imperatives. It has also created various departments and institutions to assist in meeting some of its goals. Unlike the policies which effectively capture the state’s interests and objectives, construction process of the development state has not been smooth. Rogerson, (2004) notes that the state’s challenges on capacity is hampered by financial resources, which are crucial to efficient and effective deployment of resources. Furthermore, there is the problem of a well capacitated and resourced administration. Within the local municipalities and local government spheres, there is unequal distribution of resources, with some municipalities well-resourced than others. Unclear expectations and non-clarified roles in amongst various actors has resulted to different versions and viewpoints on how to achieve economic development (Rogerson 2006). This has resulted to a lot of confusion, impeding the implantation process. Therefore, the success of the state relies on the country’s administrative organs to coordinate their actions to promote economic development, in line with the country’s agenda.

In line with the South Africa’s vision of promoting economic development, business incubators have been used as tools to support small businesses to realise their potential. One of the ways which business incubators assist small businesses is through providing access to latest technologies, to improve their services. Thus, government has contributed in providing support towards the infrastructure and financial assistance to incubators. Over the years, technology platforms have been established, with an aim of promoting innovation and new inventions in small businesses (Masutha, 2013).
One of South Africa’s objectives towards supporting small businesses is to establish at least two hundred and fifty incubation centres nationally. Currently, there are 111 incubation centres receiving support through the Department of Trade and Industry (DTI) under the Incubation Support Programme (ISP), SEDA, working under the Department of Small Business Development (DSBD) and the private sector (SEDA, 2015). Through partnerships with universities, science councils, SEDA ensure that their tenants can be able to fully utilise and access new technologies to enable new product launch into the market and absorption of new technologies and latest innovations in these sectors. Thus, business incubators are a tool for the government to achieve its goals in the pursuit of making South Africa a developmental state.

3.3. Social Network Theory

Social network theory was popularized in the 1980s to explain how networks aided entrepreneurs to access resources (Surn et al, 2013). Sirec et al (2009: 60) define a social network as “connections and interactions between individuals, groups and organizations.” These networks may be formal or informal, with their structure based on the extent in which individuals or businesses are linked to others in their networks (Seibert et al, 2001).

Informal networks include families, kins, friends and relatives, while formal networks refer to professional relations which can grow the business. Business incubator networks include: financiers, donors, local authorities, mentors, science parks, social networks, universities, competitors, other business incubators and businesses among others. Interestingly, (Klyver and Terjesen, 2007, Robinson and Stubberud, 2011) note that while the male networks are made up of professional affiliations, like consultants and financiers. Female businesses are heavily reliant on family, kin and friends. This makes it difficult for them to receive business related benefits and job searches and business information (Lin, 2005).

There are four interrelated principles which guide social network theories. These are: relationship importance to actors, the embeddedness in social fields and the social utility of network connections and structural patterning of social life (Kilduff, Tsai and Hanke, 2005). Freeman (2004:16) notes that understanding interactions between
actors within the networks is much more important than focusing on attributes of actors.

Various schools of thought have also emerged to explain the reasons why individuals would join networks. According to the Self-interest paradigm, networks are a creation of ties which have accumulated resources, knowledge and investment opportunities which individuals can gain from (Bordieu, 1992). Hence businesses may join networks to utilise and transform their businesses to greater levels. This self-interest paradigm brings forth the concept of social capital. The second school draws on social exchange and dependency theories (Homans, 1950), where people establish social ties with those who they can exchange valuable resources. The third paradigm is based on mutual interest and collective action (Marwell and Oliver, 1993) and the fourth school is relying on cognitive theories to explain how networks facilitate flow of information, as each member of the network possess a set of different skills beneficial to the network (Hollingstead, 1998, Moreland, 1999, Heiders, 1998).

Hackett and Dilts (2004) note that social networks can successfully impact small businesses based on their activity, density and centrality. Networks are also characterized by the amount of time, emotions, intimacy, maturity level, degree of trust and experiences between the various actors (Johannisson, 1990, Sirec 2009). Strong ties are frequent, emotionally close and are based on reciprocal relationship (Granovetter, 2005). They are considered as ties which entrepreneur can count on, and most influential in decision making and when planning for major change. Strong ties also provide insight and funding in the early stages of business. The nature of strong networks is collectivistic, which promotes business growth (Kzan and Akdeniz, 2014). In addition, strong ties provide access to information which is sensitive while allowing for easy information sharing. However, the strong networks cause challenges to small businesses as the information shared may be redundant as business owners may not see it fit to look for information elsewhere, since they assume the incubator provides a one stop shop for all services.

Weak ties on the other hand are unrelated, less intense and unemotional. In fact, these ties are mostly preferred by established businesses which are already
operating in the market. These ties are seen as an avenue to connect diverse networks. Although they are not considered by researchers to be effective like strong ties, Granovetter (2005), Molyneux (2002) note that weak ties are more important than stronger ones as they are likely to reach out beyond their immediate network to access information and other resources. Krackhardt (2000) downplays Granovetter and Molyneux argument, noting that information sharing requires trustworthiness, which isn’t characteristic of weak networks. In addition, sensitive information cannot be formalised within these networks. Burt (2000) argues that both strong and weak networks can be complimentary, as they may serve different roles for businesses, depending on the entrepreneur’s needs. This is summarised in Table 3.1 below.


<table>
<thead>
<tr>
<th>Strong networks</th>
<th>Weak networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional and intimate</td>
<td>Unemotional</td>
</tr>
<tr>
<td>Reciprocal relationship</td>
<td>Less intense</td>
</tr>
<tr>
<td>Internal</td>
<td>External</td>
</tr>
<tr>
<td>May lead to stagnation due to similar information</td>
<td>Opportunity to access information outside network</td>
</tr>
<tr>
<td>Emergent and established businesses</td>
<td>Established businesses</td>
</tr>
<tr>
<td>Close-knit and collectivist nature</td>
<td>Bridge to diverse networks</td>
</tr>
<tr>
<td>Traditional business incubators</td>
<td>Virtual incubators</td>
</tr>
</tbody>
</table>

Benefits of strong and weak network ties:
- Information access
- Resources access
- Collaborative opportunities
Witt (2004) analysed that networks are characterised by activities undertaken to build networks, its structure and information acquisition by network partners. However, these perspectives do not account for dynamics and factors which constitute the incubation process (Hackett and Dilts, 2004). There have been debates on how to measure networking activities and success. One proposal was to measure the amount of time spent by entrepreneurs in the networks (Hackett et al. 2004), while some scholars suggest measuring communication frequency between entrepreneurs and the network partners within a particular time (Witt, 2004; Ostgaard and Birley, 1996). Also, networks can be measured by the benefits attained through the networking activities, based on the frequency of new information provided by other actors within the network (Witt, 2004, O'Donnell, 2004). However, measurement of network effectiveness is hampered by empirical studies which rely on quantitative measures to capture qualitative information.

One of the greatest benefits of social culture derived within these circles is social capital. Social capital refers to the set of trust, institutions, social norms, shared networks, and organizations that shape the interactions of actors within a society and are an asset for the individual and collective production of well-being (Borgatti and Foster, 2003). It is also based on individual, shared and mutual interests of actors, and their motivations for actively engaging in the networks and with actors. For small businesses, motivation may stem from perceived return of investment, which entrepreneurs may receive being part of a network these include financial capital. Social capital is characterized by the extensity of a network and its strength, diversity of resources and relationships within a particular circle, depending on social ties (Lin, 2001, Borgatti, et al, 2003). Grannovetter (2005) notes that social capital is linked directly to value creation, with relationships surrounding the structural, relationship and cognitive dimensions.

Social capital is the value created from interactions within the networks. For incubator tenants, social capital may be achieved through acquisition of resources,
information and technology transfers. The concept of social capital is based on individual, shared and mutual interests of actors, and their motivations for actively engaging in the networks and with actors (Lazer and Katz, 2003, Granovetter, 2005, Witt, 2004). Social capital relies on shared networks, trust and reciprocity as well as shared values and norms. For small businesses, motivation may stem from perceived return of investment, which entrepreneurs may receive being part of a network. These include financial capital. Also financial and human capital is part of business catalyst if it is to achieve maximum profits.

Social capital is crucial towards information sharing, influence, identity construction within networks as well as integration of network actors. Networks in which tenants directly or indirectly influence their decision making and activities they involve themselves in, are important. In the case of business incubators, tenants may interact together to share information which could lead to the growth of their organisations. Social capital is built by sense of belonging, feelings of trust, reciprocity, participation, values, norms and diversity. Social capital is a major business catalyst, as it enables learning, sharing and knowledge transfers (Kilduff, Tsai and Hanke, and 2005).

Figure 3.1. Social networks (own compilation)
Kim, et al (2014) argue that while social networks provide opportunity for businesses to thrive, they also contribute to equality in resource distribution. This is through the network structures which influence entrepreneurs' interpersonal relationships. Dense social networks are more advantageous to small businesses as they have an opportunity to interact with diverse actors within and outside the network, as they are interlinked with each other.

3.4. Real Options Theory

There is no concrete business incubation theory. However, the Real Options Theory (ROT) is closest ideology towards understanding the operations of business incubators. This theory (ROT) borrows ideas from financial sector to give insight towards business incubator practices and operations. Unlike traditional financial sector which scrutinises the viability and feasibility of businesses based on market value, profit potential and costs (Mun 2006: 2). Real options theory (ROT) relies on managerial investment decisions based on varying degrees of: uncertainty, investment irreversibility and delaying investment (Kulatilaka, 2001, Copeland, 2002, Sadowski, 2009, Trigeorgisis, 1998).

Kulatilaka (2001) notes that uncertainty is valuable as it may lead to identifying and exploring new opportunities which may lead to successful transformation and integration into the competitive market. Furthermore, uncertainty could lead to innovation of new products and services. However, too much delay may lead to losses, and competitors catching up to invention of new technologies. It may also signify a lapse in judgement on manager’s side leading to massive losses, affecting the incubatee’s performance. Hackett and Dilts (2004) argue that the real options theory, when applied in early stages, may help in detecting failure and cutting out loses emanating from poor performing businesses in the incubators.

Most literature on ROT (Hacket and Dilts, 2004, Mun, 2006, Sadowski 2009) emphasise on the manager’s ability to make strategic decisions that will positively impact the business incubator. While incubator managers recognise their crucial role toward supporting small business growth, they also know that good investment
decisions will help towards promoting economic growth and innovation within the small business sector. This requires a managers’ expertise in selecting “weak but promising” businesses, injecting resources and expertise while monitoring and evaluating progress keenly, to avoid massive losses. These decisions maybe affected by management’s experience, technical expertise, market characteristics and available resources within the incubator (Hackett and Dilts, 2004).

ROT, puts into consideration the unpredictability of small firms at the time of selection and gives opportunity to weak but promising firms (Copeland, 2002). New firms are highly volatile, and decisions are based on whether risks can be mitigated or averted, affecting long term investment and development (Sadowski, 2009). Many studies (Lumpkin and Ireland, 1988; Colombo and Delmastro, 2002; Hackett and Dilts, 2004, Peters et al., 2004) agree that tenant selection is an important task for management as it is the basis for resource allocation and incubator success. These studies predict and explain how incubation process increases the chances of small businesses to survive the formative stages and become successful ventures. Each phase within an incubator presents options which the managers have to decide on. Table 3.2. below gives a summary of options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abandon</td>
<td>Halt incubatee operations. Abandon project due to dismal performance.</td>
</tr>
<tr>
<td>Contract</td>
<td>Reduce project scale by withdrawing from market and reducing capital investment</td>
</tr>
<tr>
<td>Defer</td>
<td>Temporarily suspend incubator activities while preserving the technical feasibility.</td>
</tr>
<tr>
<td>Expand/grow</td>
<td>Expand firms’ activities by injecting additional capital and resources to launch new products, or new versions of services, formation of strategic alliances or penetrate new market.</td>
</tr>
<tr>
<td>Shift</td>
<td>Switch business operation according to relative fluctuation of some reference</td>
</tr>
</tbody>
</table>
variables.

| Shutdown and restart | Stop operations and start afresh, through new innovation |

Table 3.2. Summary of incubation management options (Hackett and Dilts, 2004b).

Furthermore, ROT is useful in firm valuation and decision making on option to take in the next stages by evaluating different paths. In addition, it incorporates a learning model where managers are constantly involved in project evaluations, enabling them to make better and more informed strategic decisions when faced with uncertainty at a particular project phase (Mun, 2006). Identifying real options within projects is helpful as it helps in decision making at crucial times, valuing of a product, identifying a perfect timing to execute business ideas and plans as well as to optimise them. Incubator managers choose businesses based on the Return on Investment (ROI) they will get and also the ability of these firms to attract investors.

Hackett, et al (2004) and Kulatilaka (2001) further argue that allocating resources to firms based on their performance and outcome level ensures that the incubators are not evaluated solely by survival of the nascent firms but also when these businesses cease to operate as there is no justification to invest in these ventures.

This theory has certain positive implications incubator managers in that:

I. Managers can use this theory as a guideline to design and evaluate their tenants.

II. A positive view of firms which fail quickly in cheaply can be adopted, as it provides small firms with lessons on entrepreneurship, allowing these firms to recover or restructure themselves in future.

3.5. Conclusion

This chapter has discussed the various theoretical paradigms informing the existence and operations of business incubators. The theory of a developmental state gave information on the role of the state towards promoting economic growth, based on ideologies and bureaucratic structures. Achieving a developmental state is a process which is plagued by various challenges affecting the social, political and
economic spheres. In order to succeed with their objectives, the state needs to be legitimate and autonomous. Business incubators therefore, are a tool for governments to enhance economic growth and reduce poverty. The Real Options Theory gave insight on the importance of uncertainty towards selecting incubator tenants. The advantage of using a real option approach is that it is dynamic and capable of including flexibility, growth opportunities and competitive strategies in highly uncertain environments. ROT also enables decision makers to identify future opportunities and select incubator tenants. Social networks in which tenants are in directly or indirectly influence their decision making and activities. Social networks can be weak or strong, depending on the positioning of the entrepreneur. While networks allow for effective communication, it is the onus of the entrepreneur to be active within the networks to gain maximum benefits. The next chapter on methodology, discusses research design and data collection used in the study.
Chapter 4: Research Design and Methodology

4.1. Introduction

The government has heavily invested in small business development in South Africa. This can be seen with the policies adopted and supported by various governmental institutions. Despite the massive support, the small businesses are performing dismally in the market, with six out of ten new businesses failing. On the other hand, business incubators indicate an eighty-five percent success rate for businesses which have undergone or received support in these facilities. The question, therefore, is, in what ways do these incubators ensure small business growth? What are the value-added services that these nascent firms receive, which improve their business survival chance than when they would have been operating outside the incubator? This chapter discusses the methods used to collect data answering the above questions. This chapter includes a discussion on the research design, sampling and data collection method. It also looks at the analysis method, ethical issues and limitations of the study, and be giving a conclusion which outlines the chapter summary.

4.2. Research design

Mouton (2009:74), defines a research design as “a plan or blueprint on how you intend to conduct the research”. This is by specifying the procedure which is used in attempting to answer the research question. Punch (2014) notes that a research design is important as it helps a researcher to limit bias and incorrect interpretation of their results. In addition, the design enables a researcher to be able to link their research to the data through strategy, conceptual framework, objects of study and the data collection tools (Punch, 2014, Denzin and Lincoln, 2014).

A research design is very important as it guides a researcher with a template to follow until the research project is completed. This research adopted an exploratory research design. Babbie and Mouton (2010:33) define exploratory research as a type of research which is conducted to provide insight, new ideas and increase knowledge on a subject. This type of inquiry aims to conduct investigations without providing conclusions and solutions. It relies on using research instruments which
will enable the researcher to probe more on the topic at hand. This design is advantageous in that it allows for flexibility in research, cost-effective and can be used as an entry point for future research (Babbie, et al, 2010). On the other hand, exploratory studies are prone to bias as they rely on qualitative information and interpretations. This design is best suited for this paper, as it seeks to explore incubator tenants and management perceptions on the role which business incubators play towards promoting small business growth in Gauteng region.

4.3. Research paradigm

Guba and Lincoln (1994: 105) refer to a research paradigm as the “basic belief system or worldview that guides the investigator.” It is a framework the researcher uses to examine particular issues and find solutions to them. The researcher is directed by a research philosophy which enables them to identify the nature of their study and the methodologies they can utilize towards their research. These philosophical assumptions in social science are guided by three aspects: the ontology, epistemology, and methodology.

According to Guba, et al, (1994), ontology refers to the way a researcher views reality. This reality is influenced by the researcher's personal beliefs, and have an influence on the methods applied to investigate a particular study. Issues of ontology revolve around the existence of social entities should be considered as objective with realities that are separate from individuals (objectivism) or whether these entities are social constructions created through the perceptions of individual’s constructivism (Bryman, 2012).

Epistemology, the second aspect of philosophy, refers to the “relationship” between the reality and the researcher (Denzin, et al, 1994). Epistemology goes beyond an individual’s views and seeks to differentiate between the truth and false notions of reality (Erikson and Kovalainen, 2008:14). In other words, epistemology answers questions surrounding reality through logical reasoning, thoughts, emotions, and memories. Methodology refers to the method a researcher uses to collect data, which will explain certain phenomena of reality. It also guides the way which
The philosophical paradigm guiding this research is critical realism. Critical realism is relevant to this paper as it allows the researcher to gain an informed understanding of the subject under investigation. This paradigm’s ontology has also been used by several researchers in the fields of entrepreneurship and business research (Neergaard and Ulhøi, 2007; Blundel, 2007; Burnett, 2009; Alvarez and Barney, 2010).

One of the key tenets of critical realism is that reality cannot simply be explained by our knowledge as it is made up of different facets. That is, the human knowledge captures only a fraction of what deep and vast reality (Fletcher, 2017). According to Fletcher, reality exists in three levels. The empirical level focuses on how people experience events and is filtered through human interpretation of these events. The second level refers to the actual realm, where events occur and is not reliant on human interpretation of the same. The third level is the stage where the causal structures and mechanisms exist.

Critical realism is different from positivism and constructivism perspectives which limit reality to limited reality to human knowledge based on empirical evidence and human knowledge (Bhaskar, 1998). In terms of epistemology, Fletcher (2017) further notes that this paradigm is good at explaining casual analysis, analysing social problems and identifying solutions. Critical realism advocates argue that any phenomena under any phenomena must be critically examined to understand it better. Thus, critical realism uses both qualitative and quantitative analysis in the methodology, with the research designs viewed as an avenue for providing opportunities to discover more and gain more understanding of phenomena under study. This paper will use descriptive design, to understand the experiences and relationships within the business incubators.

4.4. Research methods
Qualitative research relies heavily on the researcher’s skills and ability, which might lead to a bias, as the analysis of data is reliant on the researcher’s judgments and interpretations. Also, this form of research cannot be used to generalise a whole population as the samples are usually too small (Babbie et al, 2010). This research is qualitative in nature as it is interested in the perceptions of tenants and managers of the business incubators. Perrom and Ram (2004) note that qualitative research is increasingly gaining popularity in small business and entrepreneurship fields. Quantitative methods dominated the business incubation fields as researchers try to understand the performance of business incubators, as well as entrepreneur performance (Voisey, et al, 2006).

Qualitative research focuses on a complete detailed description, and the researcher may be part of the data gathering process. Due to its intensive nature, it is more appropriate for collecting data in small samples, where the outcomes are neither measurable nor quantifiable (Babbie, et al, 2010). Qualitative research focuses on the perceptions and in-depth discussions with participants in a particular area under study. When it comes to sampling, the researchers are more interested in representing the population based on their behaviour and manner which the researcher can describe the population. Therefore, qualitative sampling differs from quantitative sampling in that it involves a small sample base in which the researcher collects their information while the latter involves larger samples in which researcher can make mathematical predictions (Collis and Hussey, 2003).

**4.4. Sampling**

Sampling refers to the process which, a suitable sample which is representative of the population has been selected. A sample, on the other hand, refers to the selection of people/ population who are included in the research as participants (Babbie, et al, 2010). Sampling is important in the research process as it allows the researcher to draw conclusions on populations from the sample. In addition, proper sampling ensures that the findings from the study sample of a research are a true representative of the population being studied.
The advantage of using samples include the fact that it is cost-effective, as fewer resources are required as compared to researching a whole population, which is quite large. Also, sampling is time-saving as it enables the researcher to collect data within a short time and faster. In other cases, sampling may be a way to access populations that are difficult to access, like prisons or top government officials. Therefore, it is important for the researcher to choose the most appropriate sampling method, as this influences the quality, validity, and credibility of the research. Collis et al, 2010).

Purposive sampling was used in this research to access the sample group. This method is a non-probability sampling technique, in which samples are selected by the researchers based on the participant’s knowledge, relationships and expertise on research areas (Babbie, et al, 2010). In this research, the participants were business incubator tenants who currently had their businesses located within these incubators. Twenty tenants were interviewed. Moreover, five managers were selected from within these facilities. The decision to use purposive sampling stemmed from the fact that business incubators in South Africa offer similar services. Also, the researcher was interested in the perceptions of tenants and incubator management. These two categories of participants were not easily accessible, thus the researcher had to approach the business incubation management for assistance with scheduling the interviews.

The incubators selected are indicated in the table below:

<table>
<thead>
<tr>
<th>Business Incubator</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio Park</td>
<td>Innovation Hub- Pretoria</td>
</tr>
<tr>
<td>Ignitrix</td>
<td>Innovation Hub- Pretoria</td>
</tr>
<tr>
<td>M-Lab</td>
<td>Innovation Hub- Pretoria</td>
</tr>
<tr>
<td>MpBiz Café</td>
<td>Soweto Youth Empowerment Zone</td>
</tr>
<tr>
<td>Seed and Container Park (SECOPA)</td>
<td>Soweto Youth Empowerment Zone</td>
</tr>
</tbody>
</table>

Table 4.1. Business incubators identified for study.
4.6. Data collection

This research used in-depth interviews to collect data, as the researcher was interested in the perceptions of the tenants and managers, based on the activities of the business incubators. In-depth interviews were used by the researcher, to get a deeper understanding in business incubator operations, from tenants and incubator managers. Collis, et al (2003) note that in-depth interviewing refers to intensive individual interviews with a small group, conducted by the researcher to explore detailed information on a particular subject, idea, or situation. These interviews are also useful towards understanding the research context, giving a fuller picture in particular aspect of research. In-depth interviews revolve around verbal interaction, in the form of conversations. Therefore, it is easy to misunderstand a respondent’s answer or questions can be misunderstood. Therefore, it is important to have clearly set out questions that are not vague, nor misleading.

The success of in-depth interviews relies upon asking clear questions, which are short and precise, easily understood and with less jargon (Kvale, 1996:130). Also, the researcher needs to ask single questions at a time to avoid confusion. This will also help respondents to respond adequately (Yin, 2011). Questions should be open-ended, ask probing questions, as they allow respondents to respond in their own terms, and follow up if need be to get clarity.

The researcher should establish rapport with the informants, by respecting their opinions and through attentive listening. They should explain the manner in which he will be recording responses, and if he plans to tape record, he should get the respondent’s assent (Babbie, et al, 2010). In order to avoid miscommunication, researchers need to familiarise themselves with the interview questions before undertaking their interviews. One benefit of in-depth interviews is that it enables the researcher to further probe on their area of interest while keeping within the research aims and objectives. Also, this method of data collection is that it is more informative, as it is detailed than other methods like surveys and questionnaires. In-depth interviews allow the researcher to be part of the data collection process, as they get to interact with the respondents (Babbie, et al, 2010).
On the other hand, in-depth interviews are prone to bias, as the researcher might be tempted to alter the findings to fit their research project, due to their own reasons. Also, bias may be a result of different interpretation of the information by the researcher, therefore, it is imperative to design the interview questions in a manner that allows for minimal bias. Yin (2011), calls for a neutral, non-directive and less conversation from the researcher, as well as maintaining rapport during the interviews and analysis. Furthermore, in-depth interviews are time-consuming, as it takes longer to get the necessary information from the respondents. Also, it is time intensive to transcribe and analyse data. Researchers, therefore, need to have a work plan which takes into consideration the time allocation for the interviews, transcriptions, and analysis (Boyce, et al, 2006).

In-depth interviews mostly focus on a small sample, thus the results are not generalizable, and random sampling is not used (Boyce, et al, 2006). For interviews, the general rule on sampling is determined by the similarities in stories, issues, and topics from the respondents, which indicate that a sufficient sample size has been reached (Boyce, et al, 2006).

To ensure that the in-depth interviews are well designed, the questions were developed from the themes identified in the literature review and passed to the supervisors to check any bias in questions. The interviews were conducted in English and recorded. The researcher also kept a field diary for validity, rigour and trustworthiness purposes. Each respondent was required to sign a consent form, before proceeding with the interview process. The interview questions were structured around the emerging themes from the literature review and fieldwork. Sample interview questions are attached as an addendum.

4.7. Data collection process

The interviews took place between January-April of 2017. The researcher approached the incubator managers before scheduling the meetings. She had to ask for permission and provided proof regarding the research and the nature of the study. The incubation management then gave referrals of the tenants from which researcher emailed to set up the interviews.
The researcher went to the business incubation management, and explained the nature of their research, with the approval documents from the university to support their case. The researcher then got referrals from the incubation management on their tenants, after which the researcher then followed up by sending emails to the tenants informing them of the research. In some cases, the tenants were available on sites and were directly approached to set up interview times. As for the managers, appointments were scheduled directly for the interviews. A total of twenty-five people were interviewed for this study, with interviews taking place at the business incubation centres. The interviews were conducted in English.

4.8. Data analysis

Content analysis was used to analyse the data from the interviews. Moore and McCabe (2005), note that this type of analysis involves categorising data from the field into themes and sub-themes in order to make the data comparable and understandable. The benefit of this method is that it simplifies, reduces and produces data. This data can also be measured using quantitative analysis. Also, this method allows the researcher to structure their data in a way that it gives answers to their research questions. This method is however prone to bias, as it is reliant on the researcher’s understanding, data misinterpretation may occur leading to a false and unreliable conclusion (Krippendorff and Bock, 2008). In this study, emergent themes on the role of business incubators from the literature review were used to categorise the responses from the interviews.

4.9. Reflexivity

Reflexivity refers to an “assessment of the influence of the investigator’s own background, perceptions and interest in the qualitative research process” (Krefting, 1991: 218). In order to maintain a neutral approach in this study, the researcher limited bias by asking non-leading questions in the interviews. Also, data was carefully transcribed and analysed to draw out emergent themes and compare the findings to the literature. The interviews were also recorded and a field diary used, to cross check any information that was not clear. As a foreign student, the researcher
noted that they may face language barriers. Therefore, a translator was present during the interviews. However, the respondents engaged in English, therefore, there was no need for translation.

4.10. Ethical considerations

This research was approved by the Higher Degrees Committee (HDC) and Ethics Committee of the University of Johannesburg. Business incubator managers were approached and permission sought before proceeding with data collection. The researcher explained the purpose of the interviews and gave each respondent a consent form to sign. The form gave a breakdown of the interview guidelines. One pointer was that participation in the interviews was voluntary.

In addition, they were assured of anonymity, and that their responses will not be shared with the centre managers nor will it affect their access to services within the centres. Respondents were also informed that they had the freedom to answer the questions they are comfortable with and withdraw from the interviews at any stage. These consent forms were to assure the participants that this research was for academic purposes and they were free to withdraw from the interviews at any given time. A copy of the approvals and interview consent forms are attached as an addendum. This research is a requirement to obtain my MA in Development Studies thus ownership of this work will be at the University. No remuneration will be given for participating in the research.

4.11. Limitations of the study

This research was conducted through interviewing twenty incubator tenants and five managers across five different incubation facilities in Gauteng region. Therefore, the results cannot be used to generalise and explain experiences of all incubator tenants in South Africa, as well as incubator managements’ perceptions on key success factors of business incubators. A bigger sample would be much suited to answer the research questions and enhance the reliability of this research.
During fieldwork, the researcher found it difficult and challenging to identify the respondents, as the incubator managers were hesitant to provide any information relating to their tenants. However, this was solved by providing ethical clearance and the Higher Degrees Committee (HDC) approval letter, to explain further why I was interested in approaching the tenants and managers. Since this research is qualitative in nature, it is not possible to measure the findings. Funding and time constraints limited this research to the Gauteng region, as this research was intended for purposes of examining the researcher as part of her Master’s obligation. Therefore, it could not be conducted at a larger scale. In some cases, the participants gave a positive response about their organisations, for fear of the information they provide leaking to their managers. This may have a significant impact on the findings.

In the beginning, this research was meant to focus on the SEDA Technology Programmes (STPs) supported business incubators. However, the researcher came across three different business incubators which had ceased functioning at the time the data was collected. The researcher, therefore, was forced to widen her scope of research to include private business incubators. This resulted in the above-mentioned incubators being selected for the research. This, however, does not imply that the data collected is of lower calibre, as business incubators in the country, operate using a similar model.

4.12. Conclusion

This chapter has provided a detailed description of the research methods used. This study sought to explore the perceptions of business incubator tenants and management on the role incubators play in promoting small business development. This research used purposive sampling, and in-depth interviews were used to collect data. The limitations of this research include the fact that the sample size was fairly small, with a total of twenty-five participants interviewed. Thus, a wider sample can be used in the future research to get a more representative sample. The next chapter will give a breakdown of the findings.
Chapter 5: Discussion of Results

This chapter provides a presentation of findings from the fieldwork, in order to get a deeper understanding of the operations of business incubators. In-depth interviews were conducted in the field, to explore the ways in which business incubators supported small business growth in Gauteng. A discussion of the findings, then follows, based on the emergent themes from existing literature. Furthermore, this section considers how the results are aligned to current business incubator theories and the implications thereof, to inform future organizations and government on business incubation as an economic development strategy.

5.1. Descriptive of research participants
As indicated in figure 5 below, participants who took part in the interviews were from diverse age groups. To begin with, the majority of the respondents were aged between 18-35 years of age. Twenty percent were above thirty five years, and ten percent falling under the above forty-five years age category. Overall, the tenants were under the economically active population groups in South Africa. This population is considered as very important towards economic growth and a number of initiatives have been adopted by the state to ensure they play an active role in the economy.

Figure 2.1. Age category of respondents
In terms of education, participants were asked about their highest level of qualification. Seven tenants mentioned that they had a matric, while ten had national diplomas in various fields. Only three tenants had obtained degrees. From this information, it can be deduced that the entrepreneurs whose businesses are currently undergoing incubation are educated. This finding is in line with the literature on an entrepreneur’s motivation. It has been found that individuals with a higher level of education are more likely to start a business as they may have some skills essential to run a business or they are better suited to identify unique gaps in the market (Arenius, et al 2005, Davidson et al, 2003).

Gender representation of the tenants was uneven, with seventeen out of the twenty incubator tenants interviewed being men while the remaining three were women. This indicates a huge difference in business ownership by gender. The statistics reveal a divide in the percentage of women owning businesses in the formal fields. The literature on business incubation does not categorize assistance in terms of gender. Perhaps this was due to the fact that these studies analyse incubator operations in general without delving deeper into gender aspects.

Incubator literature indicates that there is a competitive recruitment process for selecting tenants (Hackett, et al, 2004, Lewis, et al, 2008). This implies that women may be applying to be part of incubation facilities, but their ideas are considered to be viable by the incubation management. On the contrary, women seem to own businesses in the informal sector which are very successful. Therefore, there is a gap in the business incubation literature which needs to be addressed as women in business face certain hurdles which are different to men.

Participants interviewed came from five different sectors. These are construction, chemical sector, food and beverages, manufacturing and ICT sectors. The majority of the tenants were in the ICT sector, with their businesses focusing on software development, graphic design, printing and mobile applications.
Figure 5.2 above shows the distribution of incubatee enterprises across the various sectors of incubation. In line with the country’s development objectives, the business incubators operate in areas which require high technical expertise and are resource intensive. The business incubators assist emerging enterprises with office space, infrastructure, and capacity building to increase their survival chances in the market. The respondents were also asked the duration of their tenancy in the incubators. The majority of the tenants were in the first two years of incubation. Few tenants had their businesses operating for more than three years within these facilities. This shows that incubators have set timelines for the incubation process.

5.2. Role of business incubators

Business incubators are known to provide a safe environment for businesses to thrive in the early formation stages. These facilities also provide certain services which give an added advantage to their tenants over other entrepreneurs. The respondents were asked various questions relating to the influence of business incubators towards their businesses. The formulated questions revolved around the motivations of entrepreneurs to join the incubators, the benefits, and challenges. Moreover, they were asked how their businesses had improved since joining the incubation facility. In order to give a complete picture of incubator activities, the incubation management was also asked questions on their interaction with tenants,
services provided and recruitment process. The findings indicate that business incubators have positively increased the survival rates of these businesses in various ways:

5.2.1. Provision of office space

Office space was the first response given by all tenants when asked about the advantages of having their businesses incubated. This response was expected, given that several studies on business incubation have indicated the provision of office space as a key aspect of incubator services (Hackett, et al, 2004b, Burnett, 2009). The tenants noted that they needed affordable office space to operate their businesses, and the incubator served this purpose well. Fifteen of the tenants noted that the office space given by the business incubators was free of charge while the remaining five tenants paid a subsidized amount for rent.

Figure 5.3: Reasons for acquiring office space in the business incubators.
Some mentioned that they started their businesses from home and the space was limited, so they opted to look for affordable office space. According to Respondent 3:

“Having my business in the incubator helps me to save on overhead costs, as I expand my business.”

For this tenant, the advantage to their business lies in the ability to save on costs and reinvest money in their business instead of renting out a place.

Legitimacy for small businesses emerges through association with business incubation facilities. Three respondents noted that having their business in the incubator gave them credibility. This is because they could now print exact business locations on their cards and borrow loans from financial institutions. Also, entrepreneurs’ confidence in their businesses, increased, as they felt they were more professional than when they worked at home.

Respondent 8 further adds that:

“Having my business in the incubation centre makes me look serious. I now look like a professional. Before I used to tell people that I do not have an office as I am working from home, so they would walk away thinking I am a con. Right now, things have changed and many people listen to me when I say my offices are at the incubation hub.”

Kemp (2002), supports the above response, noting that operating a business within the incubator makes a business look more professional than when operating within the confines of their homes, making the business seem like a hobby. Also, Bollingtoft et al (2005) note that business incubators help to dispel any doubts from customers, service providers, and sponsors, as they are located in formal working environments. Incubation managers assisted entrepreneurs who had not yet registered their businesses with the registration process.
While office space is available to tenants, the business incubators can only accommodate a few entrepreneurs at a time. Therefore, getting space is a competitive process. To counter this challenge, one manager mentioned that they have resorted to allocating shared office space to entrepreneurs with similar businesses and partitioning different sections of the room to give the tenants a sense of privacy. However, the tenants felt that there was no privacy in this arrangement. As a result, they could not have meetings in the office or employ staff as they wished. Meetings had to be scheduled in other venues. The limited office space also means that other tenants could see what one was working on. This was particularly a frustration from the entrepreneurs in the manufacturing sector.

Respondent 16 stated that:

“I am forced to stay here for now, even though my business is growing steadily. I cannot leave because a bigger office means paying a lot of money for rent. Money which I currently do not have.”

![Figure 5.4. Shared office space in one of the business incubators](image)

Two managers mentioned that they asked entrepreneurs to apply for office space separately, during the recruitment process and gave space on the merit of their application. The recruitment process used by the incubation managers can be linked
to the Real Options Theory, where the decision makers (in this case incubator managers) opt to select only businesses with viable prospects and give them the first preference to incubation services. Furthermore, as noted by Hackett, et al., (2004) and Delmastro (2002), while tenant selection enables managers to effectively allocate resources to tenants, the decisions which managers make may be influenced by their experience, technical expertise, resources available and uncertainty. Subsequently, the tenants selected by management may not always be the ones with great ideas. This is the case of one incubator based on one manager’s opinion that:

“Most of our entrepreneurs are people who walked-in to ask for our services, or they were referred to us by SEDA and some came through learnership programmes, which we advertised on radio. They come to learn a new skill and decide to start a business when in the incubator. As such, we have a high number of people flocking into the facility for assistance, and they want us to allocate them space in the incubators, which is a problem.”

The above quote is an indication of the number of people who approach this facility. This shows how space in this particular incubator would then be very limited as there is an influx of entrepreneurs who regularly come for assistance. Space in this incubator was allocated on a ‘first come first serve basis.’ Those entrepreneurs who did not have space within the incubation facility were forced to find other spaces to run their businesses but still visited the incubators for other services, such as training and mentorship sessions.

Another challenge raised with regards to the office space was security. One tenant mentioned that the security in the facility was wanting. He went on to further mention that there had been numerous break-ins at the facility, forcing the tenants to resort to carrying their working materials home, as they had lost a number of their products.

5.2.2. Reducing costs

Another way which incubators increased the lifeline of small businesses is through sheltering costs associated with starting a business. Most tenants mentioned that it
was expensive to run a business, especially a young firm since there are a lot of expenses involved and finance is a challenge. The business incubators provide infrastructure and office space so it allows the tenants to operate their businesses without worry. Below are some of the tenants’ statements regarding the costs:

**Respondent 2:**
“I use the computers and internet free of charge. This allows me to market my business online freely.”

**Respondent 9:** “The incubator has machines which I can freely use to make the bags and hats. I do not have to pay for using these machines. These machines are expensive and I cannot afford to buy one on my own at this time, so I get to use these ones as I save up to get myself one when my business grows.”

**Respondent 6:** “I pay a subsidised amount of R 40 per square meter, which is affordable as compared to the amount of rent I would be paying if I rented an office outside this incubator.”

The above statements show that the decision by tenants to be part of incubation facilities is highly influenced by the financial aspects. In addition, the tenants noted that the incubator allowed them to save on overhead costs. Most nascent entrepreneurs rely on their savings to support their businesses (Bruneel, et al, 2002). Thus, while office space and infrastructure support is part of incubation services, these options allow the entrepreneurs to save on overhead costs and focus on taking their business to the next level as most of their concerns have been taken care of by the incubation facility (Bruneel, et al, 2002 and Bollingtoft, et al, 2005).

Location of business incubators was one way to reduce costs. While Buys et al (2007) argue that business incubators should be located in areas with close access to areas close to scientific and knowledge centres such as universities, 40 percent of tenants were more concerned about the incubator proximity to their homes.

**Respondent 1** said:
“The incubator is a walking distance to my home, so I do not need to spend money on transport. This helps me to save up for the materials I need to make my bags and meetings with clients.”

These tenants were more concerned with commuting from home to the incubator and costs associated to travelling. This is interesting as the tenants did not consider location to the proximity of other businesses and services they needed. For some tenants, location was an insignificant factor in their decision.

Respondent 11 said that:
“For me, it does not matter where the business incubator is, as long as I can receive their services. My business is based in Limpopo but I travel to Pretoria twice a month for training and to meet my mentor because they are helping me to build my business.”

Thus, as long as some entrepreneurs accessed services from the incubator, the costs associated with traveling did not seem to bother them. This could be due to the determination they had to grow their business. Determination is one of the characteristics entrepreneurs are identified with.

On the other hand, some entrepreneurs raised concerns on the location of the business incubators. They said that the incubator was located far from the Central Business District (CBD). As a result, they faced difficulty in obtaining clients. This also meant for some that they had to look for alternative ways of sourcing clients. In the case of meeting with clients, they had to find venues near the CBD. Hiring staff was a challenge, as the potential staff felt traveling to the incubation centre was expensive, time-consuming and tiresome.

Respondent 10 said:
“My incubator is far from the CBD and this has cost me money, as I am not able to get clients easily. I have to always travel to the clients for meetings or organise them in the CBD. Also, this has forced me to resort to online marketing of my products because the people I hire say the innovation hub is far they cannot make it.”
The findings, therefore, indicate a mixed response to location as a cost-saving factor. Also, these statements reveal the fragile nature of small businesses as they are often cash-strapped. Commercial office spaces are expensive and with incubators offering free or subsidized rates for their spaces, most entrepreneurs would be highly motivated to have their businesses within the incubator environment.

5.2.3. Business support

Several entrepreneurs mentioned that they needed assistance with planning their businesses. Bruneel, et al., (2012) note that incubation support can be provided into two categories: managerial support and technical support. The first category deals with the services which management provides to assist entrepreneurs to stabilize in the market environment. These include: business planning, staff recruitment and access to business contacts (Bruneel, et al., 2002 and Hansen, et al, 2000).

Manager 4 mentioned that:

“When entrepreneurs visit us for the first time, we ask them to fill in a business assessment form online, where we are able to identify the areas which their business needs urgent help. In the case that the entrepreneur does not have access to the internet, we help them to fill in the form in their offices.”

According to the managers, when the entrepreneurs enter the business incubator for the first time, they come with certain challenges which need to be sorted out. Three managers mentioned that some entrepreneurs come when they have not registered their businesses, or even patented their ideas. Therefore, the incubation management steps in to assist, as can be seen in the above excerpt.

The second category of support involves the provision of technical knowledge (Bruneel, et al, 2012). This is in the form of training which entrepreneurs receive to improve their business acumen in developing new products and services (Oakey, 2003). Some entrepreneurs noted that they did not have experience in the business field. They also needed assistance in marketing their products. Ten tenants also mentioned that they approached the business incubator to help them to develop a business plan which they could use to source for funds from the banks. One tenant
said that they needed to patent their products, did not know where to start so they approached the incubation management for help.

Respondent 17 said:
“*I needed a lot of money to get my products manufactured and distributed in the market. I could not afford this on my own. I came to the incubator because I knew I had a great idea, and my friend had told me that they could finance and patent the product for me.*”

The response above shows that ideas without capital, in most cases, are futile. Therefore, financial assistance is one area which business incubators attract entrepreneurs looking to develop their businesses further.

Funding was also cited as one of the areas which incubator managers provided assistance to their tenants. Capital is a major ingredient in transforming ideas into businesses. Entrepreneurs may have good ideas, but they face difficulty in financing their projects, as some may be too costly. More than half of the tenants mentioned that they did not have enough capital to fund their businesses. So, they approached the business incubators, where they had an opportunity to access funding by pitching their ideas to the incubation management, who then recruited them to be tenants in the business incubator. Three managers mentioned that they help the tenants to secure funding by helping them to write a business plan and marketing their ideas at the various events and branding their products.

There was a challenge in accessing funding. Some tenants felt that there was no assistance given in getting financial support. Managers were seen to do very little to connect the entrepreneurs with funders. In the case where funding was available, there was too much red tape and stringent requirements, which led to some entrepreneurs losing out on the funds. Also, some entrepreneurs complained that there was no direct access to government and potential funders, as they totally relied on the incubator management to promote their products and source funding for their businesses. Others mentioned that they received funding but it was too little to make a huge difference for their businesses, or they had a lot of instructions coming with
the money like the need to provide a detailed feedback on how the money was used. In some cases, entrepreneurs ended up losing out on the funding as they could not adhere to the stringent regulations.

To tackle the funding challenge, some managers initiated different interventions for their tenants. Manager two said:

“We normally have pitch Fridays, which take place once a month. The entrepreneurs are invited to pitch their ideas in front of investors. If investors are interested, then they would either provide finances to the tenants in the form of equity or lend them cash with interest.”

Thus, the issue of funding reveals the different expectations tenants have of the business incubators.

5.2.4 Networking

The business incubators provide an opportunity for their tenants to build their networks. Tenants were asked about their networking activities within the various business incubators. The responses were varied, indicating that there was a mixture of strong and weak networks within these facilities. These links, it emerged was crucial towards linking entrepreneurs to their clients, service providers and local communities. Furthermore, the links enabled the entrepreneurs to learn, share and build their capacities in several areas of their business. The type of networks formed in these incubators was determined by the interactions and value of these interactions thereof.

Strong networks in the business incubators emerged through interaction with the incubator management and other tenants within the facilities. In some incubators, management plays an instrumental role in creating network opportunities for tenants. The arguments of Jack, et al (2002) and Thrikawala (2011) on the importance of entrepreneurs’ understanding of the community which their businesses operate is supported through the networking opportunities organised by
the incubation management. This is through promoting the entrepreneurs products in the media, organizing marketing days and training sessions with different people.

Furthermore, entrepreneurs felt that the incubation services offered them a great opportunity to interact with stakeholders, financiers, incubator management and other tenants. This increased their chances to secure funding and even partnerships with other tenants in similar fields. Three managers mentioned that they regularly had training and workshop sessions where the entrepreneurs got a chance to interact with each other. In addition, they also booked spaces in events for the tenants to market their products at different events, including those held at the incubation facilities. This provides an opportunity for tenants to not only sell their products but to also create contacts and links to people operating within the similar industries.

One manager said that:

“At least once every month, we organise a stall for the tenants to sell their products. Each stall goes for R 150-500 depending on the sector the businesses come from. We also invite potential funders to come and see the products and if they like something they speak to the entrepreneurs.”

The idea around social networking, according to business incubator management is to create opportunities where their tenants can interact with people within their areas of specialisation. The workshops and seminars were very helpful to the tenants as they could be able to interact more with other businesses. Regarding networking, respondent 9 said that:

“The first time I visited the innovation hub, they had an information session for businesses. When I looked around and spoke to some business owners, they told me that they had a lot of activities like this and they could market their products, sell to clients and look for funds. This made me come to the hub.”

The tenant above realised the massive opportunity presented by the networking event organised by the particular business incubator. This entrepreneur’s motivation can be best explained using the self-interest paradigm on social networks, where
individuals create ties which are bound to benefit them through opportunities bound to benefit them through resources, knowledge and investments (Bordieu, 1992).

Also, some expressed interest in meeting like-minded people and exchanging ideas. They particularly liked networking with other tenants as they exchanged ideas, advised each other and supported each other’s business, by offering subsidised rates for their goods and services. These relationships signify the existence of strong ties amongst the tenants, as they are close, interact frequently with each other and their relations are defined by reciprocity. This can be seen through the way which tenants support each other in their businesses and the trust they have developed with each other, to an extent of soliciting for advice.

For Respondent 12:

“I like the relationship I have with the other entrepreneurs because we help each other out and advice each other. Like when I need my product to be marketed, I will get to my neighbour, who designs for me brochures and prints them at an affordable rate.”

Respondent 1 said that:

“Our managers have organised a stall for us at the Soweto Theatre where we go once a month and showcase our bags and hats. Also, with the other entrepreneurs, we market our products at the seven colours Sunday, which was inspired by entrepreneurs selling food, so we go there and market our products.”

The paradigm of self-interest can be seen in the interactions which tenants have with each other. An outcome of this is social capital, based on the shared mutual interests of the tenants within their networks, and the benefits which they receive, through the value of these networks. Value for the entrepreneurs came through advice, and price reduction for the goods and services they obtained from other tenants. Within the large network, benefits include funding, new clients and access to new technologies. Furthermore, the relationships with other tenants promote an entrepreneurial culture. This is through the strong ties which they form within the incubators. The entrepreneurs operate within a small network, which makes it easy to interact with
each other, as the incubators can only take in a limited amount of tenants. According to Bian (2000), the strong ties are valuable in raising the entrepreneur’s social status and interest in business, as their networks grow.

The interactions of tenants within incubator networks are also characterised by weak ties. Granovetter (2005), notes that weak ties are loose, informal, and less intense and exist outside the incubators. The tenants rely on these weak links to access services which are not available within the business incubators. The tenants mentioned that they outsource services like marketing, branding, accounting and intellectual property, amongst others.

5.2.5. Local Economic Development

Small businesses promote local economic development in various ways. This is through job creation, acquisition of new innovations and technologies, resulting in profits (Bernier, et al, 2005; Sungur, 2015). When asked how their business had changed since joining the incubator, the majority of the tenants mentioned that their businesses had significantly grown. Sixty percent indicated that they had hired one or two more people to help them with their business as they could not meet client demands on their own.

One respondent mentioned that they were expanding their business to other areas, mainly Johannesburg and Pretoria. Another respondent indicated that they now have more customer base thanks to the exposure to different networks they got through the business incubator, which made it possible for them to market their products. The entrepreneurs also mentioned that their business and management skills had greatly improved, courtesy of the workshops, training and seminars they attended. In addition, some of the entrepreneurs currently have their products rolled out in the market, through the support of the incubators.

Respondent 13 said that:
“I am happy with my incubator. When I came here, I had an idea only but they have managed to get funding for me, helped me get a patent for my product and even assisted in getting my products branding and SABS approval. I would definitely recommend for other small businesses to join the incubator.”

Figure 5.5. One of the tenant’s products for sale in the market.

The above statement is an indication of a satisfied tenant, who has seen their business transforming from conceptualization stage to the market. The tenant provided a positive outlook for incubation services. Figure 5.5 above is a product from one of the entrepreneurs, whose products were marketed with the help of the business incubator. The responses also show that not only do business incubators increase the lifeline of small businesses, but they also equip the entrepreneurs with critical technical skills and knowledge which they can utilize to further grow their businesses once they exit the incubators.
5.2.6. Technology transfer

Innovation drives entrepreneurship, and is influenced by technology. Kozan (2014) makes mention of the fact that incubators provide the tenants with an opportunity to access technologies which help them to improve their production methods, services and ultimately grow their businesses. Also, these facilities are an avenue for entrepreneur to test, develop and introduce their ideas to the market, with the support of incubation management. This is possible through the infrastructure provided by incubators. Infrastructure in this case refers to the equipment available for entrepreneurs to use within the incubation facility. The tenants in this research came from different sectors, with each sector requiring special facilities. Those in the Biotechnology and chemical fields, were able to access laboratories, while the ones dealing in clothing and textiles had sewing machines in the incubators which they could use.

Other ways which management promoted technology transfer was through the provision of laptops, internet and Wi-Fi to their tenants. In fact, all the incubators ensured that their facilities had unlimited internet so the tenants could use to market their businesses online. A number of entrepreneurs took advantage and created websites and social media pages to market their products, resulting in more customer’s publicity for their businesses. Some tenants mentioned that their respective incubators had assisted them in registering and patenting their businesses. Branding was also as part of the incubator services enabled the entrepreneurs to advertise and roll out their products in the market.
One manager mentioned that their former sponsor had provided machinery that entrepreneurs from various sections could use free of charge. They also paid for the utilities like water and electricity. For the incubators located in the innovation hub, the managers also noted that their partners took care of the infrastructure provision. The management then monitored the entrepreneurs utilising these and provide the assistance whenever there were queries. The manager of a privately funded incubator mentioned that the incubator provided infrastructure to the tenants through partnerships and collaborations with labs and companies within their locality, with similar services that their tenants needed. Manager 3 mentioned also that the tenants receive laptops so that they can be able to keep in touch with their clients and design material for their products.
The partnerships and collaborations with various organizations, particularly universities and private sector, encourage the commercialization of spin-offs and cluster companies. One incubator manager mentioned that they are currently supported by a University. However, since the partnership is recent, the spin-offs from the University is yet to reach tenants in this facility. Aside from indicating how the management assisted in patenting of their products and registration, no tenant mentioned access to any new technology provided by the incubators.

5.2.7. Knowledge and innovation transfer

One of the advantages of incubator networks is the fact that they increase profitability through the various avenues available for sharing information and skills (Sparrow, et al, 2001). When businesses operate within the incubators, they have access to the networks, mentorship, assistance and information distributed. The entrepreneurs come across information which helps them to understand their business, improve their perceptions of the market they operate in, understanding their fields respectively, increasing their business profitability.

Sparrowe, Liden and Kraimer (2001) indicate that businesses which are centrally positioned have the advantage of accessing information earlier, increasing a business’ performance. At the incubation stage, entrepreneurs get most support as it is assumed by the managers that they lack the skills. At this stage, the managers focus on creating learning opportunities for tenants (Triantafilopolou, 2006). These opportunities come in the form of regular training session and mentoring session. The managers mentioned that the training provided to the tenants are SETA accredited, which is an advantage to entrepreneurs as they can get credits for these courses at institutions of higher learning. Some of the training mentioned by entrepreneurs include entrepreneurship, venture creation, pricing, Accounting, and Marketing courses.

Also, one, the manager mentioned that they hold regular workshops and seminars for their tenants. These training help tenants as they can now make informed decisions on their businesses, and identify ways to improve their businesses.
Although this is a crucial support system for entrepreneurs, not all have access to mentorship. Four out of the five managers mentioned that they provided some mentorship to the entrepreneurs, as it was a way for them to identify the areas which their tenants struggled in and therefore help to address. In this case, mentorship is a service to tenants but used by the incubation management as a monitoring tool to assess the tenant's progress.

Another manager mentioned that they used to provide mentoring services but since their sponsor cut links with the incubation facility, they no longer assisted the entrepreneurs in this area. The mentorship service took into consideration the time and flexibility of tenants, as one manager indicated:

“We take a more casual way of mentoring the entrepreneurs, by letting them tell us when they are available for the sessions. This way they feel it is something that is valuable to their business. If they do not want to be mentored, we do not force it on them.”

On the question surrounding the value of interactions with the incubator managers, the respondents gave mixed answers, as indicated in figure 5.7 below. These responses suggest that incubator managers need to interact more with their tenants as they value feedback and communication from them.
Some tenants mentioned that the support they received from the incubator was very minimal. This made it difficult for them to expand their businesses in some cases, the tenants thought that the incubator's main service was office space and infrastructure provision only, as they had no interaction with management. Other tenants noted that management only came in once in a while, like six months to monitor progress of the entrepreneurs and check if there was an issue. As a result, they were left to fend for themselves and their businesses, making no difference in their operations as compared to when they operated outside the incubator. These experiences were a contradiction to those tenants who received all round support, expressing their satisfaction with incubator management, as they had regular meetings, trainings and mentorship. One of the objectives of the incubator is to provide support to the entrepreneurs. Yet, this was one of the areas of contention amongst the incubation tenants.

Also, other entrepreneurs felt that the incubator management provided a ‘one size fits all’ support, making it difficult for some of their needs to be met. This was a major complaint from entrepreneurs whose businesses were at the take-off stage. They
felt the incubator managers were not attuned to their needs, as businesses which were nearing the maturity stage in the incubators. As a result, some entrepreneurs resorted to looking for other avenues to bridge the gap between incubation support and business requirements. In some instances, the entrepreneurs were forced to outsource certain services as they were not provided within the incubator. Services outsourced: include: Accounting, embroidery, printing, intellectual property, consultancy, and marketing.

Respondent 17 stated that:

“The support I got in my first year of incubation was very helpful. But now that my business is established and growing, I rarely receive any support from the management. Before I used to go for training and had a mentor but now it is like I only have office space.”

The challenges faced by the incubator tenants are an indication that while business incubators exist to provide support to nascent firms and entrepreneurs, they cannot fully tackle the needs of their tenants, as they provide generic services across the board. Therefore, not all tenants will get the full benefits of support services provided in the facilities.

5.3. Sponsorship and partnership

Business incubators are a business on their own. Therefore, they have to ensure that they stay afloat while assisting entrepreneurs to build their businesses. Most incubators have several partnerships with various organisations which provide assistance in various ways, therefore enabling them to achieve their goals (White, 2004). The list of partners mentioned by the managers, indicate the growing interest of key players in the economy towards promoting small business growth, as evidenced by the large financial investments by governments, private companies, research institutions and regional organizations (Klofsten, 2002, Chan and Lau, 2005 and Lewis, et al, 2006).

When asked how the business incubators remained sustainable, four managers mentioned that the incubators are reliant on funding from their partners. The
sponsors include: SEDA, Department of Trade and industry (DTI), Vaal University of Technology (VUT), Gauteng Growth and Development Agency, banks, and Department of Economic Development.

At SECOPA, the manager mentioned that their former partner, SEDA, provided support in the form of buying machinery, laboratories and taking care of overhead costs such as training and mentorship. This allowed the managers to focus on the entrepreneurs.

On the other hand, some incubators may have no sponsorship, forcing the management to charge tenants for incubation services. One manager said:

“Our incubator is self-funded, so we charge incubation fees to the tenants. This is a once-off fee of R 5 850 per tenant for a period of two years. This amount was payable in instalments and covered office space, infrastructure, utilities, access to mentors and training. Other extra services were billed separately.”

For the above incubator, its survival is dependent on the tenant's incubation fees and other ad hoc services which they provide. The findings show that funded incubators are more likely to perform better than those with no sponsors since most of the services they offer are either fully sponsored or subsidised by their partners. The responses from entrepreneurs support this claim.

The findings indicate that the government is the main sponsor for the incubation facilities. This is through the various departments which aim to promote small business development in the country. Other supporters such as the banks and universities are supportive in providing technical skills and technology transfer to the entrepreneurs, giving them a chance to exploit new technologies which are commercially viable (White, 2004, Smith, 2016). As the main partner for business incubators, the government is focused on eliminating barriers which affect the success of small businesses. This is through spending on infrastructure development.
and financing the business incubators. This is a sign of commitment towards promoting small business growth.

Although business incubators are meant to be self-reliant, they depend on their partners for survival. This affects their goals, as they are in some cases forced to align their objectives to that of their sponsors. For instance, SECOPA, which was initially funded by SEDA, was forced to adopt an ‘open door policy’ in recruiting tenants, as one of the main SEDA objectives was to empower youth in Soweto. This was done through provision of leadership, walk-ins and referrals. The facility is no longer working with SEDA, and a new partner- the Vaal University of Technology has taken over. This has resulted in confusion and uncertainty amongst the management of this facility as they do not know what their new role is. Further complicating the issue is the fact that they are yet to meet with new partners. As a result of this confusion, the incubator management are unable to carry on with their services effectively.

Another challenge faced by management in their interactions with the sponsors is high expectations. Four managers, whose incubators were funded by external partners mentioned that they had to always provide a detailed report on the incubation activities regularly. This was time-consuming, and a source of conflict for some. Also, the release of funds in some cases was attached to report submissions. Furthermore, there were regular meetings held with the stakeholders to provide updates on the tenants, which the managers felt at times were unnecessary.

Manager one said:
“At times when we receive money, our sponsors want us to use it almost immediately and recruit a certain amount of entrepreneurs, which is not possible as we have a limit of the number of businesses we can help in our facility.”

This statement indicates the different expectations between stakeholders and the incubator management. Therefore, both incubator management and respective sponsors are on the same page in terms of objectives and expectations.
While four incubators are funded by their partners, they mentioned that there is usually a delay in receiving the funds. This is due to the bureaucratic process involved in the disbursement of funding, which ends up affecting the incubators and services they provide to their tenants. The manager from the self-sponsored incubator noted that funding is always a challenge to them. This is because they have to foot everything on their own. Therefore, most of their focus is usually spent on identifying ways to secure funding for the incubator and their tenants. They also offer services outside the facility such as branding, business consulting and graphic design as an avenue for money generation.

There is a difference in the services that entrepreneurs receive within the business incubators. This is dependent on the amount of resources the incubator has, and in some instances the funding which they get for assistance. In one of the incubators, the tenants have to pay for the services, as it is a self-funded incubator. On the other hand, the findings indicate a difference in the service provision and support received, based on who the sponsor is. We can see that business incubators which have funding and assistance from more than one sponsor have more services they provide to their tenants. The responses from entrepreneurs who remained positive throughout the interviews were from the incubators which were fully funded.

5.4. Incubator Assessment

Literature on incubators note that there is no standard measurement of business incubators due to a lack of consensus among the researchers. The most common evaluation method has been to discuss the benefits and effectiveness as suggested by (Bergek, et al, 2008). However, in their attempts to formulate a business incubation theory, Hackett, et al., (2008) have argued that successful incubator assessment should include the number of tenants who have graduated, business support offered in these incubators and the profits created from these businesses.

To find out if business incubators indeed were effective, tenants were asked whether they would recommend business incubation services to other emerging entrepreneurs. As indicated in figure 5.8, the majority of the tenants said they would highly encourage other businesses to do so, as they have seen their businesses
grow through the various services accessed in the incubator. Those who agreed mentioned that management support, training and network connections in the incubators were highly beneficial to small businesses all over.

A number of the respondents were not sure. Some felt that depending on the business stage of a business, it would be a yes or no. For a nascent firm, they agreed that the incubation services were important as there was a lot of support provided. When it came to businesses at the take off stage, they felt that the incubator did not provide services that suited the needs of this category, so they were better off not being in the incubator. Respondent 7 mentioned that business incubation limits one from working harder, because they no longer have to pay for rent, as there is no pressure.

The responses indicate that tenants are motivated by the support services provided by the incubators, and use this as an evaluation mechanism. Furthermore, the challenge of not being in touch with entrepreneur needs was used by tenants to gauge incubator performance. One entrepreneur actually felt that business incubators were very important and mentioned that they were planning to start one,
which would cater for the needs of growing businesses as they did not have much support from the incubators.

When asked how the incubator managers evaluated their tenants, all the managers responded that the first thing they look at is the number of businesses who have exited the incubation facility. This is because most entrepreneurs only leave the incubators when they feel they can stand on their own. One manager said that they had created more than two hundred businesses, which employ other people since they began operating and that was an indicator of the successful incubation process. Three of the managers also indicated that they do follow up sessions with former tenants, and so far, more than fifty of these businesses are still in operation.

Regarding current tenants, the managers mentioned that they give training and regular workshops to their tenants. These sessions gave them the opportunity to interact with entrepreneurs. They took charge of struggling businesses and tried to assist by helping in the areas of difficulty.

According to Manager 3:

“We have one on one meetings with the tenants every three months. This allows us to monitor the progress of these entrepreneurs. When we identify an underperforming business, we assist the entrepreneurs in developing turn around strategies, and give them tasks to do, which are aimed to reduce the risks of closing down or failure.”

The response indicates an active approach which some incubators take to monitor their tenants' businesses, and identify remedies to support at-risk firms.

5.5. Conclusion

This chapter provided findings from the field on the role of business incubators in promoting small business growth. The responses from in-depth interviews gave a strong indication that incubators indeed provide value added services to their tenants. However, they are faced with various challenges, like limited space, which
hinders them from incubating many businesses. The tenants of incubators feel that the management needs to do more to adequately grow businesses, particularly those at the take off stage. The interviews with management revealed the complex relations between sponsors and incubator management. This is based on the red tapes and the push by sponsors to mainly have their agenda materialised in the incubators. The findings have also revealed that the government is actively involved in incubation services, and small business development, supporting the various incubators. The discussion and implications from findings will be done in the next chapter.
Chapter 6: Conclusions and Recommendations

6.1. Introduction

Although small businesses provide a variety to the economy, create employment, reduce poverty and bridge the gap between the formal and informal markets they are performing poorly in South Africa, despite the investments injected into this sector by the government. This dissertation sought to explore the ways in which business incubators improve the survival rates of small businesses. The chapter provides a summary of the discussions and findings from the previous chapters. Moreover, it provides limitations of the study, as well as areas for further research.

6.2. The influence of business incubators in developing small businesses in Gauteng

The findings revealed that the services provided by the business incubators played a crucial role towards the growth of nascent firms. Furthermore, these services acted as a motivation for tenants to have their businesses hosted within the facilities. The services included office space, infrastructure mentorship, business support and networking opportunities. For most tenants, the incubators were a cost effective option. The research found that in one way or another, the entrepreneurs were able to save up costs which were covered by the business incubator. This allowed for them to focus on developing their businesses, resulting to their growth and expansion.

The consensus among tenants regarding business incubation was that it is very helpful for young firms, as there is massive support received from the facilities. Although the incubators provided assistance to their tenants, they could not adequately cater for all of them. This emerged through the responses amongst entrepreneurs with businesses at the maturity stage, who mentioned that they received little support from the incubators, unlike those at the foundation stage who had a lot of support. This goes to show that the business incubation strategy relies on providing intense training and support to new firms, so as to shoulder them from failing in the market, while assuming that businesses past the pre-incubation stage are all set, based on the previous training and assistance provided. This assumption
is dangerous as every stage in a business has different requirements and it is important for incubation management to identify the specific needs for each stage and their entrepreneurs if they are to register much success. Office space was also a challenge in the incubation facilities and competitive process is involved in securing space. This is where management comes about where they choose which businesses to allocate.

The Real Options Theory (ROT), developed by Hackett and Dilts (2004) explained the need for managers to make strategic decisions that positively benefit the business incubator. According to this theory, managerial decisions are influenced by uncertainty, which can lead to new opportunities or losses. This uncertainty is experienced during the selection process of firms and transition from one stage to another.

Therefore, manager's expertise were crucial in selection process, resource allocation and in the monitoring and evaluation process (Hackett, et al, 2004). These decisions are affected by manager’s experience, technical expertise and resources available within the business incubators. Although this theory largely focuses on management’s decision, the study argued that it could also be used to describe the motivations of tenants for joining business incubators. These entrepreneurs also did an assessment of the benefits they stood to gain within the incubators, even though their uncertainty was based on whether or not their businesses would be deemed as viable by the incubation management.

6.3. How social networks created by business incubators facilitate the growth of small businesses

Social networks refer to ties and interactions between individuals and groups. The ties could either be strong or weak, as earlier discussed in the literature. The Social Network Theory, best described the nature of interactions entrepreneurs have within the incubators. These theories were guided by the importance of relationships to the actors, the purposes of social networks the depth of the networks and structures of the same within the social fields (Kilduff, Tsai and Hanke, 2005). Strong network ties are frequent and based on mutual relationships while weak ties are less intense and unemotional.
The findings show that business incubators provided a platform for the entrepreneurs to interact and expand their networks. In this dissertation, strong networks were demonstrated by the support entrepreneurs gave each other in the form of advice, business support and networking. These ties were fostered through close interaction, on the basis of operating within the incubators. A benefit that emerged from the multiple interactions is social capital, which is reliant on trust, social norms and mutual interest of actors (Borgatti, et al, 2003). Social capital gave the entrepreneurs a sense of belonging, enabled reciprocity in supporting each other’s business, participation in networking events and led to introduction of norms and values within the particular groups. Furthermore, it is a major business catalyst, as it enables learning, sharing and knowledge transfers (Kilduff, Tsai and Hanke, and 2005).

Weak networks on the other hand, were a result of entrepreneurs outsourcing services which are currently not offered within the incubation facilities. These services were deemed as crucial by entrepreneurs and the virtue of outsourcing indicated their urgency to their businesses. Some entrepreneurs felt that the incubators were not really in tune with entrepreneurs’ needs. Hence, outsourcing was a way to fill this void. Weak ties, according to Molyneux (2002), give the entrepreneurs an opportunity to expand their networks, strengthening the relationship base of their businesses.

6.4. How technological transfer adds value to small business growth

Business incubators provided a space for small businesses to develop, test and introduce their ideas into the market. Technology transfer within these facilities was aided through assistance in registering businesses, patenting products and access to the various infrastructure, which enabled the entrepreneurs to develop their products. The partnerships with various institutions such as universities, made it possible for the incubators to commercialize on the spin-offs from the research. While technology transfer was important, these tenants, noted that they accessed new technologies through the labs, for those in the food businesses and IT industry. The rest mentioned access to internet for their businesses. Furthermore, knowledge transfer was aided through the networks, mentorship assistance and information distributed by incubation managers.
6.5. The relationship between donor communities and business incubators

In order for a business incubator to efficiently support their tenants, they needed to have adequate machinery, technology, space, finances and management. However, this was not easy as running incubators was costly. Partnerships have provided an avenue for incubators to be sustainable and get help in offsetting their operational costs. Each partner who supported a business incubator normally had their own agenda. The government was a major sponsor for business incubators. This was in line with their mission to create a developmental state. The concept of a developmental state is based on state ideology to promote socio-economic development and bureaucratic structures in place to ensure that the agenda is achieved (Mkandawire, 2001). Business incubators were therefore an avenue for the state to promote its development agenda, providing support to small businesses.

Also, the transformation of South African small businesses has been made possible through the various policies adopted in a post-apartheid era, to promote an inclusive environment for previously disadvantaged groups to participate in the economy. The key policies that have shaped the small business landscape in South Africa include: White paper on National Strategy for Development and Promotion of Small Business, The National Small Business Act (Act 102 of 1996), Constitution of the Republic of South Africa (Act 108 of 1996) and The National development Plan (NDP) among others.

Universities as sponsors were interested in the commercialization of their research. In this study, not much was revealed regarding the relationship between the business incubator and university as it is a new partnership. This relationship exposed the vulnerability of business incubators when dependent on the support from donors and financiers. Also, it showed how a change of donors might to some extent affect the performance of incubators, when there was lack of clarity in the roles and responsibilities of incubator management. Thus, it is important to device ways of smooth transition process without affecting incubator operations. Banks also provided support to the incubators as they are interested in profits from new ventures and access to new technologies. Incubators which did not have partners charged their tenants incubation fees, which they used for daily operations, and have to look for partnerships outside their scope to ensure to keep them afloat.
Although business incubators should be self-reliant within five years, this has proved to be difficult, as in most cases, they were reliant on external support, forcing these institutions to align their goals with those of their sponsors (Lesakova, 2012). Interactions with donors was characterized by strict rules for engagement, which incubators have to adhere to, as illustrated in the findings. Thus, therefore, it was necessary for the management and sponsors to be on the same level, if incubation was to be successful.

6.6. Limitations of the study

Due to time and financial constraints, this study was only conducted in Gauteng province, using a small sample size. Future research can be done to get a comprehensive result on the business incubator functions in South Africa.

Moreover, the research was qualitative and could not be used to measure the findings as it is exploratory. The results might be slightly affected by positive responses given by some tenants, who feared that their responses might leak to incubation management and affect their access to services.

6.7. Relevance to Policy makers

Small businesses benefited from incubation services. This could be seen from the findings in which entrepreneurs indicated how their businesses had improved since joining the incubation facilities. This implied therefore, to policy makers that business incubation as a tool for promoting small business growth had positive effects. However, these facilities were limited when it came to office space and resources, forcing them to select a few entrepreneurs at a time. This therefore reduced the impact in the economic sector. There was a need therefore, to open up more incubation facilities to nurture small businesses. Another alternative would be to partner with the private sector and institutions of higher learning for more success.
6.8. Relevance to Incubation management

This study has showed that the success of business incubators lay in the services they provided to their tenants. The incubation management could make use of this study to identify the areas which they need to improve on in the incubation process. The first being tailoring their support services to suit the needs of entrepreneurs at the different stages of the incubation process. The second, was on the value which entrepreneurs placed on interaction with the management. The findings indicated that those who were satisfied with the incubation process were tenants who received all round support and mostly mentoring from the incubators, than those who did not have any support.

6.9. Relevance to Entrepreneurs

This research has showed how business incubators promote the growth of nascent firms through the various services they provide to their tenants. Therefore, this research is helpful to entrepreneurs as it gave an overall picture on incubation services. The research may act as a motivation to the new entrepreneurs to make use of the incubators, to develop their idea and get exposure through the networks of these facilities.

6.10. Recommendations

The findings revealed a gender gap in the business incubation literature. Most of the literature focused on incubation as a whole, with little or no focus on the gender dimensions of tenants within these facilities. This is a key area for future research, should there be a need to produce a gendered analysis of tenant performance within the incubators.

There is a need to develop a more focused theoretical framework on business incubation. The lack of concrete theory, similarly affected the evaluation process of business incubators, as each facility creates their own evaluation guidelines. This gives rise to bias, as these incubators are also businesses, whose survival is dependent on the success of their tenants, therefore they may be forced to use measurements which reflect positively on their facilities. The current methods rely
on the use of theories from across various fields to explain the functions of business incubators. The closest incubation theory is the Real Options theory, by Hackett et al (2004) which they use to explain the decision-making process of incubation management.

Technology transfer provided an avenue for future research. In this study, the literature used focused on the ways in which the incubation facilities promoted technology transfer, through the services provided. The findings gave a similar outlook with respondents noting that technology transfer was mostly through the providing of infrastructure, networking and marketing. Therefore, more literature was needed to discuss this phenomenon.
References


Appendix 1: Higher Degrees Committee approval and ethics clearance

UNIVERSITY OF JOHANNESBURG

FACULTY OF HUMANITIES
RESEARCH ETHICS COMMITTEE

03 December 2015

REC 01-65-2015
STUDENT : MA Opondo
STUDENT NUMBER : 200808165
TITLE OF RESEARCH PROJECT: The Role of SEDA Technology Programmes (STPs) Towards Promoting Small Business Development in Johannesburg
DEPARTMENT : Anthropology and Development Studies
DEGREE OR PROGRAMME : MA
SUPERVISOR : Dr. S. Nojiyeza

Dear Ms Opondo

The Faculty Research Ethics Committee has scrutinised your research proposal and confirm that it complies with the approved ethical standards of the Faculty of Humanities; University of Johannesburg.

The REC would like to extend their best wishes to you with your postgraduate studies. Yours sincerely,

[Signature]
Prof Tharina Guse
Chair: Faculty of
Humanities REC Tel: 011 559 3248
eemail: tguse@uj.ac.za
Appendix 2: Consent form

Interview consent form

The purpose of this study is to explore the role business incubators play towards the successful establishment of small businesses in Gauteng, through the perceptions of its tenants. It also aims to understand the operational and training techniques used by these centres to improve their tenants’ business expertise. Furthermore, it seeks to understand the relationship between the incubation managers, financiers and the tenants.

As a respondent:
1. I understand that the interview is part of a study Ms. Opond o is conducting towards fulfilling the requirements for her MA Development Studies at the University of Johannesburg.
2. My participation in this study is voluntary.
3. I understand that there will be no form of payment for taking part in the questionnaire.
4. I may withdraw from the interview at any time without any repercussions.
5. I understand that all data collected will be limited to this use as authorised by the University of Johannesburg Ethics Committee.
6. I am aware that the researcher will keep the information I share confidential and I will remain anonymous during the interview and when findings are presented.
7. I understand that the information I share during the questionnaire will not affect my access to services in the STP centre in any way, nor will the centre managers be given a copy of the interview.
8. I understand that this research study has been reviewed and approved by the University of Johannesburg Ethics Committee.
9. I have read and understood the explanation provided to me. All my queries have been answered to my satisfaction.

By signing below I agree that I have read and understood the above information, and would be interested in participating in this study.

_________________________  _______________________
Signature            Date
Appendix 3: Interview questions for tenants

1. How old are you?
   - 18-35
   - 35-45
   - 45-65

2. What is your highest education level?

3. Which industry do you operate in? Briefly describe your business

4. Why did you choose to locate your business in the incubator?

5. How did you hear about the incubator?

6. How long have you been a tenant in the business incubator?

7. What are the advantages and disadvantages of operating your business from the business incubator?

8. How has your business changed since you joined the business incubator?

9. What challenges are you currently facing?

10. How would you rate the value of the interaction with the business advisors and staff in the facility? Why?

11. What services do you receive at the incubator?

12. How are various services provided to you in the incubator? Do you pay for any of these?

13. Describe your relationship with other tenants

14. Have you made any networks in the business incubator? What role did the incubator play in facilitating these interactions?

15. Do you seek other services outside the Business incubator? Please mention.

16. Would you recommend the STP services to other small business owners and encourage them to join the business incubator?

17. What kind of technologies do you access from the business incubator?
Appendix 4: Interview questions for managers

1. Which sector do you operate in?
2. How do you recruit tenants for the business incubators? What are the requirements?
3. How many tenants can you recruit at a time? Why?
4. What are the most common reasons tenants cite for joining the incubator?
5. What services do you provide the tenants? Do they pay for these?
6. How do you monitor their progress?
7. How do you deal with business that are underperforming?
8. What is your standard incubation period? Do tenants leave after this time expires?
9. What are the most common reasons for leaving the incubator?
10. What challenges do you face in the business incubator?
11. How do you develop tenant networks?
12. How do you evaluate the business incubators?
13. Who are your partners and what role do they play?
14. Describe the relationship between the incubator management and sponsors?
15. How does the business incubator sustain itself?
16. Do you maintain contact with former tenants?
17. Which services do you provide them with?