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Exploring the influence of funding sources on business incubation in the Western Cape

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Abstract

The topic of business incubation has been the subject of considerable academic research, as well as a focal point in entrepreneurship support ecosystems. Business incubators provide entrepreneurs and start-up businesses with a shared space (either physical or virtual). The incubator offers a systematic shared support structure that enhances businesses' chances of succeeding and growing into entities that eventually graduate to a location beyond the 'safety net' of the incubator.

Academic research in the field of incubation has been predominantly focused on: (i) understanding business incubation models that are most effective within particular environments; and (ii) understanding support services that are most useful to incubatees of the incubator. This research instead explores the influence that funding sources have on business incubators, with a focus on understanding how incubators in turn assist their incubatees in accessing finance. Research focusing on funder influence on incubators, and support provided to incubatees to assist with access to finance, is at a nascent stage within the South African business incubation landscape.

The research was undertaken utilising a multiple case study approach, with individual business incubators constituting a case. Incubators were classified into three case typologies, depending on their predominant funding source: private, public or mixed.

From the population of business incubators in South Africa, a sample of eight incubators within the Western Cape Province were selected. Semi-structured interviews with participants were undertaken over a three-month period with eight incubator managers and 10 current or former incubatees. Qualitative data from participant interviews were analysed using a combination of NVivo12 and MS Excel, to determine responses relevant to the research question and sub-questions. The information collected was categorised into themes of relevance using initial and pattern coding methodologies.

The research suggests that funders do influence the work of incubators through driving their own objectives, utilising the incubator as a tool.

Public sector funders set objectives for incubators that are linked to achieving socio-economic goals (poverty alleviation and economic redress), while private sector funders set objectives for incubators that are linked to achieving the goals of their organisation or fund mandate. Private sector funders were found to lack long-term commitment to funding incubators. Communication between public and private sector funders was found to be, in general, poorly co-ordinated, and a lack of co-ordination negatively affects the impact of incubators.

The cross-case multiple case study methodology also revealed that in the Western Cape, similarities exist in the channels of support provided by incubators to assist their incubatees to access funding, regardless of the funding structure of the business incubator. However, heterogeneous priorities exist in funding support services provided to incubatees. Bias was identified in the process of sourcing of funding for incubatees, with incubators pursuing a blend of proactive and reactive approaches, depending on their relationship with the funder.

The researcher recommends a strengthening of efforts to co-ordinate objectives across the two broad spheres of incubator funding sources (public and private) to build more effective and sustainable business incubators in South Africa. Financiers of incubators should engage other stakeholders and financiers involved in the relevant incubators to clarify policies, expectations, and performance metrics. Emphasis must be placed on ensuring alignment between incubator financiers as well as the objectives of the financiers and the incubators.

This study is well suited to being expanded in future in terms of: (i) widening the interview participant base to include incubator financiers; (ii) a geographic expansion to focus on South Africa as a whole; and (iii) expanding upon the research topic to generate additional insights into funder influence in the business incubation ecosystem.

1. Introduction

1.1 Research Area

Business incubation as a concept has been applied to business support practices dating back more than a century, but is now widely recognised as an official mechanism utilised in the support of entrepreneurship (Jamil et al., 2016; Mian, Lamine & Fayolle, 2016; Torun, Peconick & Sobreiro, 2018). Consequently, the role of business incubators and the development of focused research concerning incubation best practices have gained traction in recent years, as increased global recognition has been placed upon the development and economic impact of entrepreneurial businesses. Torun et al. (2018) noted that business incubation literature amounts to more than 1,000 studies, journals or articles.

InfoDev (2016: 30) defined business incubation as follows: “Business incubation is a public and/or private, entrepreneurial, economic and social development process designed to nurture businesses from idea generation to start-up companies and, through a comprehensive business support program, help them establish and accelerate their growth and success.”

A number of studies have provided insights into the relationship between funding sources and financial support service offering dynamics within business incubators (Chandra, 2007; 2009; Chandra & Fealey, 2007; 2009; Chandra & Silva, 2012; Chandra & Chao, 2016). The findings and focus geographies of the studies have been presented in Table 1.

Table 1 – Global research: incubator funding and funding support to incubatees

| Researcher | Focus Geographies | Findings |
|---------------------------|---------------------------------|--|
| Chandra (2007) | United States, China and Brazil | Funding of incubators differs by geographic location. Incubators in China and Brazil were found to have a higher reliance on governmental support. |
| Chandra and Fealey (2007) | China | Incubators were primarily public sector established and funded. Financial support was highly correlated to ownership structure. Incubators in China tend to seek funding from the public sector for their incubatees. |
| Chandra (2009) | Brazil | A range of governmental and private sector stakeholders are involved in incubation in Brazil. Brazilian incubators place emphasis on soft-services such as networking above hard-support such as provision of physical infrastructure. |

| | | |
|---------------------------|---------------------------------|--|
| Chandra and Fealey (2009) | United States, China and Brazil | Brazil and China have a higher dependence on government for financial support than the United States. |
| Chandra and Silva (2012) | Chile | The business incubation ecosystem in Chile is at an early-stage, but is strongly supported by government. Incubators play an important role in linking incubatees to finance. |
| Chandra and Chao (2016) | United States and Brazil | Incubators in the United States are more likely to make direct investments and offer access to external services. Brazilian incubators connect incubatees to external funders and conduct support services in-house. |

Source: Author's own review

Based on the studies described in Table 1, valuable insights were developed regarding the critical question of how the source and structure of business incubator funding affects the services that are provided to their incubatees.

In the course of undertaking research on open system intermediaries addressing institutional failures, utilising business incubators as a proxy, the work of authors in Table 1 can be enhanced by considering the findings of Dutt, Hawn and Vidal (2016). When reflecting on prior studies that focus on organisational sponsorship, the authors acknowledged the view that the “identities of sponsors have a material and lasting influence on the nature of incubator activities and on the performance of the organisations spawned through incubation” (p. 821).

The scope utilised by the authors in Table 1 provided an excellent basis for the development of an exploratory study of funder influence on business incubators in the Western Cape Province of South Africa. The intention was to provide a platform for an analysis that could be expanded to a country-level or continent-wide comparison study in future research.

1.2 Problem Statement

In their systematic review of business incubation research, Hackett and Dilts (2004) indicated that five primary research orientations relating to business incubation research prevail: incubator development studies; incubator configuration studies; incubatee development studies; incubator-incubation impact studies; and studies that theorise about incubators-incubation.

Basu and Biswas (2013) noted that the majority of studies undertaken focus on the organisational characteristics of business incubators and the value of their service offerings to incubatees, rather than on alternative areas that impact the role of business incubators, such as interactions taking place in the broader incubation network (business incubators, incubatees, external financiers etc.).

Torun et al. (2018) expanded on this analogy through a comprehensive study of business incubator benchmarking, noting that business incubation research: (i) lacks a common framework for performance evaluation; (ii) struggles to develop actual benchmarks; and (iii) has only recently shown an increase in focus on understanding the community effect of tenant firms.

Similarly, Dutt et al. (2016) highlighted that research relating to the impact of intermediaries (business groups, family firms, social entrepreneurs and business incubators) on accelerating the development of firms in emerging markets is at an early stage. Torun et al. (2018) indicated that in order to better capture the community effect of business incubators, increased efforts should be made to include all stakeholders within assessments, where stakeholders outside of the incubator and incubatees consist of public decision makers, universities, government bodies, investors, unincubated start-ups and graduated companies.

Tengeh and Choto (2015), in alignment with the sentiments expressed on a global scale, noted that from a research perspective within the South African context, the discourse has largely been focused on the needs and challenges of incubatees, whereas limited attention has been paid to the challenges faced by business incubators themselves.

Buys and Mbewana (2007) identified that an important challenge for business incubators is attracting sustainable funding sources. Masutha and Rogerson (2014), as well as Lose and Tengeh (2015), began building exploratory insights into this specific topic, but deeper insights within the South African context have yet to be developed.

Although the objective of this research was not to develop a thorough assessment of previous literature, the researcher undertook a review of the literature related to business incubation in the South African context. Table 2 was developed to highlight the primary and secondary focus areas of 14 studies undertaken in the last 12 years.

Table 2 – Academic research in the South African business incubation landscape

| Research Paper and Author(s) | Primary Focus | Secondary Focus |
|---|---|--|
| Mbewana (2005) | Identification of factors that contribute to the success of incubators | Testing success factors on the Godisa Initiative |
| Buyts and Mbewana (2007) | Identification of factors that contribute to the success of incubators | Testing success factors on the Godisa Initiative |
| Masutha and Rogerson (2014) | Evolution of policy in the South African business incubation landscape | Comparison of public vs. private sector incubators |
| Masutha and Rogerson (2014) | Comparison of public vs. private sector incubators [four cases] | Incubator operations and services |
| Choto, Iwu and Tengeh (2014) | Understanding role and challenges faced by survivalist entrepreneurs | Relevance of incubators that support survivalist entrepreneurs |
| Tengeh and Choto (2015) | Role of business incubators in supporting SMEs | Challenges faced by incubators in supporting survivalist entrepreneurs |
| Khuzwayo (2015) | Role of business incubators in supporting SMEs | Incubatee feedback on incubator performance |
| Ntlamelle (2015) | Role of business incubators in supporting SMEs | Value-add of programmes to black owned and black female-owned businesses |
| Lose and Tengeh (2015) | Key challenges faced by incubators | |
| Lose and Tengeh (2016) | Reasons for entrepreneurs selecting business incubators | Evaluation of incubatee satisfaction |
| Lose, Tengeh, Maziriri and Madinga (2016) | Exploration of factors that hinder growth of incubatees in South Africa | |
| Lose, Madinga, Maziriri and Nxopo (2016) | Review of academic literature in the South African incubation landscape | Categorisation of key themes of focus for academic research |
| Lose, Muzariri and Madinga (2016) | Importance of the role of Incubators in supporting small business | Reasons for entrepreneurs selecting business incubators |
| Tembe (2018) | Role of business incubators in supporting SMEs | Comparison of public vs. private sector incubators |
| Current Study | Influence of funding sources on business incubation | How incubators assist incubatees in accessing finance |

Source: Author's own review

Table 2 illustrates that the predominant focus of academic research in the business incubation landscape in South Africa has been concerned with the role of business incubators in supporting SMEs. Limited emphasis has been placed on developing a deeper understanding of: (i) the funding sources of incubators in South Africa; (ii) the influence of funding sources on incubator operations; and (iii) how incubators assist incubatees in accessing finance. The work of the authors reflected in Table 1 provided a useful basis for the researcher to develop a study focusing on the factors listed above.

The purpose of this study was to explore how funders influence business incubators within the South African business incubation context. An additional focus was placed on understanding how incubators help incubatees access finance, and the effectiveness of such services.

1.3 Research Question and Objectives

The study sought to identify source(s) of funding to business incubators in the Western Cape, and to explore the influence that the funding sources had on the incubators. In addition, the research sought to provide insights into support services that are offered by incubators to help incubatees access finance.

The research question posed in achieving the goals above was thus:

1. How do funding sources influence business incubators?

The research also intended to address the following sub-questions:

2. How do incubators assist incubatees in accessing finance?
3. How effectively are the financial support services offered by business incubators being delivered to incubatees in practice?

The research objectives can be outlined as: (i) to investigate how the funding source(s) of a business incubator influence(s) the incubator's support of incubatees; (ii) to provide an assessment of the support services offered by business incubators to help incubatees access finance; and (iii) to assess whether such support services are actually being delivered by the business incubator to incubatees in practice.

1.4 Research Justification

Although exploratory work on understanding funding dynamics within the business incubation ecosystem has been undertaken by various authors (as reflected in Table 1) over the course of studies in the United States, China, Brazil and Chile, the development of a comparative analysis of funding dynamics within the business incubation ecosystem in South Africa is lacking (as reflected in Table 2).

This study builds exploratory insights relating to the funding dynamics that exist within the South African business incubation landscape, utilising business incubators in the Western Cape

Province as a sample. The study also contributes empirically to the understanding of which services are offered by incubators to assist their incubatees in accessing finance. This will allow incubator managers to assess their support service offering in comparison to other incubators.

The findings presented in this research are of particular relevance to three stakeholder groups, which are described below.

1.4.1 Incubator financiers

The research is intended to provide incubator financiers with an improved understanding of how the funding source(s) of business incubator(s) can influence the operational activities of the incubator itself, as well as the support services provided by incubators to assist incubatees in accessing finance.

The first component is relevant in terms of the long-term objectives of the financier, who is ultimately invested in the success of the incubatee cohort. Incubatee development, in particular sustainability, is of paramount importance to financiers who are seeking a return on their investment from the incubator. The Department of Trade and Industry (dti) (2004) described the notion of a widespread belief among entrepreneurs that “access to finance is the biggest single obstacle along the start-up and expansion paths of small enterprises” (p. 38). As a result, understanding how funding sources may impact a business incubator’s ability to support their incubatees in accessing finance is of high relevance. The second component is relevant to the financier in terms of strategic alignment. Strategic alignment speaks to the development of a deeper understanding of the goals and objectives of the incubator, and whether the financiers’ goals and objectives are aligned.

Scaramuzzi (2002) and multiple authors as reflected in Table 1, noted that in developing countries, multilateral and bilateral donor agencies are increasingly providing funding support to programmes that incorporate components of business incubation. Examples of such initiatives include the World Bank *infoDev* Digital Entrepreneurship programme, and the African and European Development Banks’ *Boost Africa* initiative.

This research is positioned to assist entities in the development finance ecosystem to make informed decisions about the effect of their funding within incubation ecosystems. Examples

of entities involved in such funding include the World Bank, the IFC, regional development banks and regional entrepreneurship funding support programmes.

1.4.2 Practitioners

The current study is important to incubator managers, who are faced with a complex institutional environment that requires a careful balancing of objectives and resources (Mrkajic, 2017).

This study provides insights into the financial sustainability challenges faced by incubators operating across the incubation value chain (private sector to public sector) and identifies common support services provided to assist incubatees to access finance.

1.4.3 Current and potential incubatees

This research is relevant to current and potential incubatees that are assessing the possible value-add of a business incubator to their business. Similar to incubator financiers, incubatees are motivated to leverage the services of a business incubator to ensure their long-term operational sustainability.

To many incubatees, access to finance is a critical component of long-term sustainability. For this reason, developing an understanding of how the funding sources of a business incubator affect the support provided in terms of access to finance will allow current and potential incubatees to determine whether locating themselves in a particular business incubator will enhance their chances of long-term sustainability, and which incubators provide the most appropriate financial support services to support their financial sustainability.

1.5 Conclusion

In conclusion, the first chapter introduced the concept of business incubation and provided a brief discussion of relevant literature. The key concepts introduced included funding mechanisms for both business incubators and incubatees.

The chapter further summarised recent literature relating to the South African business incubation ecosystem, and identified how this study built upon previous research through a review of exploratory literature regarding the funding of business incubators in South Africa.

The study sought to explore the influence that financiers exert on business incubators through the provision of funding. In addition, the study aimed to develop an understanding of how such an influence may affect the support provided to incubatees.

The following chapter builds upon the concepts introduced through an in-depth review of literature, focusing on the key concepts outlined above. Chapter 3 outlines the research methodology utilised, while Chapter 4 provides the research findings and a discussion of the key themes that emerged from the research. Chapter 5 provides a conclusion to the research and offers recommendations for future studies.

2. Literature Review

2.1 The Concept of Business Incubation

InfoDev (2016: 30) defined business incubation as follows: “Business incubation is a public and/or private, entrepreneurial, economic and social development process designed to nurture businesses from idea generation to start-up companies and, through a comprehensive business support program, help them establish and accelerate their growth and success.”

In order to understand the concept of business incubation, the description provided by Aernoudt (2004) utilising a medical comparison provides an excellent starting point, i.e. an incubator is commonly associated with a place where prematurely born infants are nurtured and taken care of. The broad principle of the medical incubator is that of a temporary care environment within controlled conditions that allows babies to survive and develop to the point at which they are ready to enter the outside world. This principle can be applied to the concept of business incubation, whereby new businesses are nurtured through the provision of services that aid them in surviving their formative years to the point of emerging into the greater commercial sphere.

In practical terms, a business incubator can be viewed as a shared space (either physical or virtual) that provides occupants (‘incubatees’) with access to a range of shared services, which vary in nature in accordance with the objectives of the business incubator. Focusing on the facility and core personnel, Lewis, Harper-Anderson and Molnar (2011) defined a business incubator as a “multitenant facility with on-site management that directs the business incubator programme” (p. 15).

Business incubation has gained considerable recognition as a support structure for entrepreneurs, particularly in the last four decades, as increased global emphasis has been placed on the provision of support to small and medium-sized entities. As a result, the influence of business incubators as a critical support structure for entrepreneurship has continued to gain traction (Lalkaka, 2002).

The recognition of business incubators as a tool for increasing the future successes of small businesses has led to a confluence of public and private sector interests, centralised around the

common goal of supporting fledgling enterprises to make the transition from invention to commercialisation (Etzkowitz, 2002). The provision of structure, in the form of a shared or virtual facility, which provides entrepreneurs with controlled conditions under which to achieve their immediate objectives in terms of growing product and service development, profits, and employment, is aligned to the interests of both public and private sector stakeholders (Hurley, 2002).

In an extensive review of benchmarking structures within business incubation literature, Torun et al. (2018) highlighted that performance evaluation within business incubation is of paramount importance, especially to studies that are seeking to determine KPIs (Key Performance Indicators) and benchmarking tools.

Research undertaken by Al-Mubarak and Busler (2011) identified that the goals of business incubation programmes can be broadly categorised as incorporating: economic development; innovation; venture creation; technology transfer; technology commercialisation; increases in new firm formation; the creation of new and sustainable jobs; the acceleration of business growth; a reduction in the failure of new enterprises; the creation of value for stakeholders; empowerment for specific groups of entrepreneurs; and the development of an entrepreneurial culture.

Jamil et al. (2016), having researched business incubation in China, India, Malaysia and Pakistan, noted that although the capacity of the institutions may be at a more nascent stage in those countries, business incubation can play a significant role in developing countries. They cited the term “smarter growth” (Jamil et al., 2016: 295) as specific example of the benefit of business incubation.

2.2 Business Incubation Models and Service Offerings

Identification of best practice business incubation models and associated service offerings is the subject of extensive global analysis (Lewis, Harper-Anderson & Molnar, 2011; Hackett & Dilts, 2004; Torun et al., 2018). The type of business incubation model selected is typically influenced by the vested interests of the entity or entities establishing and funding the incubator (Dutt et al., 2016). In turn, the service offering of the incubator is commonly selected to align

with the incubator model in order to achieve the highest degree of success in terms of the objectives of the incubator itself.

2.2.1 Business incubation models

A proliferation of studies have been undertaken with the objective of characterising commonly-accepted business incubation models.

Gulotta and McDaniel (1995) focused on the entity establishing the business incubator as the driver of the model, categorising business incubator programmes into four categories that are centred around the roles played by so-called triple-helix institutions: (a) governmental or non-profit entities; (b) private, for-profit organisations; (c) academic institutions; or (d) public/private partnerships.

Lewis et al. (2011) focused on the incubatee type as a driver of the incubator model, and identified five broad forms of business incubators by sector: (a) mixed-use; (b) technology; (c) manufacturing; (d) services; and (e) other.

Aernoudt (2004) provided a broad typology of business incubators, which are categorised in Table 3 below:

Table 3 – Typology of business incubators

| Component | Main Philosophy | Main Objective | Secondary | Sectors involved |
|---------------------------------|-----------------------------------|----------------------------------|---|---------------------|
| Mixed Incubators | Business gap | Create start-ups | Employment creation | All sectors |
| Economic Development Incubators | Regional or local disparity group | Regional development | Business creation | All sectors |
| Technology Incubators | Entrepreneurial gap | Create entrepreneurship | Stimulate innovation, technology, start-ups and graduates | Focus on technology |
| Social Incubators | Social gap | Integration of social categories | Employment creation | Non-profit sector |
| Basic Research Incubators | Discovery gap | Blue-sky research | Spin-offs | High tech |

Source: Aernoudt (2004)

Given the range of classification typologies, it is clear that there are no definitive restrictions for undertaking business incubator classification.

2.2.2 Business incubation service offerings

The provision of value-added services to incubatees is the core component upon which the concept of a business incubation facility is established. The service offering of business incubators can, however, vary significantly in accordance with the underlying objectives of the incubator itself.

Lalkaka and Abetti (1999) noted that the business incubation environment is “the microcosm of work space plus support services, significantly augmented by shared facilities and assisted access to outside services and seed capital” (p. 201). Lalkaka (2002) later identified critical support structures in terms of “hard” or “physical” offerings such as space and facilities, which contrast with “soft” support structures such as counselling, training, information and networking services.

Schwartz (2011) built upon this analysis, separating business incubation support structures into two components, constituting physical support and shared facilities and services. Physical support is identified in the form of subsidised or flexible rental space, which can take a variety of forms to support incubation activities, including offices, laboratories, and small production and manufacturing spaces. Shared facilities and services are aimed at enabling functionality for entrepreneurs who are initially constrained from a resourcing or knowledge perspective. Shared facilities and services can vary in accordance with the objectives of the business incubator, but often include professional services, equipment and certain back-office functions.

To be included in the study undertaken by Lewis et al. (2011), incubation programmes were required to offer the following services to incubatees: (i) help with business basics; (ii) networking activities among incubator clients; (iii) marketing assistance; (iv) help with accounting/financial management; (v) access to capital; and (vi) linkages to higher education/strategic partners.

Hackett and Dilts (2004) noted that developing a list of support services that are offered to incubatees is of value to both the incubator (in terms of developing a clear understanding of

the scope of services) as well as to incubatees, as the list of services may induce self-reflexive consideration on the part of the incubatees in terms of assessing what may be required for their venture to develop and succeed.

Mrkajic (2017) identified that incubator support services and structures develop in a different manner in response to institutional gaps. Specifically, a link is drawn between greater institutional gaps existing in developing countries, and the resulting need for more complex incubation models in order to fill the void created by poor institutional infrastructure.

It is important to take note of the fact that businesses operating in South Africa, as a developing country, often face different operational and growth challenges to those faced by companies that operate in more developed markets. In their analysis of key success factors for business incubation in South Africa, Buys and Mbewana (2007) explicitly made note of this view.

Buys and Mbewana's (2007) study can be considered to be one of the most comprehensive assessments of key success factors for business incubators undertaken in the South African business incubation ecosystem, yet the study only focused on public sector incubators that had been launched by the Departments of Trade and Industry, and Science and Technology, known as the Godisa Initiative.

Based on their assessment of global critical success factors for business incubation, Buys and Mbewana (2007) identified 39 initial potential critical success factors. They shortened these to the following 11 factors for the purposes of analysis within the South African context:

Table 4 – Critical success factors for South African business incubators

| No. | Critical Success Factors |
|-----|---|
| 1. | Access to science and technology expertise and facilities |
| 2. | Comprehensive business plan |
| 3. | Stringent selection criteria |
| 4. | Availability of funding |
| 5. | Quality of entrepreneurs |
| 6. | Stakeholder support |
| 7. | Supportive government policies |
| 8. | Competent and motivated management |
| 9. | Financial sustainability |
| 10. | Experience advisory board |
| 11. | Networking |

Source: Buys and Mbewana (2007)

Of particular relevance to this study are success factors 4, 6 and 9. With regard to the key factors identified, Buys and Mbewana (2007) noted the following:

Availability of funding (4)

The ability of incubators to raise capital through avenues such as low-interest government grants, loans and angel funding, as well as supporting the provision of other financial support services (such as tax and risk management), is an essential part of the function of the business incubator.

Stakeholder support (6)

The need for achieving consensus on the mission of the business incubator from the stakeholder community that is supporting the incubator is critical. Entities that were identified as making up the stakeholder community included local businesses, government, the broader community, venture capital firms, entrepreneurs and management of the business incubator.

Financial sustainability (9)

Business incubators should proactively identify sources of finance that allow them to operate as their own viable businesses. Sources identified in terms of finance included subsidies, equities and royalties.

2.3 Global Business Incubation: An overview of funding sources for business incubators

2.3.1 Funding sources in business incubation

Aranha (2003) identified a hierarchical structure within which business incubators operate, and identified a range of financiers, categorised as “leader sponsors”. Lead sponsors are subdivided into an expanded definition of finance providers: universities/academia, communities, industrial entities, governments, venture capitalists, consortiums, corporates, franchises, NGOs, cooperatives and unions.

In exploring the concept of sponsorship, Amezcua, Grimes, Bradley and Wiklund (2013) examined the effects of sponsorship of university business incubators in the United States, and identified that sponsorship effectiveness of incubators is dependent on meeting organisational needs within the context of the environmental pressures of the industry.

Dutt et al. (2016) built upon the analysis of sponsors of business incubators, and categorised entities across four broad criteria: (i) private; (ii) academic; (iii) government; and (iv) NGOs. Importantly, their study identified that the intentions of the sponsors in supporting business incubators vary significantly in their approach, application and suitability, especially within emerging market contexts. Scaramuzzi (2002) noted that funding for incubators in developing countries is primarily made via public entities, with increasing evidence of multilateral or bilateral donor agencies also providing support.

Lalkaka (2002) identified the following roles of key stakeholders within the business incubation system when focusing specifically on the component of funding a business incubator:

- Governments primarily invest via the development of the infrastructure required for the business incubator, as well as the provision of initial finance to the business incubator.
- Business entities provide financial support through various forms, which can include direct investment (when an incubator has proven its effectiveness); for-profit investment (primarily in the case of venture capital-focused investment to incubators); investment in order to acquire innovation (primarily in the case of corporate or internet incubators); and in order to deliver upon corporate social responsibilities that encourage the development of intrapreneurs.

Funding mechanisms for business incubators vary in form and structure, but are primarily provided by one or more core stakeholders (i.e. public sector enterprises, private sector enterprises, or tertiary entities). The structure of such funding mechanisms can vary significantly in accordance with the objectives of the financiers, as well as the terms of the finance provided. Scaramuzzi (2002) provided further background regarding the wide range of financial support mechanisms utilised within the business incubation landscape, which include technical assistance, tax incentives, regulatory provisions, training, innovation support, and additional incentives in accordance with the country's economic development objectives or programmes.

Business incubation funding sources can often be explored in accordance with the survival timeline of the facility itself. Lewis et al. (2011) highlighted the fact that public agencies are

often the key actors from a funding perspective during the initiation or feasibility study stages of the incubator establishment, as well as being key contributors to the construction or rehabilitation of the physical incubation facility.

Depending on the model selected for the incubator, a number of parties outside of public sector institutions may also play a role during the establishment phase of the incubator. Weiblen and Chesbrough (2015) indicated that corporate and independent funders can provide nascent business incubators with both funding and locational support. Given the correct structure and aligned goals and objectives, both public and private sector participants can contribute as part of a joint funding arrangement in the establishment of a new business incubation facility.

The management of such complex funding arrangements is often difficult given the potential for misalignment in underlying objectives. The ‘tightrope’ walked by many business incubators in attempting to satisfy a range of potentially competing objectives is highlighted in *infoDev* (2015), which sought to guide incubation managers and highlight the importance of finding common ground between the goals of all funders (both public and private sector) and the incubation hub itself.

2.3.2 An analysis of common incubator funding sources by country

The work of the authors in Table 1 has provided an basis for understanding incubator funding sources. Chandra (2007) and Chandra and Chao (2016) provided a comparative overview of potential incubator funding sources utilised in the United States, China and Brazil, which are summarised below for comparative purposes:

Table 5 – Business incubator funding sources: United States, China and Brazil

| Country | United States | China | Brazil |
|---|---|--|--|
| Business incubator funding sources identified | <ul style="list-style-type: none"> - Governmental grants (state, local, county) - Capital allocations via development agencies (federal, state, local) - Corporate sources - Chambers of Commerce - University support - Community foundations - Rental income - Service fees - Cash generated from equity investments | <ul style="list-style-type: none"> - Governmental funds (particularly real estate investments) - Rental income - Income generated from chargeable sources | <ul style="list-style-type: none"> - Governmental funds - Federal Agency (FINEP) - BNDES (Bank for Social Development) - Private sector funding - National incubation support programme |

Source: Chandra (2007) and Chandra and Chao (2016)

2.3.3 Incubator funding: the South African context

In seeking to develop an understanding of the South African business incubator funding landscape, the researcher conducted a review of 14 studies undertaken in this context over the last 12 years. The primary and secondary foci of the studies (interpreted by the researcher) have been included to provide further context, and are reflected in Table 6.

Table 6 – Academic research in the field of South African business incubation

| Research Paper and Author(s) | Primary Focus | Secondary Focus |
|------------------------------|--|--|
| Mbewana (2005) | Identification of factors that contribute to the success of incubators | Testing success factors on the Godisa Initiative |
| Buys and Mbewana (2007) | Identification of factors that contribute to the success of incubators | Testing success factors on the Godisa Initiative |
| Masutha and Rogerson (2014) | Evolution of policy in the South African business incubation landscape | Comparison of public vs. private sector incubators |

| | | |
|---|---|--|
| Masutha and Rogerson (2014) | Comparison of public vs. private sector incubators [four cases] | Incubator operations and services |
| Choto, Iwu and Tengeh (2014) | Understanding the role of, and challenges faced by, survivalist entrepreneurs | Relevance of incubators that support survivalist entrepreneurs |
| Tengeh and Choto (2015) | Role of business incubators in supporting SMEs | Challenges faced by incubators in supporting survivalist entrepreneurs |
| Khuzwayo (2015) | Role of business incubators in supporting SMEs | Incubatee feedback on incubator performance |
| Ntlamelle (2015) | Role of business incubators in supporting SMEs | Value-add of programmes to black owned and black female-owned businesses |
| Lose and Tengeh (2015) | Key challenges faced by incubators | |
| Lose and Tengeh (2016) | Reasons for entrepreneurs selecting business incubators | Evaluation of incubatee satisfaction |
| Lose, Tengeh, Maziriri and Madinga (2016) | Exploration of factors that hinder growth of incubatees in South Africa | |
| Lose, Madinga, Maziriri and Nxopo (2016) | Review of academic literature in the South African incubation landscape | Categorisation of key themes of focus for academic research |
| Lose, Muzariri and Madinga (2016) | Importance of the role of incubators in supporting small business | Reasons for entrepreneurs selecting business incubators |
| Tembe (2018) | Role of business incubators in supporting SMEs | Comparison of public vs. private sector incubators |

Source: Author's own review

Masutha and Rogerson (2014) indicated that the business incubation landscape in South Africa can be encapsulated across four distinct phases: (i) the pre-incubator hives of industry programme; (ii) the Godisa programme; (iii) development under the new Small Enterprise Development Agency (SEDA); and (iv) the rollout of business incubators under the dti's Incubation Support Programme (ISP). The number of business incubators in South Africa grew from three in 2001, to 51 in 2013.

Funding sources for business incubation in South Africa can be split into two broad categories: public sector and private sector. At the public sector level, the South African government has supported business incubation through interventions implemented by a range of national governmental ministries, including the Department of Trade and Industry; the Department of Small Business Development; the Department of Agriculture, Forestry and Fisheries; and the Department of Science and Technology.

The dti (2014) recognises that governmental funding support to incubators is supplied via various channels, which include the Incubation Support Programme, the SEDA Technology Programme and the Small Enterprise Finance Agency [SEFA].

In September 2012, the dti introduced a sub-programme of the Enterprise Investment Programme (EIP) known as the Incubation Support Programme (ISP), which was aimed at supporting the development of business incubator initiatives. The Department's (2013) ISP guideline noted that the broad objectives of the ISP were to promote closer interactions between small and big businesses, through encouraging large corporates to invest alongside government on a cost-sharing basis via the ISP.

Grants via the ISP are allocated on a cost-sharing basis in a ratio of 50:50 for large businesses, and 40:60 for SMMEs. The grant itself is capped at a maximum allocation of R10 million per annum for a total duration of three years, amounting to a maximum allocation of R30 million (dti, 2013). Greve (2013) reported that by October 2013, the ISP had approved 30 applications for support, amounting to a total investment value of R817 million, with most incubator approvals being granted in the manufacturing and agricultural sectors.

SEDA also provides support to business incubators through the SEDA Technology Programme, which is a sub-programme of the dti. The programme offers financial assistance via a non-repayable grant of up to R600,000 for programmes aimed at providing technology transfer to SMEs (dti, 2014). In March 2018, SEDA was identified to be actively supporting 64 incubation centres (SEDA, 2018).

The Small Enterprise Finance Agency (SEFA) specifically focuses support on providing direct finance for incubated SMEs or through on-lending programmes via business incubators (the dti, 2014).

Less well documented information is available regarding private sector support for incubators in South Africa. Ntlamelle (2015) noted that the private sector has played an important role in the context of the South African landscape, but highlighted that the results have varied, with incubation services offered by the private sector being neither superior nor inferior to public sector-supported incubators.

Common private sector funding methods leverage standardised funding mechanisms for providing finance to business incubators, which include: (i) loans from traditional sources;

(ii) private sector direct and indirect investments; (iii) allocations from non-profit sources and NGOs; and (iv) other sources.

2.4 The role of funding sources in influencing access to funding for incubatees

When focusing on business incubation and the role of an incubator in assisting incubatees to access finance, the work of the authors in Table 7 provides an excellent guideline. Their research focused on the role of a business incubator in “proactively locating internal and external sources of capital for its incubatees, as well as taking the risk of making direct investments in some of its more promising incubatees” (Chandra et al., 2007, p. 81).

Table 7 – Global research: incubator funding and funding support to incubatees

| Researcher | Focus Geographies | Findings |
|---------------------------|---------------------------------|--|
| Chandra (2007) | United States, China and Brazil | Funding of incubators differs by geographic location. Incubators in China and Brazil were found to have a higher reliance on governmental support. |
| Chandra and Fealey (2007) | China | Incubators were primarily public sector established and funded. Financial support is highly correlated to ownership structure. Incubators in China tend to seek funding from the public sector for their incubatees. |
| Chandra (2009) | Brazil | A range of governmental and private sector stakeholders were involved in incubation in Brazil. Brazilian incubators emphasised ‘soft’ services such as networking above ‘hard’ support such as the provision of physical infrastructure. |
| Chandra and Fealey (2009) | United States, China and Brazil | Brazil and China had a higher dependence on government for financial support than the United States. |
| Chandra and Silva (2012) | Chile | The business incubation ecosystem in Chile was at an early stage, but was strongly supported by government. Incubators played an important role in linking incubatees to finance. |
| Chandra and Chao (2016) | United States and Brazil | Incubators in the United States were more likely to make direct investments and offer access to external services. Brazilian incubators connected incubatees to external funders and conduct support services in-house. |

Source: Author’s own review

The work of the authors in Table 7 introduced theoretical constructs relating to the effects of funding sources on a business incubator, and analysed how such funding sources can affect the facilitation of access to finance on behalf of incubatees.

The findings of those studies that focused specifically on China can be devolved into the following components: (i) incubator ownership is likely to influence the market orientation of

the incubator; (ii) incubators that are heavily funded or subsidised by government on an ongoing basis are less likely to be exposed to the full force of market competition; and (iii) incubators that are not funded by government or operate mixed-use structures are likely to seek necessary and sustainable resources from the market in order to ensure survival, in the absence of long-term funding certainty.

It should be noted that the above analysis focuses on observations recorded in the studies on China, and thus cannot be extrapolated as being applicable on a global basis. However, the observations do provide interesting insights into the characteristics of country-specific ecosystems and the effect of funding sources on the support provided by business incubators to incubatees in accessing finance.

2.5 Support services offered by business incubators to assist their incubatees to access finance

2.5.1 Assisting incubatees to access finance: the global context

As outlined earlier in the literature review, considerable emphasis has been placed on exploring which factors make incubators successful. A major component of such research has been directed at identifying key services offered by business incubators to their incubatees, in order to identify factors that increase the possibility of incubatees growing into successful businesses.

Research continues to identify a lack of access to capital as one of the most significant challenges faced by start-up businesses and SMMEs (Masutha & Rogerson, 2014). As a result, a common support mechanism offered to incubatees is the provision of financial services support, which is aimed at assisting incubatees to access finance. Although recognition of the funding access ‘gap’ is widely recognised in literature and governmental economic development analyses, Aernoudt (2004) noted that in practice, links between incubators and start-up funding remain underdeveloped.

The authors in Table 7 undertook relevant research into the financial services offerings of business incubators in the United States, China, Brazil and Chile. In the course of undertaking the research, Chandra et al. (2007) developed a useful guideline for the classification of financial services provided by business incubators, noting that financial services can

encompass introducing the incubatee business to certain sources of risk capital, or, in rarer cases, the incubator investing in the incubatee directly.

Accordingly, Chandra et al. (2007) built upon the classification of financial service provision to identify funding as either external or internal. External funding support to incubatees is identified as occurring when funding is provided to the incubatee from a source outside of the incubator. Similarly, internal funding support occurs when funding is provided to the incubatee through a source that is internal to the business incubator.

Lose, Muzariri and Madinga (2016), in an assessment of the reasons why incubatees in the Western Cape selected a particular incubator, noted that only 3.6% specified accessing finance as a key objective. It should be noted, however, that 60.7% of the respondents reported under the category ‘a blend of factors’, which may have included finance.

Table 8 provides a further breakdown of the types of financial services that can be provided to an incubatee, broken down by internal or external access.

Table 8 – Summary of major financial services by incubator categories

| | Financial Services | | | | | |
|------------------|----------------------------------|---------------------------|-------|-----------------|-------------------|------------|
| | External | | | | Internal | |
| Incubator Type | Assistance for government grants | Assistance for networking | Banks | Venture Capital | Direct Investment | Soft Loans |
| Governmental | X | X | X | X | | X |
| Non-Governmental | X | X | X | X | X | |

Source: Chandra, He and Fealey (2007)

2.5.2 Assisting incubatees to access finance: the South African context

In their findings regarding the key success factors for business incubation in South Africa, Buys and Mbewana (2007) noted that “availability of funding” is a key factor in determining the success of a business incubator in South Africa. To provide further context, the study highlighted the important role of an incubator as a channel to assist incubatees to raise capital, as well as to link incubatees to other key financial support services such as business tax and risk management services.

Table 9 provides an overview of the public funding structures available to SMEs in South Africa, as identified by the dti.

Table 9 – Public funding structures available to SMEs

| Type | What they Do | Examples of Beneficiaries |
|---|--|--|
| National Empowerment Fund (NEF) | Supports Broad-Based Black Economic Empowerment through the provision of financial and non-financial assistance | Black-owned SMEs and entrepreneurs |
| Industrial Development Corporation (IDC) | Provides finance for industrial development projects and industrial expertise to drive growth in priority sectors | Industrial firms and businesses in manufacturing, agriculture, bio-technology and renewable energy, infrastructure, ICT and mining |
| Black Business Supplier Development Programme | Offers cost-sharing grants to black-owned small enterprises to increase their competitiveness and sustainability | VAT registered enterprises with at least 51% black majority share |
| Isivande Women’s Fund | Offers exclusive funding to women to accelerate their economic empowerment by providing affordable, usable and accessible finance than what is currently available | Women-owned SMEs |
| Support Programme for Industrial Innovation | Promotes and assists technology development in South African industry through the provision of financial assistance | Projects that develop innovative products and/or processes |
| The Technology and Human Resources for Industry Programme | Increases industry access to technology through the provision of funding and the facilitation of collaboration between higher education institutions and industry | Supports higher education institutions and technology-based initiatives |
| Technology Innovation Agency | Supports the development and commercialisation of competitive technology-based services and products | Enterprises in advanced manufacturing, agriculture, industrial biotechnology, health, mining, energy and ICT |

Source: The Dti (2014)

Table 10 provides an overview of the private funding structures available to SMEs in South Africa, as identified by the dti.

The review of the available literature showed that limited in-depth research exists on the influence of funding sources on business incubators in South Africa, as well as on how incubators support incubatees in accessing finance in South Africa.

The research process was thus designed to explore the two research gaps identified. The methodology utilised is detailed in the following chapter.

3. Research Methodology

3.1 Research Approach and Strategy

This study investigated how incubator funding sources influence business incubators. As the term ‘influence’ can be widely interpreted, this study specifically focused on how funding sources influence: (i) the core objectives of the incubator; and (ii) the support that incubators provide to assist their incubatees in accessing finance.

The research question can thus be presented as follows:

1. How do funding sources influence business incubators?

The research also addressed the following sub-questions:

2. How do incubators assist incubatees to access finance?
3. How effectively are the financial support services offered by business incubators being delivered to incubatees in practice?

The researcher utilised an inductive qualitative methodology, which was exploratory in nature. Stake (2010) contrasted quantitative and qualitative methodologies, describing quantitative researchers as conducting studies in the pursuit of explanation and control, while qualitative researchers seek to develop an understanding of the complex interrelationships among all that exists.

Tracy’s (2013) explanation of the inductive and deductive approaches is highlighted in Table 11.

Table 11 – Inductive vs. deductive research approaches

| Inductive Approach | Deductive Approach |
|--|--|
| (a) Begin with observing specific interactions | (a) Begin with broad or general theory; |
| (b) Conceptualise patterns from these observations | (b) Make an educated guess or a hypothesis about the social world on the basis of this theory; |
| (c) Make tentative claims (that are then re-examined in the field) | (c) Conduct research that tests the hypothesis; and |
| (d) Draw conclusions that build theory | (d) Use the evidence gathered from the research to confirm or disconfirm the original theory |

Source: Tracy (2013)

In accordance with the nature of the research questions, which focus on determining the ‘how’ with regard to the sphere of influence exerted by funders on business incubators, an exploratory approach was deemed suitable for conducting this study (Saunders, Lewis & Thornhill, 2007).

Saunders et al. (2007) noted that exploratory research aims to seek new insights into a phenomenon, adding that an exploratory study is a valuable structure for clarifying the understanding of a problem. The authors highlighted the following three principal ways of conducting exploratory research: (i) a search of the literature; (ii) interviewing ‘experts’ in the subject; and (iii) conducting focus group interviews.

This study emphasised components (i) and (ii), and sought to develop exploratory insights into an area that has not been extensively explored in academic literature in South Africa.

3.1.1 Multiple case study: business incubators by funding source(s)

The research method utilised within the exploratory research design was a multiple case study approach, with three business incubator types utilised as cases within the analysis.

Case study research is undertaken by studying an issue explored through one or more cases within a bounded system (Cresswell, 2011). Bell et al. (2015) similarly described case study

research as an in-depth study of one or more individuals or phenomena, in its/their existing context. Cresswell (2011) added that case study research can be considered a methodological process, which takes a qualitative approach to exploring a bounded case (case) or multiple bounded case (multiple case) over time, through collating multiple sources of information. Yin (2014) advised that the case study method is most relevant when trying to answer questions that seek to explain some present circumstance – in this scenario, “How do funding sources influence business incubators?”

Selecting a multiple case study approach allows for practical application within the scenario under consideration. This is characterised by the analogy of Yin (2009) in relation to multiple case study logic:

“The logic underlying the use of multiple case studies is the same. Each case must be carefully selected so that it either (a) predicts similar results (a literal replication) or (b) predicts contrasting results but for anticipatable reasons (a theoretical replication).”

As described in section 2.2.1 of the Literature Review, business incubators can be classified in numerous forms (Lewis et al., 2011; Aernoudt, 2004). It was thus necessary for the researcher to apply a classification approach to ensure cross-case comparability. For the purposes of this study, business incubators are classified in accordance with their funding structure. Table 12 describes the classification process, whereby incubators were identified as receiving: (i) mixed funding; (ii) private funding; or (iii) public funding.

Table 12 – Business incubator case categorisation

| Incubator Type | Categorisation | Description |
|----------------|----------------|--|
| Mixed | A | A blend of private sector, public sector and other funding sources (i.e. non-profit donations, rentals etc.) |
| Private | B | More than 50% of incubator funds are derived from the private sector |
| Public | C | More than 50% of incubator funds are derived from the public sector |

Source: Author’s Own

3.1.2 Unit of analysis

Business incubator managers and current or former incubatees served as the unit of analysis within the context of the multiple cases. The participants were selected on the basis of their experience and capacity to provide unique insights into the subject matter (Walliman, 2017).

In-depth, semi-structured interviews with business incubator managers were the primary tool for data collection in the study, combined with additional semi-structured interviews undertaken with current or former incubatees. Bell et al. (2015) described semi-structured interviews as being able to cover a wide range of contexts, where the questions are more broadly framed than those contained in a structured interview schedule. In addition, semi-structured interviews allow the interviewee additional latitude in terms of allowing for variation in the question sequence, and the potential for undertaking follow-up questions during the interview process.

Following the in-depth, semi-structured interviews with incubator managers, the researcher recognised the need to undertake shortened semi-structured interviews with current or former incubatees, in order to validate the data generated from the interviews undertaken with the incubator managers.

This process allowed the researcher to check the extent to which support services that are supposed to assist incubatees to access finance are delivering from the viewpoint of the incubatees. Utilising such an approach also allowed for improved triangulation, which can be defined as:

“Triangulation entails using more than one method of investigation and source of data in the study of social phenomena so that findings can be cross-checked, and as a reliable and valid way to understand complex social realities...” (Bell et al., 2015, p. 45)

Maxwell (2008) expanded on the above definition, noting that triangulation assists in reducing systematic biases and allows for a better assessment of explanations arising from general respondent feedback. Triangulation is widely recognised as being originally conceptualised by Webb et al. (1966) for quantitative researchers to use more than one method to develop measures of concepts, resulting in greater confidence in findings. However, Bell et al. (2015)

noted that the triangulation technique can also be utilised within the context of qualitative research, such as when ethnographers validate observations with interview questions to further determine their understanding of the issues at hand. Importantly, triangulation can also be utilised as a process of cross-checking findings from both quantitative and qualitative research.

A general inductive approach, as detailed in Table 13 in comparison to grounded theory, discourse analysis and phenomenology, was identified as the most appropriate for analysing the data collected from interviews.

Table 13 – Contrasting a general inductive approach to other options

| | General Inductive Approach | Grounded Theory | Discourse Analysis | Phenomenology |
|-------------------------------------|---|---|--|---|
| Analytical strategies and questions | What are the core meanings evident in the text relevant to – evaluation or the research objectives? | To generate or discover theory using open and axial coding and theoretical sampling | Concerned with talk and texts as social media practices and their rhetorical or argumentative organisation | Seeks to uncover the meaning that lives within experience and to convey felt understanding in words |
| Outcome of analysis | Themes or categories most relevant to the research objectives identified | A theory that includes themes or categories | Multiple meanings of language and text identified and described | A description of lived experiences |
| Presentation of findings | Description of most important themes | Description of theory that includes core themes | Descriptive account of multiple meanings in a text | A coherent story or narrative about the experience |

Source: Thomas (2006)

The researcher collected secondary data on an ongoing basis throughout the course of the research process by reviewing available public data relating to incubators (including websites and annual reports). The researcher also attended networking and pitching events hosted by business incubators to observe these financial support services in action.

Table 14 outlines the methodology employed by the researcher to collect information relevant to the research objectives.

Table 14 – Channels utilised to support data collection

| Channel | Data Sources |
|-----------------|--|
| Interviews | Transcripts generated from semi-structured interviews |
| Observation | Observing support services provided to incubatees to assist access to finance (pitching competitions, networking events) |
| Documentation | Publicly available documentation relating to business incubator funding and support services (website information and brochures) |
| Historical Data | Articles or reports highlighting incubator support to incubatees in accessing finance |

Source: Author's own application; Walliman (2017)

3.1.3 Identification of participants

The Western Cape is recognised as having a vibrant start-up support ecosystem, and was recently recognised as having the most productive start-up tech sector in Africa (Endeavor Insight, 2018). A range of governmental, semi-governmental and non-profit entities operate in the ecosystem, which focus on supporting and developing an enabling environment for start-up entities. These include:

Table 15 – Key role players in the Western Cape start-up ecosystem

| Entity | Role | Classification |
|--|----------------------------------|--|
| Department of Trade and Industry (dti) | National governmental department | Government |
| Small Enterprise Development Agency (SEDA) | National governmental department | Government |
| Technology Innovation Agency (TIA) | National government agency | Government |
| Western Cape Government | Ecosystem enabler | Government |
| City of Cape Town | Ecosystem enabler | Government |
| Wesgro | Start-up growth support | Governmental agency |
| Cape Innovation and Technology Initiative | Sector development agency | Mixed funded (public and private sector) |
| Silicon Cape | Ecosystem enabler | Non-profit |
| Heavy Chef | Ecosystem enabler | Privately owned |

Source: Author's own

By engaging with the above entities and accessing secondary data via the contact databases available, the researcher was able to develop a list of 17 incubators operating in the Western Cape to target for participation. In accordance with Table 12, the incubators were classified according to their funding sources to create the t case typologies that were analysed.

3.2 Dissemination of invitations

In accordance with the *Information Sheet and Consent Form* presented in Appendix A, permission via email was requested from the 17 incubators identified to participate in the semi-structured interview process.

Where the telephonic details of incubator managers were available, the researcher sought to engage potential participants directly to provide further context to the invitation emails sent. Where no response was received, the researcher sought to follow-up with the incubators telephonically. Eight incubator managers agreed to participate in the research.

Utilising a snowball sampling methodology (refer to section 3.4.2), incubator managers were asked to provide contact details for current or former incubatees that the researcher could contact to invite to an interview. The researcher sought specifically to interview incubatee representatives who had worked at the business during the time that it was located in the incubator, and who had an understanding of the financial services support provided by the incubator to the business (if applicable). The Founders, Managing Directors or Chief Executive Officers of the incubatees were identified as being best-positioned to be interviewed.

The contact details of the 18 incubatees were provided by Incubator Managers. The researcher followed the same process as detailed above, i.e. providing the incubatees with an *Information Sheet and Consent Form* and a formal request to participate in the research. Ten current or former incubatees agree to participate in the research.

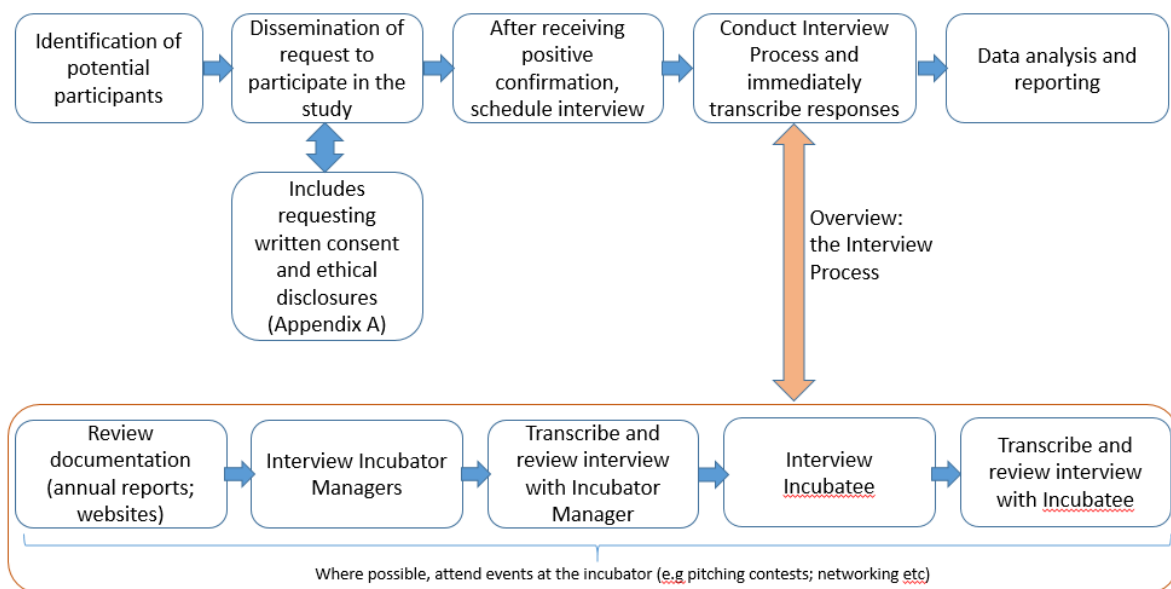
3.3 Data gathering

The interview process was undertaken over a 3-month period (November 2018 to January 2019). The interviews with the incubator managers were carried out over the first month, while

the interviews with the incubatees were undertaken over the following two months. Figure 1 provides an insight into the data collection and analysis process.

The research was undertaken through eight, in-depth, semi-structured interviews with incubator managers, and ten shortened semi-structured interviews with current or former incubatees. Prior to each interview, the participants were provided with a detailed background relating to both the objectives of the research and the research process via email, and were afforded the opportunity to opt out of the research process, in alignment with the university’s ethical requirement guidelines (Appendix A).

Figure 1 – Data collection and analysis process



Source: Author’s own

The interviews with the incubator managers lasted between 30 and 45 minutes, while the interviews with the current or former incubatees lasted between three and 10 minutes. The interviews were undertaken using a semi-structured narrative form, which encouraged the respondents to expand on their stories and practical experiences related to the research question and sub-questions (Tracy, 2013).

An initial series of questions was undertaken to build rapport with the interviewees, following which the researcher began engaging the participants regarding the interview protocol.

Interview protocol: incubator managers

Following the introductory questions, the interview protocol for incubator managers was split into three distinct components. The interview protocol structure has been broken down into components in Table 16, and can also be reviewed in Appendix B.

Table 16 – Focus areas of interview protocol: incubator managers

| Questions | Focus in terms of Research Question and Objectives |
|-----------|--|
| 1 – 5 | (i) Understanding how the incubator was funded; (ii) development of insights relating to how funding for business incubators could be improved |
| 6 – 10 | Understanding the incubator itself, with a specific emphasis placed on determining the support services provided by the incubator to assist incubatees to access finance |
| 11 & 12 | Understanding how funding sources influenced the incubator |

Interview protocol: incubatees

The interview protocol for incubatees has been broken down into focus components in Table 17, and can also be reviewed in Appendix B.

Table 17 – Focus areas of interview protocol: incubatees

| Questions | Focus in terms of Research Question and Objectives |
|-----------|--|
| 1 – 4 | (i) The importance of an incubator’s ability to link incubatees to finance; (ii) how an incubator may be influenced by its financiers; (iii) to what extent the incubator had actually provided support to the incubatees in accessing finance |

3.4. Population and Sampling

3.4.1 Defining the population

Masutha (2014) estimated that approximately 51 public sector funded business incubators existed within the South African business incubator landscape in 2014, while the SEDA website listed 58 incubation centres in 2019. The number of private sector incubators in South

Africa is not available, but is estimated by this researcher at greater than 25, based on discussions with incubator managers.

To the researcher's knowledge, no publicly available data exist representing the total number of businesses that have been, or currently are being, incubated by business incubators in South Africa. The researcher estimates the population at greater than 1,000 current or former incubatees, based on discussions with incubator managers and through analysing secondary data.

Sampling procedure and criteria

The researcher sought to keep the sample representative of the broader South African business incubator population by identifying and engaging an extensive list of incubators, and by placing no limitations on the incubator business model. As a result, the incubators represented a range of private, public and mixed funded entities.

Due to time and geographic constraints, the researcher targeted the development of a sample of respondents made up of currently operational business incubators in the Western Cape and current or former incubatees of the business incubators interviewed.

The incubators were not limited to a specific sector, but rather included a wide range of sectors within the economy including multi-sectoral, education, tech, green economy and manufacturing. Similarly, the incubatees interviewed represented a wide range of sectoral focus areas for their businesses.

The number of both incubator managers and incubatees interviewed was aimed at maximising the generation of quality data, i.e. by avoiding the generation of shallow contributions (too little relevant information) or a paralysing volume of data (an overload of information that affects transcription and interpretation) (Tracy, 2013).

3.4.2 Sampling techniques

A combination of convenience and snowball sampling techniques were utilised to engage participants.

Convenience sampling of business incubator managers

Rahi (2017) noted that convenience sampling is undertaken by engaging participants who are “close at hand”. The researcher utilised the recommendations of the entities listed in Table 15 to find incubators in the Western Cape, and engaged participants through the process described in section 3.2 to contact incubator managers.

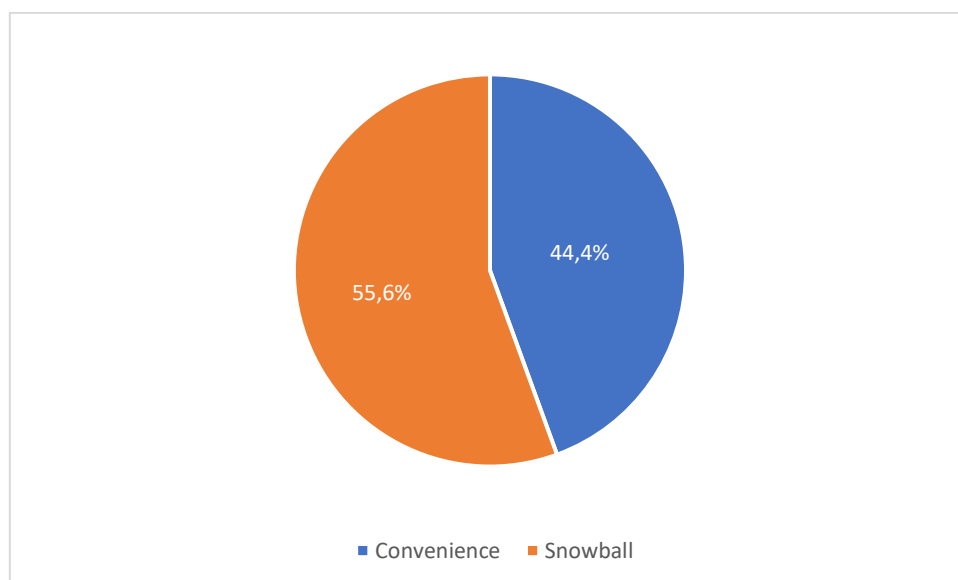
In accordance with the snowball sampling methodology outlined below, during the course of the study the incubator managers interviewed were also asked to recommend current or former incubatees who could be interviewed, in order to contribute to the validity of the data developed.

Snowball sampling of incubatees

Bell et al. (2015) noted that snowball sampling is a process whereby the researcher makes contact with a small group of people who are relevant to the research topic, and then utilises their advice or recommendations to establish contact with others. Tracy (2013) added that snowball sampling can be a particularly useful method when looking to engage hidden populations – in this scenario employees or founders of businesses that are either located within an incubator, or which had been through an incubation process.

Figure 2 provides a breakdown of the primary responses by sampling methodology utilised.

Figure 2 – Sampling methodology breakdown by response (percentage)



Source: Author

Table 18 provides a breakdown of participant feedback across the interview process, noting that the interviews with the incubator managers lasted on average 43 minutes, while the interviews with incubatees lasted on average five minutes.

Table 18 – Semi-structured interview overview

| Respondent Type | Respondent Role | Aggregate time spent interviewing respondents | Period of engagement for conducting interviews |
|-----------------|---|---|--|
| Incubator | <ul style="list-style-type: none"> • Incubator Manager • Incubator CEO | 345 minutes (average 43 minutes per interview) | 1 month |
| Incubatees | <ul style="list-style-type: none"> • Founder • Managing Director • CEO | 48 minutes (average 5 minutes per interview) | 2 months |

Source: Author's Own

In order to avoid deductive disclosure, especially given the specific geographic focus of the study, the researcher chose not to name the participants (Tracy, 2013). This decision was made in accordance with the research ethics process undertaken by the researcher.

3.5 Data Analysis and Reporting

Approach to classifying cases

A cross-case synthesis analytical technique was selected to analyse the data, as both an appropriate method for analysing multiple case studies, as well as a method that would preserve a 'case-based' approach (Yin, 2017).

As outlined in section 3.1.1., the business incubators were classified in accordance with their funding sources, under the classification of 'Mixed [A]', 'Private [B]' or 'Public [C]'. Introducing case classification allowed the researcher to search for specific insights or themes that were prevalent within particular cases, or across all cases, in accordance with the research question and sub-questions.

The researcher utilised the guidance of Yin (2017, p. 198) by ensuring as far as possible that the individual cases were comparable in terms of their institutional settings – in this case business incubators in the Western Cape.

Approach to analysis of data

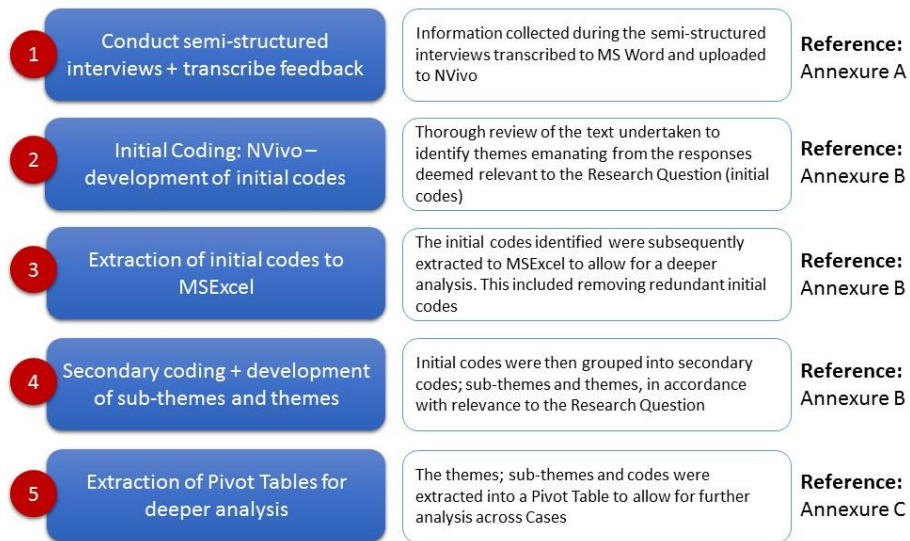
Walliman (2017) defined coding as “the application of labels or tags to allocate units of meaning to collected data” (p. 184).

An initial coding methodology (Saldaña, 2013) was utilised as a first step to extract codes. This saw the researcher reviewing the transcripts generated through the semi-structured interview process, identifying key similarities and differences emanating from the data, and classifying them in a basic manner.

At this point, the researcher made the decision to extract the initial codes generated in NVivo to an MS Excel format. The decision to change to MS Excel was based on the fact that the researcher encountered limitations in undertaking the secondary coding process using NVivo, and found MS Excel to be a more suitable format for such a process. The researcher notes that this may have been attributable to a lack of experience in NVivo, compared to his stronger capability in MS Excel.

The data in MS Excel was then entered into a second coding cycle, recognised by Saldaña (2013, p. 207) as a “way of reorganising and reanalysing data coded through first cycle methods”. A pattern coding methodology was utilised for conducting the second coding cycle, in which major themes, networks of interrelationships or theoretical constructs were grouped together (Saldaña, 2013; Walliman, 2017). It should be noted that the current study did not focus on building theory, but rather the development of exploratory insights into the phenomenon of influence in the business incubation space.

Figure 3: Data analysis process



Source: Author's Own

Subsequent to the initial coding process undertaken on NVivo12™, initial code lists were extracted to MS Excel 2013 and combined, resulting in the development of 417 unique quotations spread across 180 initial codes. The 180 initial codes generated through the first round coding process were then distilled into 40 secondary codes through the pattern coding process. The secondary codes were then categorised into areas of relevance relating to the research question across 16 themes, and finally grouped into five key findings.

The key findings and themes emerging from the analysis are unpacked in detail in the Research Findings and Research Discussion chapters.

3.6 Research Reliability and Validity

Yin (2009) indicated that a high-quality case study design is based on focusing on enhancing four conditions: (i) reliability, (ii) construct validity; (iii) internal validity and (iv) external validity.

Reliability

Saunders et al. (2007) noted that research reliability refers to the extent to which one's data collection techniques or analysis procedures will yield consistent findings. The researcher sought to enhance the reliability of this study by developing easy to follow interview protocol (Appendix B) that allow other researchers seeking to replicate the study.

Validity

Saunders et al. (2007) indicated that validity is concerned with whether the findings are really what they appear to be about.

Construct validity for this study was enhanced through the process of collecting multiple sources of evidence and creating a chain of evidence (Yin, 2009), as well as by cross-referencing the responses from the incubator managers against feedback from the incubatees.

Internal validity was improved by introducing a pattern matching (Yin, 2009) during the coding process to understand if responses to the research question were similar, with an emphasis on incubator manager protocol questions 11 and 12.

A threat to external validity existed given the focused geographic sample size, which may reduce the potential to generalise findings to the entire population. External validity was enhanced through the process of replication, whereby the researcher sought to replicate the design and methodology across multiple business incubators to understand if the findings were similar (Yin, 2009).

For the purpose of the research conducted, threats to both reliability and validity exist, however the researcher followed recommended methodologies such as replication and triangulation to enhance the quality of the research design.

3.7 Research Limitations

The research respondents were based in the Western Cape Province of South Africa, which limits the ability to generalise findings from the research to other geographic locations. The researcher selected incubators representing a wide range of sectors in order to enhance the potential for comparisons with other locations, however.

Non-random sampling in the interview process of business incubators, combined with a small sample size of candidates, may have contributed toward a bias of similarity in responses, as a result of similar prevailing economic conditions and cultural approaches. The researcher undertook efforts to ensure a diversity of respondents, both in terms of organisational and sector mix, to reduce bias.

Snowball sampling for engaging incubatees may have encouraged bias in the responses provided, as the business incubator managers may have recommended incubatees who were more likely to provide responses that reflected the incubator in a positive manner. The researcher attempted to reduce such bias by assuring the incubatee participants that their feedback would remain confidential, thereby encouraging transparent disclosure.

Triangulation methodology was utilised to help reduce any limitations relating to bias arising in the data collection process from both the incubator managers and the incubatees.

3.8 Delimitations

Due to both geographic and time constraints, respondents were only selected from the Western Cape Province in South Africa.

The respondents identified for the interview process were incubator managers and incubatees.

The incubator managers were selected based on their deep expertise relating to the topic of incubation, coupled with a strong understanding of the financial and operational structures of the business incubators.

The incubatees were selected to enhance triangulation within the research, as participants with direct experience of the incubation process. The incubatees selected needed to have been current or former incubatees of the business incubators interviewed, in order to ensure that the feedback received was relevant to the incubators studied.

3.9 Conclusion

A qualitative inductive approach was selected to conduct the research methodology. This approach was determined to be best suited to answering the research questions and sub-questions posed, as it focused on developing a response to the questions that sought to determine 'how' influence and support is affected by funding sources.

A multiple case study methodology was selected as the most appropriate research methodology. The business incubator cases were classified in accordance with their funding structure, utilising business incubator managers and current or former incubatees as the units of analysis for developing the research.

A convenience sampling methodology was utilised to identify incubator manager participants to partake in semi-structured interviews. Eight incubator managers participated in the study. Utilising the snowball sampling methodology, the participant incubator managers recommended current or former incubatees to participate. Then current or former incubatees participated in the study.

The data emanating from the semi-structured interviews were analysed using a cross-case synthesis analytical technique, before being coded. The research findings are presented in the following chapter.

4. Research Findings

This chapter presents the findings that emerged from the analysis of data gathered from the eight incubator managers and 10 incubatees operating within the Western Cape business incubation ecosystem. Where relevant, data gathered through secondary data sources were included to support the process of triangulation of the data.

In accordance with the process described in the research methodology, five key findings emerged from the data, supported by 16 themes. The research findings have been presented in further detail below, utilising themes which contributed to the emergence of findings.

Referencing was undertaken utilising the following structure (example):

(Case A, P1: 20) = Case A, Participant 1, Code: 20

(Case B, P4: 135) = Case B, Participant 4, Code 135

Table 19 provides a breakdown of the interview protocol questions detailed in the methodology for both incubator managers and incubatees, and links them to the key findings identified. The table also highlights the link between the questions posed and the research question and sub-questions. For reference, the research question and sub-questions have also been presented below:

1. How do funding sources influence business incubators?
2. How do incubators assist incubatees to access finance?
3. How effectively are the financial support services offered by business incubators being delivered to incubatees in practice?

Table 19 – Linkages between the interview protocol, findings and research questions

| Incubator Manager protocol questions | Incubatee protocol questions | Key Findings | Link to research question & sub-question |
|--------------------------------------|------------------------------|--|--|
| 1, 2, 3 | | Incubator funding varies in source and structure | Research question (1) |
| 4, 5 | | Funding to incubators is poorly co-ordinated | Research question (1) |
| 11, 12 | 2 | Funders influence the work of incubators | Research question (1) |
| 8 (a) | 1, 3 | Bias in preferred funding sources for incubatees | Research question (1) and sub-question (2) |
| 8 (b, c, d) | 3, 4 | Mechanisms for supporting and tracking funding to incubatees are under-optimised | Research question (1) and sub-question (3) |

Source: Author's Own

4.1 Incubator funding varies in source and structure

An important component of the research was the development of an understanding of funding mechanisms utilised by business incubators to sustain operations. During the semi-structured interviews (questions 1 to 3: incubator manager interview protocol), the incubator managers were asked to provide insights into the funding source(s) of their incubator. The themes that emerged from the responses are presented below.

4.1.1 Incubator funding is non-homogenous

In the interviews, the incubator managers were asked to provide insights into the composition of their incubator's funding sources.

Composition of funding

For ease of comparison, the responses from the incubator managers interviewed were collated in Table 20, to reflect incubator funding composition across the spectrum of respondents.

Table 20 – Funding composition of participants

| Participant | Case | Funding Composition |
|-------------|------|--|
| 1 | A | Mixed: 20% public sector; 40% private sector; 40% non-profit |
| 2 | A | Mixed: 50% public sector; 50% private sector |
| 3 | B | Private: 20% direct private sector; 20% incubatee revenue; 60% commercial revenue |
| 4 | B | Private: 80% private sector; 20% grant |
| 5 | A | Mixed: 35% public sector; 35% incubatee revenue; 30% commercial revenue |
| 6 | C | Public-oriented: 75% public sector; 25% commercial revenue |
| 7 | A | Mixed: 50% private sector; 50% university |
| 8 | B | Private: 100% private sector |

Source: Author's own

Transition in funding models

The overwhelming majority of participants indicated that the funding composition of their business incubator had undergone a form of transition in recent years. Participant 3 (Case B; P2: 148) noted that there was an “initial” funding story and then a “current” funding story, while Participant 5 (Case A; P5: 150) noted that the funding composition of the incubator has “morphed a lot over the last three years”.

Participant 1 (Case A; P1: 147) noted that they had received funding for the incubator at various stages from governmental partners, ranging from the national level (the dti) to the provincial level (the Western Cape Government) to the local level (the City of Cape Town), with the last four to five years being a mix of government and private enterprise (P1: 130).

Several participants identified a transition from reliance on public sector funding towards a commercially funded model, either through the internal strategic efforts of the incubator to diversify funding or by being driven to diversify by the incubator’s public sector financier. Finding the optimal mix of funding for the business incubator to remain sustainable and also competitive was an objective for the majority of participants.

Participant 3 (Case B; P3: 146) highlighted that the incubator initially received funding via the dti through the Incubator Support Programme. The respondent then noted that:

“Dti said they were not going to do 100% funding for incubators anymore ... So they capped it at 60% and they said, “You need to find a private partner for the other 40% and you only get three years and you have to be self-sustaining in those three years.” (Participant 3, P3: 146)

Participant 5 (Case A; P5: 151) highlighted the fact that the incubator was originally “100% SEDA funded”, but expanded on the transition of the model to note:

“We have managed to whittle that down to a point where SEDA accounts for 30-40% of our funding. I’m at a point where I’m finalising my business plan for the next three years, hoping to bring them down to about 20%.” (Participant 5, P5: 151)

Participant 6 (Case C; P6: 119) indicated that the incubator is looking to take on “much more commercial funding”, while also noting that the business is in the process of “finalising the first close of our fund – and that will include a component that specifically involves the funding work that we do in the incubator”. Participant 1 (Case A; P1: 116) summarised the continued sustainability challenge faced by incubators:

“I think diversity of funding is important because the landscape continues to change and my view is that you have got to create a commercial imperative [...] if you really want to be sustainable in the long term.” (Participant 1, P1: 116)

The participant added to this view later in the interview, noting:

“The ideal model remains to be a hybrid, and I think the missing link and the missing opportunity is really to create an impact fund, which could have even more commercial return.” (Participant 1, P1: 129)

The first theme identified reflected that incubator funding is not homogenous, based on the respondents indicating a range of funding structures and financiers, as well as the fact that the

majority of business incubators had undergone or were planning a transition in their current funding model.

4.1.2 Corporate funding of incubators is growing

In the interviews, the incubator managers were asked to reflect on their experiences in raising funding for their incubator from corporate financiers.

Corporates as a funding source for incubators

The majority of respondents recognised that corporate funding for business incubators is both a common and a viable source of funding for business incubators in the Western Cape. Participant 8 (Case B; P8: 156) identified that there is “a lot of money available in the private sector” for business incubators to potentially access, while Participant 7 (Case A; P7: 171) added that “there has been a lot of activity” taking place in terms of corporate funding of incubators.

The respondents also recognised the value of fine-tuning their relationships with corporate financiers. Participant 5 (Case A; P5: 285) reflected that:

“It’s a matter of matching your service to the corporates in your sector that are connected. There is a major scope to generate revenue there.” (Participant 5, P5: 285)

Strategic alignment to corporate goals

Several participants raised the concept of improved alignment of the incubator to servicing corporate goals, in order to assist the incubator to successfully raise funding. Participant 4 (Case B; P4: 68) noted the importance of assisting corporates to “tap into” the incubator’s pipeline. Participant 1 (Case A; P1: 64) also recognised the need for strategic alignment of funding:

“It can’t just be philanthropic or CSI-based; it has to be solving their business problems with their pain points, co-creation of helping them solving a problem statement.” (Participant 1, P1: 164)

Participant 5 (Case A; P5: 70) referred to the need for corporates to identify the potential value-add of utilising business incubators to achieve their goals:

“I think it is about the private sector entities evaluating the incubator’s programmes [...] and understand that it is probably a better alternative to make that investment in, than a fly-by-night supply chain development consultant.” (Participant 5, P5: 70)

Corporate incubation

Three of the eight business incubator respondents referred to the concept of corporate incubation. Participant 7 (Case A; P7: 164) recognised that the question of corporate incubation is a common query for incubators, with corporates trying to determine: “Do we partner, or do we do it internally?” The perceptions of the respondents towards corporate incubation in the South African context were overwhelmingly negative. Participant 3 (Case B; P3: 162) noted that:

“I haven’t seen any start-up engagement internally at a corporate work, in the world – and we look at articles all the time of what’s out there.” (Participant 3, P3: 162)

Participant 4 (Case B; P4: 163) noted the complexity attached to the expansion of capacity required when developing a corporate incubator, while Participant 7 (Case A; P7: 165) made a reference to the challenges corporates experience when driving internal alignment:

“The challenge is [...] there needs to be everything lined up internally – from who is championing this and making sure that there is alignment in terms of incentives across the organisation.” (Participant 7, P7: 165)

However, both Participants 3 (Case B; P3: 169) and 7 (Case A; P7: 167; P7: 168) recognised the value that corporate incubation could bring to the incubation ecosystem through leveraging “networks” and providing strategic linkages. The suggestion is best summarised through the quote of Participant 3 below:

“They should partner with things like us [...]; they should get it out of their building because they each offer unique value propositions that would fit what multiple corporates are looking to do.” (Participant 3, P3: 169)

The second theme identified was the growth of corporate funding of incubators within the local ecosystem, with a caveat that corporates are still grappling with whether to undertake the incubation function in-house or via funding an established incubator.

4.1.3 Public sector funding to incubators remains prevalent

In the interview protocol, incubator managers were asked to reflect on their experiences in raising public sector funding for their incubator.

More than half of the participants indicated engaging with or successfully accessing public sector funding for the purpose of financing or co-financing their incubators. The participants recognised that efforts have been made in the public sector to support incubators, with Participant 7 (Case A; P7: 177) noting that “over the past few years there has been a lot of investment that the public sector has made”. Participant 2 (Case A; P2: 176) agreed with this view, noting that, “You can get money from the government through SEDA, TIA, dti”.

Specific feedback relating to the effectiveness of public sector financing has been included in Section 4.2.2.3, with Participant 1 (Case A; P1: 173) commenting that:

“Grant funding has become a bigger thing albeit sometimes it is a lot harder to get and is a little dependent on...it’s a kind of flavour of the month thing.” (Participant 1, P1: 173)

Public sector funding was identified as a channel that is regularly pursued by incubator managers as a source of funding. Public sector funding was noted to be a current source of funding for 50% of the participants.

4.1.4 Incubators regularly seek alternate funding sources

More than half of the participants discussed alternative funding mechanisms as additional means for supporting the financial sustainability of their incubators. The mechanisms discussed included: (i) generating income through undertake consulting work – Participant 4 (Case B; P4: 106) identified that “for the past 18 months most of our funding sources came from our for-profit’s consulting money”; (ii) revenue generation via incubatees – Participant 5 (Case A; P5: 107) highlighted that “approximately a third” of the incubator’s income is derived from

incubatees in the form of a revenue sharing process; and (iii) the provision of funding ‘in-kind’ through the incubator funders – Participant 7 (Case A; P7: 115) noted that “physical facilities and services [...] things like your internet, cleaning and all support services that go into a space of functioning” are provided by the incubator funder.

Although the incubator managers predominantly identified generating funding from corporate or public sector financiers, the majority of respondents also discussed the concept of alternate revenue generation as a means for funding incubators.

Table 21 summarises the first four themes identified, which contributed to the first emerging key finding: *Incubator funding varies in source and structure*.

Table 21 – Themes and finding: incubator funding

| Themes Identified | Key Finding |
|---|--|
| Incubator funding is not homogenous | Incubator funding varies in source and structure |
| Corporate funding of incubators is growing | |
| Public sector funding to incubators remains prevalent | |
| Incubators regularly seek alternate funding sources | |

Source: Author’s own

4.2 Funding to incubators is poorly co-ordinated

An important objective of this study was to develop insights into the funding currently received by business incubators in order to develop an initial view on the challenges they face, as well as opportunities for improvement.

Through the interview protocol (questions 4 & 5: incubator manager interview protocol), the incubator managers were afforded the opportunity to provide insights into the effectiveness of funding mechanisms for their incubators. The managers were requested to share recommendations on enhancing funding support.

4.2.1 Public and private sector incubator funders lack alignment

The majority of respondents raised the issue of a lack of alignment between their financiers as a key challenge to raising additional funding and maintaining focus on the day-to-day interests of their incubators.

Half of the respondents discussed the issue of a lack of alignment. In this scenario, two key issues were raised by participants. The first related to the fact that a lack of alignment exists within the ecosystem between private sector funders and public sector funders. Participant 7 (Case A; P7: 47) noted that “there are very few examples where you have got alignment between the public and private sector” in the business incubation funding space, expanding on this view by explaining:

“I was considering applying for the dti Incubator Support Programme and decided actually not to apply for it because their incentives didn’t really align with the mandate of our corporate partners and the outcomes we were hoping to have from the incubator.” (Participant 7, P7: 47)

Participant 5 (Case A; P5: 40) expanded on the issue of raising funding across the public and private sector funding channels, noting that a private financier had advised:

“We are simply not comfortable making an investment with you, because the tail wags the dog here. SEDA gives you less money than we are going to spend with you, yet they get prime advertising, they get prime co-marketing, they tell you they will put their logo on all your branding and all your literature.” (Participant 5, P5: 40)

Participant 2 and Participant 6 raised the challenge of a lack of alignment between public sector financiers – with Participant 6 (Case C; P6: 45) highlighting infighting between financiers – “TIA with SEDA have been trying to sort it out, they haven’t.” Similarly, Participant 2 (Case A; P2: 43) made note of the fact that “delays and competition within the same government cannot be a good thing by any means”.

Improved alignment between financiers in the business incubator funding ecosystem emerged as an important theme amongst the incubator managers when discussing challenges and opportunities for improvement.

4.2.2 Private sector incubator funding lacks commitment

Half of the respondents engaged made reference to the lack of long-term commitment of corporate financiers to providing strategic funding support in the business incubation space, highlighting frustration on the part of incubator managers. Both Participant 1 and Participant 6 made specific reference to the fact that corporate financiers often fund incubators purely to “tick boxes”. Participant 6 (Case C; P6: 61) noted:

“I think out there, there needs to be a bit of a mind-set change [...] there is a lot of funding that they (corporates) do, which seems to be purely for tick box.” (Participant 6, P6: 61)

Participant 1 (Case A; P1: 60) also highlighted the poor commitment of corporates to long-term outcomes, noting that “we have seen a lot of corporate examples of them running these three month ‘incubation programmes’, which I tend to call vanity projects”. Participant 1 went on to provide a suggestion for corporates in terms of an approach to funding business incubators:

“If you do it (funding), do it properly, do it with meaning so that you really are trying to do it for the incubator and do it for the incubatee [...] not to make yourself look great.” (Participant 1, P1: 286)

Participant 4 (Case B; P4: 63) discussed the fact that when dealing with private sector funding partners, “they are looking after their own interests – that’s the reality”.

The respondents recognised that certain interventions could be made to enhance private sector funding support to business incubators, which would prevent the theme identified as a lack of commitment from the private sector. This included a better alignment of business incubators to corporate strategies, as well as stronger commitment from the corporates to avoid ‘vanity projects’.

4.2.3 Public sector funding to incubators is onerous and poorly allocated

Onerous requirements for funding access

The majority of participants identified ‘onerous requirements’ as a barrier to accessing public sector funding for their incubators. In the context of the feedback emanating from participants, onerous requirements were determined as referring to complex and lengthy application structures to access public funds, and/or complex reporting structures for funding that had been accessed.

Participant 1 (Case A; P1: 82) simply noted that, “It (funding) is inordinately difficult to unlock”, while Participant 7 (Case A; P7: 73) noted:

“If I think back to some of the requirements in reporting on that specific kind of funding I think the feedback I’ve heard from other people is that it has been very onerous.” (Participant 7, P7: 73)

Participant 5 (Case A; P5: 78) recommended that in order to reduce such barriers, a positive step would be to “make sure that government financiers understand their own policies and don’t change the goalposts every year”.

Improved allocation of public funding within the incubation ecosystem

Two of the participants spoke in detail about the need for better allocation of incubator funding within the public sector. The sentiment was summarised by Participant 5 (Case A; P5: 95), who simply noted, “Fund less incubators, better”.

Participant 6 (Case C; P6: 100) expanded on this view, noting, “I think there is a decent amount of financial support coming out of SEDA, the problem is they have spread it too thinly”. Participant 5 (Case A; P5: 93) provided the most extensive recommendation in this regard, noting:

“They should rather fund 20 incubators appropriately. They should invest the money and time to understand that you cannot unanimously score and metricise 20 different incubators across 20 different sectors all on the same benchmark, same KPIs, expect the same outcomes at the same time or point in the cycle of the economy.” (Participant 5, P5: 93)

Enhancing the funding process of public sector financiers

The majority of participants provided suggestions for improving public sector support to business incubators. This included further feedback in alignment to previous responses, with Participant 6 (Case C; P6: 98) advising that public sector financiers “should double down on the incubators that perform”.

Participant 8 (Case B; P8: 99) discussed “building awareness” around the funding available for incubators, while Participant 1 (Case A; P1: 89) recommended that public sector funders should be strategic through coupling funding to an economic development mandate.

Participant 2 (Case A; P2: 90) made an additional recommendation of government exploring the potential for centralising support structures – “having this one desk that does it all”.

Feedback from respondents contributed to the identification of an underlying theme of public sector funding being onerous and poorly allocated.

The second three themes identified contributed to the second emerging key finding: *Funding to incubators is poorly co-ordinated*. The themes and finding are reflected below in Table 22.

Table 22 – Themes and finding: incubator funding challenges

| Themes | Key Finding |
|---|--|
| Public and private sector incubator funders lack alignment | Funding to incubators is poorly co-ordinated |
| Private sector incubator funding support lacks commitment | |
| Public sector incubator funding is onerous and poorly allocated | |

Source: Author's own

4.3 Funders influence the work of incubators

A key objective of the research was to develop an exploratory understanding of how funding sources influence business incubators. Through the interview protocol (questions 11 and 12:

incubator manager interview protocol), incubator managers were asked to discuss their views on the element of ‘influence’ in the context of their funding sources.

4.3.1 Incubator funders drive their own objectives

The impact that a funder exerts on the strategy, objectives and implementation plans of a business incubator is an under-explored concept in academic literature. A key objective of the researcher was to develop a deeper understanding of the influence exerted by financiers on business incubators.

Influence of funder(s) on the incubator

All the respondents interviewed indicated that their financiers have a direct influence on the operations of their incubator in one way or another. Participant 2 (Case A; P2: 326) summarised the interaction by noting that “the investor’s request sort of becomes part of your DNA”. Participant 1 (Case A; P1: 325) agreed with this sentiment, indicating that “they come with a mandate. So whether it be impact, whether it be they want them (incubatees) to operate in a certain region, in a certain market, in a certain way”. The funder’s influence extends in many cases to the setting of KPIs and objectives, which can be at odds with the objectives of the incubator. Participant 7 (Case A; P7: 327) noted:

“We are also wrestling with how your funder and your ultimate model are linked with KPIs and objectives, which then impacts the outcome you have.” (Participant 7, P7: 327)

Participant 5 (Case A; P5: 339) was the most blunt regarding the relationship with the incubator financier, stating simply: “It’s the tail that wags the dog!”

Incubator funders directly influencing the role of the incubator in assisting incubatees to access certain funds was a concept identified by two respondents. The first, Participant 6 (Case C; P6: 311), noted that “SEDA tries to guide us down the route of using SEFA”, but also added “we have never been successful”. Participant 3 (Case B; P3: 312) highlighted the fact that the funder of their incubator “has prevented us from getting broader access to finance to a larger pool of our incubatees”.

Participant 5 (Case A; P5: 341) provided an interesting insight relating to the expectations of the incubatees themselves rather than the financiers, noting that “the bulk of small business and entrepreneurs that we find that flock to SEDA-related incubators all want grants”. This insight raises an important question relating to the potential expectations set by incubatees on incubators that are public sector funded, rather than by the incubator funders.

To enhance the interpretation of the feedback from the respondents, the themes emanating from the research relating to funder influence were broadly classified into public sector funder influence and corporate funder influence.

Influence of a public sector funder on the incubator

Several respondents provided in-depth insights into the influence that a public sector funder can have on a business incubator operating in South Africa. The most common issue raised by the respondents was that the over-arching objective of public financiers is to achieve socio-economic objectives through their funding. Participant P2 (Case A; P2: 316) noted that “SEDA doesn’t care if they are successful or not, they just want SMMEs created, a low turnover target, and BEE and jobs created”. Similarly, Participant 6 (Case C; P6: 308) noted that:

“We have got targets for black-owned business, women-owned businesses and youth-owned businesses. Rather than saying, ‘Go out and find the most businesses that are going to make the most impact’.” (Participant 6, P6: 308)

Aligned to the above sentiment was the indication that public sector financiers appear to be strongly KPI-driven, with Participant 2 (Case A; P2: 315) noting that “the reason they invest into the incubator is – their return on investment if you will – is reporting on set KPIs; key performance indicators with set targets.” The positioning of the KPIs in turn drives the objectives of the incubator, with Participant 5 (Case A; P5: 338) noting that “they are the people that dictate my KPIs regardless of my relationship with the corporates”.

The linkage between defined public sector-oriented KPIs and socio-economic objectives is well illustrated in the feedback provided by Participant 2 (Case A; P2: 336):

“I would be more likely to on-board a young black woman South African entrepreneur onto my incubation programme more than another one let’s say an old white non-South African.”

Because she is a female, a woman, young and black and that is one of the KPIs I have to report on.” (Participant 2, P2: 336)

Participant 5 (Case A; P5: 332), when discussing their incubator’s support structures in assisting incubatees access finance, also referred back to the influence of public sector KPI setting:

“So right now there is absolutely no point for me to even look at access to finance because I work for that money that I get – the grant money – I’ve got 4 or 5 KPIs, I check the boxes, funding is not a part of it.” (Participant 5, P5: 332)

Influence of a corporate funder on the incubator

Feedback from the respondents relating to the influence of corporate funders focussed on the allocation of incubator resources in order to ensure that corporate objectives were met. Participant 3 (Case B; P3: 320) noted:

“When a new corporate funder comes on board that is paying us for an open innovation campaign or challenge, the lion’s share of our focus goes to that project.” (Participant 3, P3: 320)

Participant 7 (Case A; P7: 333) highlighted the fact that KPIs set by corporates could influence the objectives of the incubator, potentially to the detriment of the incubatees, noting:

“If we have a KPI that is like number of investors on board it becomes quite easy to push and say, ‘Actually I think you should take on investment’, because that is the KPI that we are measured on when actually it makes sense for that business to bootstrap and to get to a point where they actually need finance to grow to the next scale.” (Participant 7, P7: 333)

An emerging theme based on the responses of the incubator managers was that incubator financiers drive their own objectives into the incubator.

4.3.2 Incubators and incubator funders lack alignment

Alignment of financiers to incubator objectives

Several participants voiced their concern about a lack of alignment of financiers to the core objectives of their incubators. Participant 3 (Case B; P3: 292) noted that delivering a return within bounded time constraints can also be a challenge for incubators, highlighting that corporate clients sign on for “12 months at a time”, while the incubator’s longer-term funders were “committed for three years”. Participant 2 (Case A; P2: 289) also noted the difficulty of balancing the interests of their incubator’s financiers:

“They have different conflictual visions, which definitely impacts the running even on a day to day basis of the incubator, and sadly so unfortunately.” (Participant 2, P2: 289)

Participant 2 (Case A; P2: 301) raised a concern relating to the KPIs set by public sector funders – not in reference to influence, but rather noting a poor alignment in terms of applicability across incubators:

“They (SEDA) actually fund more incubators in the construction space or farming space that is not tech related [...] the reporting that we have been asked for and even some of the targets that are set on our KPIs are irrelevant to what we do.” (Participant 2, P2: 301)

Co-ordinated objectives between the incubator and financier(s)

The majority of the respondents discussed the importance of driving co-ordinated objectives in terms of the funder and incubator to enhance successful outcomes from all perspectives, including incubatees. Participant 3 (Case B; P3: 287) discussed the need to ensure that “the source is matched with the motives behind the funding”, while Participant 7 (Case A; P7: 283) agreed that co-ordination of expectations is essential:

“For me it is all around the alignment of what the expectation and output is of the funders and what those incentives behind the incubator are that then dictates whether it is further funding or finance that is raised.” (Participant 7, P7: 283)

A number of respondents highlighted specific challenges relating to the co-ordination of objectives and financiers, in terms of timing expectations. Participant 6 (Case C; P6: 291) noted the view that incubators provide “a longer term sustainable impact”. Participant 3 (Case B; P3: 296) noted that:

“While we’ve got the long term support of the university, our programmes are either on an annual or three year cycle, which makes it very hard if you are thinking around incubation and how long it takes to create a business and get that return is challenging.” (Participant 3, P3: 296)

The respondents noted the importance of creating alignment between the objectives of the financiers and the incubator itself, as well as co-ordinating objectives. The theme identified from the responses was determined to be a lack of alignment between incubators and incubator funders.

4.3.3 Incubatees attach importance to incubator funding source(s)

Developing a deeper understanding of the impact of incubator funders on incubatees presented the first practical opportunity to incorporate the feedback from the incubatee respondents.

In the interview protocol developed for the incubatees (incubatee protocol question 2), the respondents were requested to provide insight into whether the funding sources of the incubator had influenced their choice of incubator. The majority of respondents indicated that they had conducted research into the incubator prior to selection, and provided a variety of reasons for their selections.

Several incubatee respondents spoke of the importance of the “network” that incubators provide, which in turn could enable access to funding. Participant 12 (Incubatee; P12: 343) discussed the “exposure” achieved through the incubator and added that “it did give us access to potential funding”. Participant 9 (Incubatee; P9: 356) noted that, “We know that there are investors that walk through [Incubator 3] so it was a consideration for us when selecting the incubator.”

The incubatees spoke of the importance of selecting an incubator based on the concept of adding credibility; Participant 17 (Incubatee; P17: 354) commented that, “When we go out into the market we can tell people we’re backed by SEDA, which obviously adds to your credibility”. Participant 18 (Incubatee; P18: 344) added to this statement, noting:

“Basically the validation of the incubator, [...], other investors had already heard of us, and they had heard of what we are doing and our mission. That helped in their minds because they had confidence in us.” (Participant 18, P18: 344)

Participant 11 (Incubatee; P11: 348) spoke about the link that the incubator could provide to funding sources via the funder partners: “So we knew that there was a seed fund that would be available to successful start-ups, and that there is another commercialisation fund which is like the second round.” Participant 17 (Incubatee; P17: 358) added to this, which again spoke to the link to public sector funders:

“A big plus for [Incubator 2] is they’ve got the channel into the Technology Innovation Agency, and of course the big plus about that money is that it’s free – it’s grant – and that means there’s no equity you’re giving up.” (Participant 17, P17: 358)

The feedback from the incubatees relating to the funding source of incubators contributed to the identification of the theme: ‘Incubatees attach importance to incubator funding source(s)’.

The three themes identified contributed to the third emerging key finding: ‘Funders influence the work of incubators.’ The themes and finding are reflected below in Table 23.

Table 23 – Themes and finding: funder influence

| Themes | Key Finding |
|---|--|
| Incubator funders drive their own objectives | Funders influence the work of incubators |
| Incubators and incubator funders lack alignment | |
| Incubatees attach importance to incubator funding source(s) | |

Source: Author’s own

4.4 Bias in preferred funding channels for incubatees

During the semi-structured interviews (incubator manager interview protocol questions 8 (a) and 8 (b)), the incubator managers were asked to share insights into the support services that

their incubators provide to assist incubatees to access finance. The participant responses are set out below within the parameters of public, private and alternate funding channels.

4.4.1 Reactive assistance for incubatees to access public sector funding

Governmental grants

All of the business incubator respondents indicated awareness of governmental grants as a funding channel for incubatees. The majority indicated taking a reactive rather than proactive stance to assisting incubatees access funding via governmental grants.

Participant 1 (Case A; P1: 255) noted that: “We would make them aware of the landscape. So we would point out to them the avenues they can take, but we don’t actually assist them in doing applications.” Similarly, Participant 6 (Case C; P6: 261) advised that, “We will look around and say what kind of funding is appropriate for this business and if it’s government funding then we will go and help them and get that funding”. Participant 7 (Case A; P7: 262) remarked that:

“We promote opportunities, but we don’t actively sit with a company and say, ‘Okay these are the grants that you should go with’. It’s more I would say a reactive versus proactive approach.” (Participant 7, P7: 262)

Four of the incubatees interviewed indicated receiving support or guidance from the incubator in terms of accessing finance via governmental grants, with Participant 11 (Incubatee; P11: 276) noting: “Yes they have, we are currently on the TIA Seed Fund, the value of, I think, R650,000.” Participant 10 (Incubatee; P10: 277) added that, “We have also had the opportunity to apply to government schemes”.

Soft-loans via government

A very limited number of respondents indicated that they utilise soft loans from the government to support their incubatees, with Participant 5 (Case A; P5: 265) summarising the potential misalignment in this component of the funding spectrum: “I have not come across a single bankable business with sufficient off-take agreements that meets the SEFA requirements.”

Additional governmental channels for accessing incubatee funding

A number of additional governmental sources of funding were raised by the respondents. Both Participant 2 (Case A; P2: 258) and Participant 6 (Case C; P6: 270) highlighted the fact that the incubators were “TIA Seed Fund partners”, which enabled the incubator to act as a “disbursement” partner on behalf of the TIA Seed Fund. Participant 2 (Case A; P2: 258) elaborated on this role:

“We are a Seed Fund Partner, which disperses grant money up to R600k to a particular project that you can pitch to the committee [...] after that if successful enough you can move and ask for a soft loan to TIA through the Technology Development Fund.” (Participant 2, P2: 258)

Both Participant 2 (Case A; P2: 268) and Participant 6 (Case C; P6: 269) mentioned seeking to access the dti’s SPII programme for their incubatees. Participant 6 (P6: 269) explained that:

“We tap into SPII [...] We have also looked at various agricultural incentive schemes for some of the agri processing business we have worked with.” (Participant 6, P6: 269)

Finally, both Participant 4 (Case B; P4: 260) and Participant 6 (Case C; P6: 271) mentioned that they assist their incubatees when engaging with the IDC.

4.4.2 Preference for venture capital within private sector funding channels

Via the interview protocol, the participants were asked to provide information about the support provided to assist incubatees to access private sector funding. Where relevant, insights from the incubatees pertaining to the support provided by the incubator have also been included.

Linkages to venture capital

An overwhelming majority of respondents spoke about their efforts to link incubatees to venture capital. The approach taken by the incubator managers was predominantly proactive when engaging venture capital firms.

Proactive measures are taken by incubators through either direct relationships or pitching contests, which provide incubatees with a platform to engage venture capital firms. Participant 3 (Case B; P3: 246) highlighted the linking of incubatees with a specific venture capital firm that the incubator views as “the best in Africa, probably”, while Participant 8 (Case B; P8: 250)

noted that: “When we have pitching competitions they are usually funded and our panel usually consists of some of the VCs.”

Two of the incubatee respondents indicated that incubators are actively providing linkages to venture capital firms. Participant 12 (Incubatee; P12: 254) highlighted that they were aware of [Participant 3]’s “good relationship with VCs”, while Participant 15 (Incubatee; P15: 253) noted that, “I think through the [...] partnership that they have – at the last conference I managed to get in touch with Proparco, a few VC funds, and I’m entering due diligence now.”

Linkages to banks

All of the respondents indicated that they attempt to provide their incubatees with access to funding by creating links to banks. Participant 1 (Case A; P1: 233) advised that the incubator would “make them [incubates] aware of the kinds of funding that are available, but we don’t do the physical interaction”. Similarly, Participant 4 (Case B; P4: 238) noted that, “We get people to give them advice around how they can best access that, but there is no direct channel saying this is how you access banking finance”. The overwhelming feedback from respondents was that the banking sector is not suited to supporting start-up businesses.

Participant 2 (Case A; P2: 235) opined that this issue is not limited to the Western Cape, noting: “In terms of funding, purely funding first of all in South Africa, it is not only Western Cape it’s South Africa, banks aren’t really geared for that.” Participant 8 (Case B; P8: 242) elaborated on this funding mismatch:

“Generally what we see is that banks would want at least a two year track record and we work with very early stage entrepreneurs so most of the times they won’t qualify for funding with the banks anyway.” (Participant 8, P8: 242)

Linkages to corporates

Three of the participants discussed providing their incubatees with links to corporates, in order to support access to finance. The primary motivation for such linkages was the impression of the respondents that corporates have money available to fund incubatees. Participant 1 (Case A; P1: 225) noted in reference to corporate funding that: “I don’t think there is a shortage of people wanting to put money into start-ups.”

Participant 3 (Case B; P3: 230) commented that several of the incubators' incubatees have accessed "working capital and capex" support through their corporate financiers, but also added that there are "still bad interest rates for start-ups" (P3: 231).

Linkages to corporate venture capital

Only two of the participants discussed actively attempting to provide their incubatees with links to corporate venture capital. Participant 3 (Case B; P3: 229) was the only respondent to highlight a direct and ongoing working relationship with a corporate venture capital team, noting that through their corporate funder "we have between four and six engagements with their VC fund every year".

Participant 2 (Case A; P2: 227) argued that corporate venture capital has not yet matured in the South African market:

"The one model that is slightly more prevalent in developed economies is the one of corporate venture capital, where yes they risk capital funding something, but they are doing it for their own potential benefits." (Participant 2, P2: 227)

Participant 2 (Case A; P2: 226) added to the view expressed above, noting that "the corporate ventures is definitely something you should keep your eye on".

4.4.3 Incubators leverage relationships to source funding from additional channels

Arranging networking with financiers

The overwhelming majority of respondents identified networking with financiers as a channel utilised by their incubator to support their incubatees to potentially access finance. The respondents indicated that networking with financiers is arranged through an event-based scenario or through direct interventions.

Participant 1 (Case A; P1: 179) spoke of the importance of "demo days", noting that "our power to convene is big and people often come to us as a landing spot to look for investments". Participant 3 (Case B; P3: 180), meanwhile, explained that "twice a year we have a specific investor and networking event", while Participant 7 (Case A; P7: 186) mentioned that the

incubator hosts an “investor day” where “we look at each business and say what the profile of the most suitable investor is, and then reach out to our network”.

Limitations of the event-based approach to supporting access to funding was highlighted by Participant 4 (Case B; P4: 184), who discussed the abundance of events taking place in the ecosystem:

“Because of the rise of a lot of the accelerators there are also so many of these (events) happening. So we rather introduce them to a series of investors when we feel they are ready and the investors know beforehand that this is a company they would like to meet. So it’s more like a dating kind of thing.” (Participant 4, P4: 184)

Participant 3 (Case B; P3: 203) highlighted the potential for networking to occur through introductions taking place at the incubator itself:

“We have various corporates that we take around all the time’ various investors that frequent us and we just introduce them to whomever is new at the zoo.” (Participant 3, P3: 203)

From the perspective of the incubatees, several respondents highlighted the importance of networking with financiers as a key channel to accessing finance. Participant 14 (Incubatee; P14: 222) noted that: “We started to build our network from there, which eventually led to building a network of funders”, while Participant 18 (Incubatee; P18: 223) highlighted the success of the process:

“In terms of linking to some other funding, it was the network of the incubator – they knew all the big players in the Cape Town ecosystem, and that helped us find funding.” (Participant 18, P18: 223)

Relationships with angel investors

Two incubator respondents highlighted angel financiers as a channel for sourcing funding for incubatees. Participant 3 (Case B; P3: 214) noted that angel investors “proactively come to us and we keep them engaged and then make a connection (to incubatees) when it is appropriate”. Participant 7 (Case A; P7: 215) indicated that “most of our incubatee funding comes from angel investors at an early stage”, but commented on a difficulty associated with linking incubatees

to angel investors: “A challenge from our side is keeping up-to-date operational relationships with those angels, to know who is looking for investments, then secondly growing that pool of angel investors over time” (Case A; P7: 216).

Participant 2 (Case A; P2: 210) identified angel investors as a “gap” in the funding ecosystem, noting:

“So that small gap where you need anything between let’s say R100,000 to maximum R500,000, it’s kind of hard to get [...] and the Business Angel is a big thing and it’s missing in the whole of Africa - not only South Africa or the Western Cape, and after that you can go to Venture Capital.” (Participant 2, P2: 210)

Direct investment by the incubator

Less than half of incubator managers indicated that they make direct investments into their incubatees, which can potentially be attributed to a lack of available funding for such investments or challenges relating to expertise. Participant 1 (Case A; P1: 191), whose incubator has made direct investments, noted:

“I am not sure we would rush to repeat that model – it has been incredibly labour intensive [...] there are legal structures all over the place; you have got to protect yourself. It has been an interesting learning curve.” (Participant 1, P1: 191)

Participant 6 (Case C; P6: 196) spoke about the acquisition of equity stakes in exchange for services, noting that “we take equity stakes for the kind of incubation support that we provide”. Participant 4 (Case B; P4: 194) discussed the concept of both direct and indirect support to incubatees through the incubator:

“Depending on the type of enterprise some will take equity, others will take a no interest loan that they repay on work revenue and the third element that we do is around saying we think your business can grow with a capital injection. Let us leave you this capital injection and this is a retainer of your services for us.” (Participant 4, P4: 194)

Additional funding channels

A final component of the feedback from the respondents relating to support mechanisms designed to assist incubatees to access finance was structured or unstructured support, which fell outside of the mechanisms outlined above.

These included providing businesses with “Chapter 11 bankruptcy protection” (Case A; P5: 208); “dampening financial pressure” on incubatees by charging them residency fees that do not cover all expenses (Case A; P2: 207); and providing incubatees exposure through major ecosystem events (Case A; P2: 199).

4.4.4 Incubatees are positive about access to finance provided by incubators

In accordance with the research question and sub-questions, the incubatees (incubatee protocol question 4) were encouraged to share their views on the importance of incubators providing access to funding and the extent to which they had been supported.

Importance of funding to incubatees

The incubatee respondents provided an interesting insight into the importance of an incubator’s ability to link their incubatees to financing. A slight majority of participants indicated that they had joined the incubator for reasons other than access to funding as a top priority.

Participant 11 (Incubatee; P11: 26) discussed the importance of incubator support, noting: “I think for our business – we are a hardware business – we were more concerned about support.” Participant 10 (Incubatee; P10: 23) concurred, indicating that: “My main priority was getting into an incubator so that they could assist me in building my actual business.”

Several participants indicated that funding was a key component of consideration, but not the *most* important factor. Participant 13 (Incubatee; P13: 27) explained that: “I would say in second place to the incubator being able to network me, was its ability to link me up to investors.” Participant 17 (Incubatee; P17: 19) responded that linkages to funding were “important of course. I think what’s more important than that is the ability to link you to clients, especially in the corporate space”.

Finally, certain participants emphasised their incubators’ role in linking them to funding as being the most important criteria for selecting the incubator. Participant 9 (Incubatee; P9: 16)

advised that, “Funding for any start-up in South Africa is important, and very hard to get, so any boost we can get in terms of getting funding for us is a big consideration” while Participant 15 (Incubatee; P15: 30) stated simply, “Very important. For me, that’s the highest priority”.

Although important, access to funding is therefore recognised as just one of several key criteria within the incubator service offering by both incubator managers and incubatees.

Incubatee analysis of support provided to access funding

The majority of incubatee respondents indicated that the support provided by incubators in accessing finance has “exceeded expectations” (Incubatees; P9: 411; P10: 412; P11: 413; P18: 418). These successes are reflected in feedback from the participants, for example Participant 13 (Incubatee; P13: 415) indicated that “they have supported a lot, in fact the investment with Afgri came through (Incubator 3)”, while Participant 11 (Incubatee; P11: 413) highlighted that:

“I think it has far exceeded our expectations. The programme has been really involved and (Incubator 6) has really assisted us in terms of reaching some of the milestones that unlock the disbursement of funds.” (Participant 11, P11: 413)

Some respondents also discussed support that had not met expectations, with Participant 16 (Incubatee; P16: 410) suggesting that, “I would probably have wanted to see more private/VC/angel investors being brought to the table, but I guess that always goes hand-in-hand with the positioning of that particular incubator”, while Participant 12 (Incubatee; P12: 408) mentioned a lack of clear outcomes:

“I would say there are a lot of positives, there were a lot of introductions, but none of these came to fruition, and I think that’s a bit frustrating” (Participant 12, P12: 408)

The themes identified contributed to the fourth emerging key finding: *Bias in preferred funding sources for incubatees*. The themes and finding are reflected below in Table 24.

Table 24 – Themes and finding: channels utilised to assist incubatees to access finance

| Themes | Key Finding |
|--|---|
| Reactive assistance for incubatees accessing public sector funding | Bias in preferred funding channels for incubatees |
| Preference for venture capital within private sector funding channels | |
| Incubators leverage relationships to source funding from additional channels | |
| Incubatees are positive about access to finance provided by incubators | |

Source: Author's own

4.5 Mechanisms for supporting and tracking funding to incubatees are under-optimised

The incubator managers (incubator manager interview protocol questions 10, 8(c) and 8(d)) were encouraged to share their views on any challenges that the incubators had experienced when attempting to access funding for incubatees, as well as any measures they had undertaken to track support provided to incubatees in accessing funding.

4.5.1 Incubators experience challenges in accessing funding for incubatees

A range of challenges were identified by participants as hindering access to funding for incubatees. For ease of comparison, these were split into critiques of the public and private sector funding mechanisms.

Public sector funding criticisms

The criticisms of public sector funding varied in nature, but primarily spoke to areas where a simple intervention could significantly improve access to finance for incubatees. Participant 8 (Case B; P8: 364) noted that “one of the things that has come across very clearly is not a lot of people are aware of the funding opportunities that are available”.

The participants mentioned inappropriate structures when it comes to public sector funding, for example Participant 6 (Case C; P6: 378) discussed the fact that their incubator has never put in an application for SEFA funding on behalf of their incubatees “because you look at it

and you go, ‘It’s not going to happen’. Our clients have literally said, ‘We are not wasting our time’”. Participant 8 (Case B; P8: 363) discussed the actual funding application structure, noting that, “A lot of these applications are still being done manually, which is ancient”.

Participant 5 (Case A; P5: 361) provided a particularly insightful comment relating to the fact that the KPI structure of public funding can discourage incubators from seeking funding for their incubatees:

“Well in terms of the structure, if you look at the strings that the money comes with, there is absolutely no incentive in that to provide funding or get the incubatees to funding.”
(Participant 5, P5: 361)

Private sector funding criticisms

Several incubator managers were critical about the application of private sector funding to incubatees. Participant 8 (Case B; P8: 377) noted that “even though I say that there is a lot of money available they are not necessarily spending it in the right areas”. Participant 1 (Case A; P1: 368) stated simply, “I think a very big thing for me to do it with meaning rather than to tick a box” when discussing private sector funding support to incubatees.

Participant 2 (Case A; P2: 376) held a more upbeat view, noting:

“It is on the correct path at the moment and it’s growing, which is a good thing, but there again there is a lot of room for I wouldn’t say improvement, but maybe better structure, that’s one thing, and more players definitely.” (Participant 2, P2: 376)

The challenges identified by incubator managers that hinder the effectiveness of incubators in supporting incubatees to access finance were split into criticisms of public and private sector-based financiers. These were grouped accordingly under the sub-theme ‘Incubators experience challenges in linking incubatees to finance’.

4.5.2 Monitoring and evaluation of support for access to finance is at an early stage

The incubator managers provided insights into their incubators’ Monitoring and Evaluation (M&E) practices based on interview protocol questions 8 (c) and 8 (d). The majority of

participants advised that their incubators track the support structures provided to incubates, however the extent to which tracking is undertaken varies significantly across respondents.

Participants 3[Case B]; 1[Case A]; 4[Case B]; 6[Case C] and 7[Case A] all indicated that their incubators have implemented tracking mechanisms to understand and measure how they assist incubatees to access finance.

Participant 7 (Case A; P7: 39) indicated that their incubator undertakes an M&E review on an annual basis:

“We are currently doing our annual M&E to look back and see how many of the start-ups have raised money, who did they raise from, how did that raise happen?”

Notably, across all the participants, no in-depth publicly available information was accessible relating to the incubators’ level of success in supporting incubatees to access finance.

The two themes identified contributed to the fifth emerging key finding: *Mechanisms for supporting and tracking funding to incubatees are under-optimised*. The themes and finding are reflected below in Table 25.

Table 25 – Themes and finding: supporting and tracking funding for incubatees

| Themes | Key Finding |
|---|--|
| Incubators experience challenges in accessing funding for incubates | Mechanisms for supporting and tracking funding to incubatees are under-optimised |
| Monitoring & Evaluation of support for access to finance is at an early stage | |

Source: Author’s own

4.6 Research findings in the context of the cross-case analysis

Given the cross-case multiple case study methodology utilised, Table 26 presents the findings identified alongside their application to case typology, where relevant. Notably, the findings

tend to apply across the three case typologies developed, rather than emerging with application to a specific case typology.

Table 26 – Findings applied to case typology

| Finding | Takeaway relating to Case (Mixed, Private, Public) |
|--|---|
| Incubator funding varies in source and structure | The initial finding was aligned to the classification of cases undertaken, in that incubators can be broadly classified as mixed, private or publicly funded. |
| Funding to incubators is poorly co-ordinated | Incubators across all case classifications indicated experiencing challenges relating to co-ordination of funding. Mixed funded incubators identified co-ordination as a common challenge. Interestingly, the public funded incubator respondent also identified poor co-ordination between public funders themselves as a challenge. |
| Funders influence the work of incubators | Incubators across all case classifications indicated that funders influence their work. Public funded incubators are influenced by funders seeking socio-economic outcomes; private funded incubators are influenced by funders seeking outcomes relating to the organisational goals of their financiers; and mixed funded incubators are required to find a balance between contrasting goals of financiers. |
| Bias in preferred funding sources for incubatees | Incubators across all case classifications were found to proactively seek funding for incubatees via certain channels, depending on their relationships. However, the channels are not generic in accordance with case typology, and were thus not found to be defined by the funding source of the incubator. |
| Mechanisms for supporting and tracking funding to incubatees are under-optimised | Incubators across all case classifications indicated experiencing challenges in supporting their incubatees to access finance. Similarly, the majority of incubators reported undertaking a form of monitoring and evaluation of their activities. The challenges and tracking systems reported were not found to be defined by the funding source of the incubator. |

Source: Author's own

4.7 Discussion of Findings

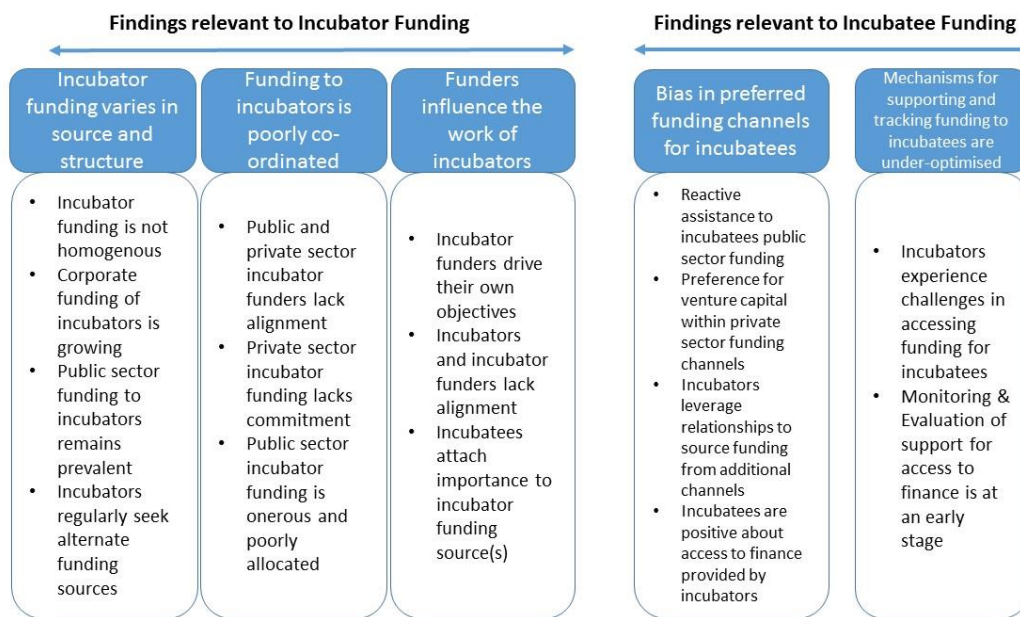
The following chapter discusses the research findings, with the objective of expanding on the key themes and patterns that emanated from the data collected. The information is also compared with research identified in the Literature Review section of the study, in order to

provide exploratory insights into the comparability of the Western Cape’s business incubation funding ecosystem to global ecosystems.

Understanding the research findings

Figure 4 summarises the five key findings in relation to the research questions and sub-questions, as well as the related themes that emerged at each level.

Figure 4 – Research key findings and themes



Source: Author’s Own

The findings can be separated to better understand the research question and sub-questions initially posed. The first three findings relate to the business incubators themselves (‘Findings relevant to incubator funding’) and the influence that financiers exert on the incubators. The last two findings explore the role of the incubator in supporting incubatees to access finance (‘Findings relevant to incubatee funding’).

4.7.1 Incubator funding varies in source and structure

The first finding aligns closely to the reviewed literature. Aranha (2003) identified a broad range of “lead sponsors” that commonly act as finance providers to business incubators. These were broadly identified as universities/academia, communities, industrial entities,

governments, venture capitalists, consortiums, corporates, franchises, NGOs, cooperatives, and unions.

The group of finance providers identified by Aranha (2003) can be supplemented by those identified through the work undertaken by Chandra (2007) and Chandra and Chao (2016), who analysed incubator funding sources across the United States, China and Brazil.

The funders identified by Chandra (2007) and Chandra and Chao (2016) are seen in Table 27, which includes a column representing research extracted from participants of the study relating to funding sources of incubators in South Africa.

Table 27 – Funding comparison of incubators across countries

| Country | United States | China | Brazil | South Africa (Western Cape) |
|---|--|--|--|--|
| Business incubator funding sources identified | <ul style="list-style-type: none"> • Governmental grants (state, local, county) • Capital allocations via development agencies (federal, state, local) • Corporate sources • Chambers of Commerce • University support • Community foundations • Rental income • Service feeds | <ul style="list-style-type: none"> • Governmental funds (particularly real estate investments) • Rental income • Income generated from chargeable sources | <ul style="list-style-type: none"> • Governmental funds • Federal Agency (FINEP) • BNDES (Bank for Social Development) • Private sector funding • National incubation support programme | <ul style="list-style-type: none"> • Governmental funds • SEDA • Dti Incubation Support Programme • TIA • Banks • Rental income • Cash generated from equity investments • Corporate sources • University support • Donor agencies |

| | | | | |
|--|--|--|--|--|
| | <ul style="list-style-type: none"> • Cash generated from equity investments | | | |
|--|--|--|--|--|

Source: Chandra (2007); Chandra and Chao (2016); Author's Own

Table 27, supported by the research of Chandra (2007) and additional research by Chandra and Chao (2016), indicates that incubator funding mechanisms in the business incubation ecosystem in the Western Cape appear to closely replicate prevailing global structures.

An interesting insight emerging from the research findings is related to the transitional funding structures within the broad funding structures. Masutha and Rogerson (2014) noted that 82% of incubators in South Africa in 2013 were public sector driven through the activities of SEDA, however findings from this research show that only 50% of the incubator managers interviewed indicated receiving public sector funding at the time of the interviews being undertaken.

This is indicative of the trend identified by the incubator managers of an ongoing transition in funding. The trend represents a shift away from reliance on public sector funding to either a hybrid funding model or a self-sufficient funding model. This transition over time aligns to the view of Lewis, Harper-Anderson and Molnar (2011), i.e. that public agencies are key actors from a funding perspective during the initiation or feasibility stages of incubator establishment.

The first finding presents an opportunity for future research into the evolution of funding structures of business incubators in South Africa. This is based on evidence of a transition in business incubator funding sources taking place, with a shift from a public sector funding orientation towards an increasing reliance on funders in the private sector.

4.7.2 Funding to incubators is poorly co-ordinated

The second finding provides an insight into a topic that has not been extensively researched in South Africa, i.e. that “business incubation services offered by private incubation programmes

are not significantly better than or inferior to business incubation services administered through private incubation programmes” (Ntlamelle, 2015: 86).

During the primary data collection process, the participants were requested to provide feedback on how funding support to business incubators could be improved, with four recommendations emerging:

1. Alignment between public and private sector incubator financiers should be improved.
2. Private sector incubator financiers should be prepared to commit their funding for the long-term to enhance outcomes.
3. Public sector funding should be allocated to top performing incubators.
4. Public sector reporting requirements should be streamlined to allow incubators to focus on their core responsibilities.

Limited research in the South African context presents an opportunity for additional future studies to explore alignment between business incubators and financiers.

4.7.3 Funders influence the work of incubators

The primary aim of this research was to develop an understanding of how funding sources influence business incubators. The third finding confirmed that business incubators are influenced by their funding sources through the setting of objectives that align to the goals of their financiers.

All the incubator managers interviewed indicated that their financiers exert an influence on their incubators in some way or form. To enhance this analysis, it is useful to split financiers into two channels – public and private sector.

Public sector influence on business incubators

Masutha and Rogerson (2014) highlighted the fact that the SMME economy is a specific area of focus identified by the South African government for post-apartheid reconstruction and development. In particular, the objective of the government is to utilise the sector as a mechanism to support poverty alleviation and economic redress. Mbewana (2005) agreed with

this sentiment, highlighting that private sector sponsors of incubators are primarily interested in job creation and economic diversification.

This notion was also supported by SEDA (2018) and Tembe (2018), who noted redress of the economic profile of South Africa's economy as a component of the SEDA's operational mandate. Specific objectives in this regard include supporting BBBEE objectives, youth, women-owned businesses and people with disabilities. Regarding BBBEE, Ntlamelle (2015) commented that because of incubation programmes being geared towards incubating black-owned businesses, many incubators have little incentive to incubate non-black-owned businesses.

In the current study, incubator respondents who leveraged public sector funding indicated that their KPIs were set to meet socio-economic objectives. The participants acknowledged that in certain instances, pursuing such objectives may not have been aligned to the core objectives of the incubator in terms of identifying businesses with a high potential for long term success and impact.

Private sector influence on business incubators

Weiblen and Chesbrough (2015) found that corporate and independent funders can provide nascent business incubators with both funding and locational support. In the current study, private sector financiers were broadly criticised by incubator managers for their lack of commitment to the longevity of support that effective business incubation requires.

This lack of commitment can potentially be aligned to interest-maximisation and a tendency to focus on narrow mandates. Mbewana (2005: 6), in discussing private sector funding support to business incubators, noted that private sector sponsors are "primarily interested in property development; transferring innovative technology and invested opportunities in tenant firms."

Specifically, private sector financiers were found to influence incubators through the below:

- (i) Supply-chain orientation: setting KPIs aimed at producing incubatees that could fit into a corporate's supply chain. Although the incubator managers were broadly positive about the potential benefit for such a strategy, many indicated that the time

constraints for producing viable businesses set by the private sector financiers was too short.

- (ii) Marketing over substance: corporate financiers were also identified as providing funding to business incubators to create positive media and PR for the financier, rather than being genuinely committed to supporting long-term successful incubation interventions.

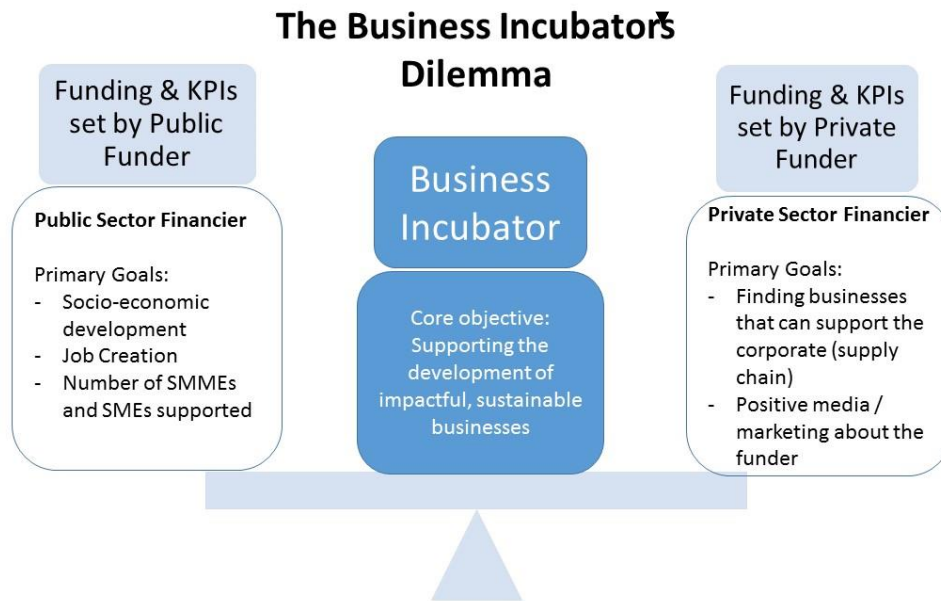
The business incubator's dilemma

Figure 5 summarises the research findings related to the influence of incubator funding sources in the South African context, presented as 'The Business Incubator's Dilemma'. Figure 5 demonstrates the challenge faced by business incubators when being influenced by financiers that want to achieve their own self-serving goals.

In many instances the incubator walks a tightrope to balance the core objective (supporting the development of impactful, sustainable businesses) with the demands of the financier. This view is corroborated by the work of *infoDev* (2015), which highlighted the importance of finding common ground between funders and incubators.

As a result, most of the participants interviewed reported that they regularly transition their funding models to enhance the operating climate by working with funders that are best aligned to the objectives of the incubator.

Figure 5 – The Business Incubator’s Dilemma



Source: Author's Own

The third finding indicated that business incubators are influenced by their funding sources. This presents opportunities for improving relationships between business incubators and incubator financiers to ensure alignment towards common goals, as well as future studies on the exploratory research undertaken in this study.

4.7.4 Bias in preferred funding sources for incubatees

The fourth finding leveraged the literature review to determine how business incubators assist their incubatees to access funding.

Work undertaken by the authors in Table 7 provided a basis for engaging participants regarding which support services are provided to assist incubatees to access finance. In addition the dti (2014) identified the following as channels of private sector support for SMEs in South Africa, were also considered: (i) angel investors; (ii) venture capital funds; (iii) private equity firms; (iv) banks; (v) crowdfunding platforms; and (vi) networking resources.

A breakdown of the funding support services offered by individual incubators is presented below in Table 28. These services are broadly classified as being provided on a proactive basis ('proactive'); on an ad-hoc or reactive basis ('Reactive'); or not provided by the incubator ('No').

Table 28 – Financial support services offered to Incubatees

| Incubator | Common Financial Support Services offered to Incubatees | | | | | |
|------------|---|------------|--------------------------|-------------------|-----------------------------|-------------------|
| | Public Funding Channels | | Private Funding Channels | | Additional Funding Channels | |
| | Governmental Grants | Soft Loans | Venture Capital | Linkages to Banks | Networking | Direct Investment |
| P1; Case A | Reactive | No | Reactive | Reactive | Proactive | Proactive |
| P2; Case A | Proactive | Reactive | Proactive | Reactive | Proactive | No |
| P3; Case B | No | Proactive | Proactive | Proactive | Proactive | No |
| P4; Case B | No | No | Reactive | No | Proactive | Proactive |
| P5; Case A | No | No | Reactive | No | Reactive | Reactive |
| P6; Case C | Proactive | Proactive | Proactive | Ad-hoc | Reactive | Proactive |
| P7; Case A | Reactive | No | Proactive | No | Proactive | No |
| P8; Case B | Proactive | No | Reactive | Reactive | Proactive | No |

Source: Author's Own

| Case Classification Key | |
|-------------------------|---------------------|
| Case A | Mixed funding |
| Case B | >50% private funded |
| Case C | >50% Public funded |

Considering Table 28 it is apparent that incubators in the sample across case categories do not prioritise linking incubatees to *all* potential funding channels on a proactive basis. This can be attributed to the incubators' need to align to and achieve funder-set KPIs, which are not necessarily oriented towards achieving financial outcomes for incubatees. As a result, incubators tend to maintain relationships with a wide range of potential incubatee funders, rather than remaining reliant on one or two specific funding channels for their incubatees.

Hattingh, McGregor and Ressel (2018) were of the view that, "Networking can be thought of as the true 'heart' of the Incubator" and a critical channel through which to assist incubatees to develop market access and source funding. The importance of networking as a channel for

market access was highlighted within the South African context by Khuzwayo (2015), who identified the importance of a networking support function offered by the incubator as a channel for providing market opportunities for incubated companies. Table 28 indicates that linking incubatees to finance opportunities through networking is the most common support service offered on a regular basis, according to the incubator managers interviewed.

Table 28 helps to illustrate that although incubators may show bias in their preference for linking incubatees to certain funding sources, at a broad level, incubators in South Africa do not follow a generic structure for linking incubatees to finance. The majority of incubatees interviewed reported feeling positive about the support received.

The fourth finding presents an opportunity for a practical self-analysis of funding support structures by business incubator managers. Sharing of practices and successes could encourage higher success rates in the process of sourcing funding for incubatees.

4.7.5 Mechanisms for supporting and tracking funding to incubatees are under-optimised

The fifth finding aligns to research relating to the importance of conducting monitoring and evaluation.

Hattingh et al. (2018) identified the monitoring and evaluation of business incubation programmes as being fundamental to the six pillars of successful incubation, and recommended a focus on monitoring the factors that underpin the growth of incubatee businesses, i.e. sales and job numbers.

Torun et al. (2018) noted in their comprehensive study of business incubator benchmarking that business incubation research: (i) lacks a common framework for performance evaluation; (ii) suffers from difficulty in the development of actual benchmarks; and (iii) has only recently shown an increase in focus on understanding the community effect of tenant firms.

Given the research findings, it is evident that: (i) incubator monitoring and evaluation lacks standardisation, making comparisons across incubators difficult; (ii) incubator monitoring and

evaluation is not easily accessible (particularly in the public domain in South Africa); and (iii) although most incubators reported undertaking monitoring and evaluation of their processes, a specific emphasis on tracking funding raised on behalf of incubatees is not regularly requested by financiers. Introducing such a structure would contribute to the provision of key information relating to performance linked to capital access. This aligns to the problem identified by Masutha and Rogerson (2014), who highlighted that access to capital remains one of the most significant challenges faced by start-up businesses and SMMEs.

The fifth research finding presents a considerable opportunity for future research into the monitoring and evaluation practices of business incubators in South Africa. This is particularly relevant to tracking successes in terms of linking incubatees to funding.

4.8 Conclusion

Five key findings emerged from the data gathered from participants during the research process, based on a grounding within 16 themes. Figure 4 presented a summary of these findings.

The key themes identified were then analysed by discussing their contributions to an understanding of the research question and sub-questions, before being linked to prior literature as presented in the Literature Review (Chapter 2).

Notable takeaways include that: (i) the South African funding incubation ecosystem bears similarity to international comparisons, with a decreasing prevalence of public sector funding support as incubators transition funding models; (ii) the business incubation funding ecosystem is poorly co-ordinated; (iii) funders influence the strategic intent of incubators, with a distinct difference existing in the South African context between public and private sector objectives (refer to Figure 5); (iv) a bias exists in funding channels utilised to seek support for incubatees, with a preference for utilising networking events to expose incubatees to financiers; and (v) monitoring and evaluation structures can be improved to include better monitoring of the support provided to incubatees when accessing finance.

5. Conclusion

5.1 Conclusion

The objective of this study was to explore how funding sources influence business incubators. This included placing a focus on understanding how funding sources influence business incubators by providing support services to assist incubatees to access finance. The research question and sub-questions have been presented below for reference:

1. How do funding sources influence business incubators?

Sub-questions:

2. How do incubators assist incubatees to access finance?
3. How effectively are the financial support services offered by business incubators being delivered to incubatees in practice?

The academic and practitioner literature review revealed that although literature pertaining to business incubation is extensive, a limited number of studies have been conducted on the influence of financiers in the context of business incubation. Several studies were identified that provided a platform for informing the basis of an exploratory study within the South African context (Chandra, 2007; Chandra & Fealey, 2007; Chandra, 2009; Chandra & Fealey, 2009; Chandra & Silva, 2012; Chandra & Chao, 2016).

A multiple case study methodology was selected for the study, utilising business incubators as cases classified according to their funding structure. Incubator managers and current or former incubatees constituted the units of analysis. Eight business incubator managers and ten current or former incubatees were interviewed. The business incubators were divided into three case categories, being 'mixed funded', 'private funded' and 'public funded'. The findings were analysed utilising a cross-case synthesis-based methodology that sought to shed light on both the research question and sub-questions.

Five key findings were found to be relevant to the research question and sub-questions, based on the 16 themes that emerged from the data. An important takeaway from the research was

that the key findings were applicable across cases, rather than only being prevalent within a specific case typology.

The findings of the research indicate that incubator funders do influence the activities of business incubators, both on a day-to-day and a strategic basis. In the South African context, business incubators grapple with delivering on the objectives set by funders which can be contradictory, i.e. public funders seek to achieve socio-economic outcomes, while private sector funders seek outcomes aligned to the objectives of their organisations.

Business incubators were found to be biased in their approach to sourcing funding for incubatees, with a predominately proactive approach being utilised when sourcing funding from private sector funding channels. Public sector funding channels as a route for raising incubatee funding are leveraged on a predominantly reactive basis. The most popular channels for sourcing funding are via hosting networking events to assist incubatees with access to financiers, and linking incubatees to venture capitalists.

Table 29 was developed to provide a short summary of the implications of the current study in terms of three key components: (i) Theory; (ii) Practical Interventions; and (iii) Policy.

Table 29 – Research implications

| Component | Research implications |
|-----------|---|
| Theory | <p>The study built upon previous theoretical frameworks utilised to explore the influence of funding sources on business incubators, leveraging the work of the authors referred to in Tables 1 and 7 in particular.</p> <p>Key implications arising from the research, based on the literature review and research findings, are the following:</p> <ul style="list-style-type: none"> • The topic of incubator funding within the South African business incubation research landscape is limited. • The study indicated that business incubator funding structures are, in general, opaque to public analysis. This implies an opportunity for additional research to generate more information on this topic. |

| | |
|-------------------------|--|
| | <ul style="list-style-type: none"> • In particular, the concept of influence within the business incubation landscape is under-explored. The current study has provided a strong platform for further country-wide research into this topic. • Future research into the topics identified above can be improved by including financiers as participants within the research process. |
| Practical interventions | <p>The research findings identified a range of practical issues or opportunities prevalent within the business incubation context that can be addressed or reviewed for intervention.</p> <p>Key implications arising from the research, based on the literature review and research findings, are the following:</p> <ul style="list-style-type: none"> • A lack of alignment exists within the ecosystem. Incubator financiers and incubators should explore the potential for co-development of strategy to respond to the current lack of alignment prevalent in the industry. • An over-reliance exists on supporting incubatees to access funding through certain funding channels. Incubator managers should analyse and improve structures for assisting incubatees in accessing finance, given an over-reliance on certain channels such as networking events. • An opportunity exists to build upon research in this area, to map out channels for funding and their usage by incubators. |
| Policy | <p>The study is relevant to policy developers, as practical recommendations were identified through the process of conducting research that could be factored into future policy development.</p> <ul style="list-style-type: none"> • The study implies that current policy in South Africa has enabled the establishment of a business incubator funding structure that closely resembles other established ecosystems such as the United States and Brazil. • The study found that monitoring and evaluation structures within the business incubation ecosystem are under-optimised. This implies that the tracking of support provided to incubatees can be improved. • Policy makers should consider: (i) introducing policies to enhance monitoring and evaluation of funding support provided |

| | |
|--|---|
| | <p>to businesses in the public sector; (ii) enhancing current policy to enable funding flows to business incubators.</p> <ul style="list-style-type: none"> • An opportunity to develop research that analyses monitoring and evaluation tools utilised by incubators in South Africa, to understand the extent to which monitoring and evaluation is applied effectively. |
|--|---|

Source: Author's Own

Recommendations to incubator financiers

The findings of the research indicate that incubator financiers in South Africa should place increased emphasis on ensuring strategic alignment to the incubator(s) they are funding. This includes defining a funding strategy that allows for a long-term commitment to support incubation cycles, and ensuring that goals set are aligned to both those of the incubator and other incubator financiers.

Incubator financiers should enhance efforts to understand the track record of incubators in assisting incubatees to access finance, as well as the alignment of such results to the goals of the financiers. If necessary, a specific KPI addressing this requirement should be requested to improve alignment between the financiers and the incubators.

Development financiers generally act as financiers of incubation ecosystems rather than direct financiers of business incubators. As a result, development financiers should create internal policy directives that require a review of current incubator funding partners, incubator objectives and incubatee graduation cycles.

Recommendations to incubator managers

When discussing how incubators can achieve success in South Africa, Hattingh et al. (2018) noted that, “An effective selection process is a prerequisite to cost effectiveness and achieving results”.

Hattingh et al. (2018) also commented that the concept of an effective selection process should be applied to all stakeholders, which should include: (i) determining the position of the incubator itself, focusing on the programme(s) being run by the incubator to understand which businesses are best suited to the programme(s) under consideration; (ii) understanding the agenda of the incubator donors (financiers) and their alignment to the incubator goals; and (iii) determining the suitability of incubatee applicants against the objectives determined in points (i) and (ii).

The process recommended is well-aligned to the findings of the research, which speak to the need for incubators to align internal policy objectives to financiers that share a similar long-term vision for the incubator. Incubators should also consider being more transparent about their funding models to assist financiers to improve alignment, and to support incubatees in selecting incubators that are best suited to their goals.

With regard to the improvement of monitoring and evaluation, incubators should also consider introducing a tracking metric (if the incubator is not measuring such information already) to demonstrate a track record of success to both financiers and incubatees, and to drive longer-term funding commitments from financiers.

Recommendations to incubatees

Current and former incubatees participating in the research were predominantly found to be satisfied with the support they had received from business incubators with regard to assistance with accessing finance. Incubatees also indicated that access to finance was one of multiple reasons for selecting an incubator, rather than the primary reason.

The research indicates that incubatees should carefully assess not only the service offerings of the incubator they are considering, but also the financiers of the incubator. Due diligence of this nature will assist incubatees to determine their fit in terms of the funding support capacity of the incubator and potential access to funder supply chains.

5.2 Recommendations for Future Research

Academic literature focusing on business incubation in South Africa is limited (refer to Table 2). It is hoped that this exploratory study will provide a platform for future research into the influence that financiers exert upon business incubators. Developing an in-depth understanding of influence and impact provides an opportunity to enhance effectiveness, both at the incubator level and at the point of provision of financing. A number of opportunities exist for future academic research, as described below.

Participant expansion

An opportunity exists to expand this analysis to include semi-structured interviews with incubator financiers. This will help the sector to further understand which factors drive the establishment of particular KPIs, as well as to what extent financiers attempt to align their objectives to those of the incubator.

Incubatee data collection methodology

An opportunity exists to expand the number of incubatee participants to strengthen the validity of data. Some incubators were not willing to disclose the contact details of their incubatees or provide introductions – a scenario also reported by Ntlamelle (2015).

An alternative data collection methodology could be utilised to reduce the potential for bias within the data set that may have been introduced by utilising a snowball sampling methodology of incubatees. Options could include convenience or random sampling methodologies as preferred methods.

Geographic expansion

An opportunity exists to expand the research to a pan-South African analysis, to understand if funder influence is affected by geographic location within South Africa. This expanded geographic approach could, in turn, be grown to a regional- and potentially continental-wide approach, with the objective of identifying funding conditions under which business incubators are most successful.

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APPENDIX A:

INFORMATION SHEET & CONSENT FORM – [Insert Name of Company]



Dear _____

I trust you are well.

My name is James Milne and I am conducting research towards a Master's Degree in Development Finance at UCT's Graduate School of Business. I am researching the role of funding on business incubation support services provided to incubatees and would like to invite you to participate.

The objective is to develop a deeper insight into factors in the funding ecosystem that may influence support outcomes by engaging with business incubator managers.

The research has been approved by the UCT Commerce Faculty Ethics in Research Committee. Please note that your participation in this study is voluntary. If you choose to participate, but wish to withdraw at any stage, you will be free to do so without negative consequence. However, I would be extremely grateful should you choose to participate in an interview, as your expert insights would contribute greatly to the richness of the research and potential findings.

Interviews will take place face-to-face or telephonically (including mediums such as Skype or Zoom) and will focus on (i) funding sources of your incubator; and (ii) support services provided by your incubator to incubatees to assist them in accessing finance.

Should you agree to participate in this interview – of not more than 40 minutes – the final report will be shared with yourself, with the expectation that through this research you will be able to gain value and insight into (amongst other things):

- Common business incubation funding sources and structures (global and local context)
- Whether business incubator funding sources affect the manner in which the incubator provides support to incubatees in terms of promoting access to finance
- Common support services offered by incubators to incubatees in accessing finance (and whether this service offering is affected by the incubators funding source)
- The extent to which incubators are in fact delivering the financial support service offering they indicate

Please let me know by return of email whether you would be willing to take part in this research through a face-to-face, video or telephonic interview. Please also provide your

permission to record the discussion for the purposes of the study. I would be glad to make arrangements to meet with you or give you a call at your soonest convenience.

Please note that the information you disclose will be held in the strictest confidence. We will neither publish, release, nor disclose any of the information on, or identifiable with, individuals or firms. Please also be advised that no costs would be incurred by you as an interviewee. If you have any questions or concerns about your participation, please feel free to contact my supervisor Xolisa Dhlamini - xolisa.dhlamini@gsb.uct.ac.za.

Please sign below to confirm your willingness to participate in the study per the information outlined above. I greatly appreciate your consideration and support.

Name of participant.....

Signature of participant.....

Date...../...../.....

APPENDIX B:

INTERVIEW PROTOCOL: INCUBATOR MANAGERS

How do funding sources of business incubators affect the support provided to incubatees in accessing finance?



Company: _____

Role: _____

Ethical Considerations:

- This research has been approved by the Commerce Faculty Ethics in Research Committee.
- Your participation in this research is voluntary. You can choose to withdraw from the research at any time.
- The questionnaire will take approximately 40 minutes to complete.

Should you have any questions regarding the research please feel free to contact the researcher: Mr. James Milne (084 834 3536).

Background Questions:

1. Briefly describe your job function and role within the organisation.
2. How long have you worked for your current organisation?

Interview Questions:

The following research questions have been split into three components in order to support answers that are relevant to the research question and sub-questions. The components are: (i) incubator funding source and structure; (ii) understanding the incubator (business model; service offering; financial service offering); (iii) impact of funding structures on market orientation.

Incubator Funding Source

1. How is your business incubator funded (examples: publicly-funded, privately-funded or a combination of the two)?
2. Please provide a breakdown of your incubator's funding sources by entity or organisation.

| Funding Source (Public/Private/Combination) | Entity/Organisation |
|--|----------------------------|
| | |
| | |
| | |

3. Please provide a breakdown of your incubator’s funding mix by funding source.

| Funding Source (Entity) | % of Total Funding |
|--------------------------------|---------------------------|
| | |
| | |
| | |

4. a) Do you believe the public sector provides adequate financial support for business incubators?
b) How do you believe the public sector could enhance funding support for business incubators?
5. a) Do you believe the private sector provides adequate financial support for business incubators?
b) How do you believe the private sector enhance funding support for business incubators?

Understanding the Incubator (Category; Service Offering; Financial Service Offering)

6. What type of business incubator do you operate? (Examples if respondent requires guidance: Technology Incubator; Mixed-use Incubator; Corporate Incubator; Venture Capital Incubator; University Incubator; Other.)
7. Please provide an overview of the broad service offering provided by your incubator to incubatees have been included below to give context:
- Help with business basics.
 - Networking activities among incubator clients.
 - Marketing assistance.
 - Help with accounting/financial management.
 - Access to capital and linkages to higher education/strategic partners.

As the study intends developing a deeper understanding of financial services support offered by business incubators in South Africa, the following section focuses on financial support services provided:

8. a) Please advise whether your business incubator offers any of the following services to incubatees:

| Financial Service | Offered by Incubator (Y/N) |
|--|----------------------------|
| Assistance in accessing governmental grants | |
| Assistance in arranging networking with financiers | |
| Linking incubatees to banks in order to access funding | |
| Linking incubatees to venture capital in order to access funding | |
| Linking incubatees to additional financiers in order to access funding (*please provide further background to the financier) | |
| Assistance in accessing soft-loans/reduced loan rates via government | |
| Direct investment in incubatees via the business incubator | |
| Other (please elaborate) | |

- b) Do you offer any additional financial support services to assist incubatees in accessing funding?
- c) Do you track the delivery of such services and their impact?
- d) If “yes”, are you able to share historical records that show how you have assisted incubatees in the past?
9. Do you consider financial support services to be an essential component of your service offering?
10. How could business incubators enhance the support they provide to incubatees in accessing finance?

The influence of funding sources on support provided to incubatees in accessing finance:

11. How do your funding sources impact/inform/influence the financial support services provided to incubatees?
12. How has your funding structure impacted your ability to support incubatees in gaining access to finance?

Thank you for your time!

INTERVIEW PROTOCOL: INCUBATEES

How do funding sources of business incubators affect the support provided to incubatees in accessing finance?



Company: _____

Role: _____

Ethical Considerations:

- **This research has been approved by the Commerce Faculty Ethics in Research Committee.**
- **Your participation in this research is voluntary. You can choose to withdraw from the research at any time.**
- **The questionnaire will take approximately 10 minutes to complete.**

Should you have any questions regarding the research please feel free to contact the researcher: Mr. James Milne (084 834 3536)

Interview Questions:

1. When selecting an incubator to locate your business in, how important was the ability of the incubator to link you to funding sources?
2. Did you ever consider the funding structure of the incubator itself, and how that may affect your own business objectives?
3. Did/Has XXX incubator provided you with linkages to funders?
4. Did/Has the support provided by XXX incubator in linking you to funders met your expectations?

Thank you for your time!

Interview Participant Breakdown

| Participant | Date | Approx. Duration | Interview Type | Incubator/ Incubatee | Job Title |
|----------------|----------|------------------|----------------|----------------------|--------------------|
| Participant 1 | 21.11.18 | 40 mins | Face-to-Face | Incubator | Incubator Manager |
| Participant 2 | 22.11.18 | 45 mins | Face-to-Face | Incubator | Incubator Manager |
| Participant 3 | 23.11.18 | 1h 35 mins | Face-to-Face | Incubator | Incubator Manager |
| Participant 4 | 26.11.18 | 40 mins | Face-to-Face | Incubator | Incubator Manager |
| Participant 5 | 27.11.18 | 40 mins | Face-to-Face | Incubator | Incubator CEO |
| Participant 6 | 28.11.18 | 30 mins | Face-to-Face | Incubator | Incubator CEO |
| Participant 7 | 07.12.18 | 25 mins | Telephonic | Incubator | Incubator Manager |
| Participant 8 | 19.12.18 | 30 mins | Face-to-Face | Incubator | Incubator Manager |
| Participant 9 | 18.02.19 | 4 mins | Telephonic | Incubatee | Founder and CEO |
| Participant 10 | 19.02.19 | 3 mins | Telephonic | Incubatee | COO |
| Participant 11 | 19.02.19 | 4 mins | Telephonic | Incubatee | Founder |
| Participant 12 | 20.02.19 | 4 mins | Telephonic | Incubatee | Managing Director |
| Participant 13 | 20.02.19 | 3 mins | Telephonic | Incubatee | CEO and Co-Founder |
| Participant 14 | 20.02.19 | 9 mins | Telephonic | Incubatee | CEO |
| Participant 15 | 25.02.19 | N/A | Written | Incubatee | Managing Director |
| Participant 16 | 26.02.19 | 7 mins | Telephonic | Incubatee | CEO |
| Participant 17 | 27.02.19 | 4 mins | Face-to-Face | Incubatee | Founder |
| Participant 18 | 14.04.19 | 5 mins | Telephonic | Incubatee | Founder |

APPENDIX C:

Example of utilising NVivo12 to develop initial codes for incubator manager respondents:

The screenshot shows the NVivo 12 Pro interface for a project named 'Masters Thesis.nvp'. The 'Nodes' list is displayed in a table format. The nodes are organized into a tree structure on the left, with 'Nodes' selected. The table columns are: Name, Files, References, Created On, Created By, Modified On, and Modified By. The nodes list includes various topics related to incubator funding and support.

| Name | Files | References | Created On | Created By | Modified On | Modified By |
|--|-------|------------|--------------------|------------|--------------------|-------------|
| A lot of money available in private sector | | 1 | 2019/01/22 8:56 PM | JBD | 2019/01/22 8:56 PM | JBD |
| Accessing funding for incubatees is a challenge for the Incubator | | 1 | 2019/01/15 7:17 PM | JBD | 2019/01/15 7:17 PM | JBD |
| Accessing governmental grants | | 6 | 2019/01/14 8:37 PM | JBD | 2019/02/04 7:12 PM | JBD |
| Accessing public sector funding is onerous | | 1 | 2019/01/14 8:26 PM | JBD | 2019/03/12 8:14 PM | JBD |
| Accessing soft loans via government | | 3 | 2019/01/14 9:48 PM | JBD | 2019/02/04 8:59 PM | JBD |
| Additional funding channels for incubatees | | 1 | 2019/01/15 8:05 PM | JBD | 2019/01/15 8:05 PM | JBD |
| Additional Public Sector funding mechanisms | | 2 | 2019/01/14 9:32 PM | JBD | 2019/01/14 9:33 PM | JBD |
| Additional support from Corporate Financiers | | 1 | 2019/01/22 9:04 PM | JBD | 2019/01/22 9:04 PM | JBD |
| Additional corporate funding would be beneficial to Incubators | | 1 | 2019/01/15 7:53 PM | JBD | 2019/01/15 7:53 PM | JBD |
| Aligning Incubator to Corporate objectives | | 1 | 2019/02/04 8:44 PM | JBD | 2019/02/04 8:44 PM | JBD |
| Alignment between incubator and financiers | | 2 | 2019/01/14 9:07 PM | JBD | 2019/01/22 9:07 PM | JBD |
| Application of public funding is poor | | 1 | 2019/01/15 7:00 PM | JBD | 2019/01/15 7:00 PM | JBD |
| Approach to Incubation | | 1 | 2019/02/04 6:32 PM | JBD | 2019/02/04 6:32 PM | JBD |
| Arranging networking with financiers | | 6 | 2019/01/14 8:38 PM | JBD | 2019/02/04 7:12 PM | JBD |
| Benefits of a Corporate funder to incubatees | | 1 | 2019/01/14 9:02 PM | JBD | 2019/01/14 9:02 PM | JBD |
| Benefits of University funding partner | | 1 | 2019/01/14 9:04 PM | JBD | 2019/01/14 9:04 PM | JBD |
| Business skills more important than finance | | 1 | 2019/01/22 9:06 PM | JBD | 2019/01/22 9:06 PM | JBD |
| Challenges hampering incubatee access to finance | | 1 | 2019/01/14 9:58 PM | JBD | 2019/01/14 9:58 PM | JBD |
| Channeling incubatees in line with funder mandates | | 1 | 2019/01/14 10:07 P | JBD | 2019/01/14 10:07 P | JBD |
| Companies sourcing funding from multiple government funding sources | | 1 | 2019/01/14 10:12 P | JBD | 2019/01/14 10:12 P | JBD |
| Complexity of Funding Structure for the Incubator | | 1 | 2019/01/14 10:05 P | JBD | 2019/01/14 10:05 P | JBD |
| Conflicting visions of Incubator Financiers | | 1 | 2019/01/14 10:06 P | JBD | 2019/01/14 10:06 P | JBD |
| Corporate commitment is not long-term | | 1 | 2019/01/15 5:45 PM | JBD | 2019/01/15 5:45 PM | JBD |
| Corporate Funder drives focus of Incubator | | 2 | 2019/01/14 8:34 PM | JBD | 2019/01/15 6:24 PM | JBD |
| Corporate funder influencing incubator objectives | | 1 | 2019/01/14 9:05 PM | JBD | 2019/01/14 9:10 PM | JBD |
| Corporate funder of Incubator beneficial to Incubatees | | 1 | 2019/01/22 9:09 PM | JBD | 2019/01/22 9:09 PM | JBD |
| Corporate funder seeks to onboard incubatees as customers in long term | | 1 | 2019/01/14 10:04 P | JBD | 2019/01/14 10:04 P | JBD |

Example of utilising NVivo12 to develop initial codes for incubatee respondents:

The screenshot shows the NVivo 12 Pro interface for a project named 'Masters Incubatee.nvp'. The 'Nodes' list is displayed in a table format. The nodes are organized into a tree structure on the left, with 'Nodes' selected. The table columns are: Name, Files, References, Created On, Created By, Modified On, and Modified By. The nodes list includes various topics related to incubatee experiences and funding.

| Name | Files | References | Created On | Created By | Modified On | Modified By |
|--|-------|------------|--------------------|------------|--------------------|-------------|
| Access to market | | 1 | 2019/04/17 6:49 AM | JBD | 2019/04/17 6:49 AM | JBD |
| Angel funders on board | | 1 | 2019/04/17 6:50 AM | JBD | 2019/04/17 6:50 AM | JBD |
| Importance of Exposure for Incubatee via Incubator | | 2 | 2019/03/27 3:51 PM | JBD | 2019/04/17 7:11 AM | JBD |
| Importance of Funding to incubatees | | 5 | 2019/02/23 3:51 PM | JBD | 2019/04/17 7:09 AM | JBD |
| Importance of incubator funding structure to incubatee | | 9 | 2019/02/23 3:53 PM | JBD | 2019/04/17 7:10 AM | JBD |
| Importance of linkages to funding for incubatees | | 6 | 2019/02/23 3:52 PM | JBD | 2019/04/17 6:48 AM | JBD |
| Improving incubator support services | | 3 | 2019/02/23 4:03 PM | JBD | 2019/03/27 3:54 PM | JBD |
| Incubatee analysis of incubator support in providing access to funding | | 7 | 2019/02/23 3:54 PM | JBD | 2019/04/17 7:11 AM | JBD |
| Incubator linking incubatee to financier | | 1 | 2019/02/23 3:52 PM | JBD | 2019/02/23 3:52 PM | JBD |
| Incubator linking incubatees to funding sources | | 3 | 2019/02/23 3:53 PM | JBD | 2019/01/17 6:51 PM | JBD |
| Incubator providing linkages to funders | | 1 | 2019/02/23 3:56 PM | JBD | 2019/02/23 3:56 PM | JBD |
| Incubator providing linkages to government fundersfor incubatees | | 4 | 2019/02/23 3:57 PM | JBD | 2019/04/17 7:07 AM | JBD |
| Incubator providing networking opportunities with funders | | 4 | 2019/02/23 3:56 PM | JBD | 2019/04/17 7:10 AM | JBD |
| Linkages to contacts that are not at the right level | | 1 | 2019/03/27 3:54 PM | JBD | 2019/03/27 3:54 PM | JBD |
| Linking incubatees to Venture Capital | | 1 | 2019/03/27 3:54 PM | JBD | 2019/03/27 3:54 PM | JBD |
| Orientation of incubators influenced by funders | | 2 | 2019/02/23 4:06 PM | JBD | 2019/02/23 4:07 PM | JBD |

Utilising a pivot table to analyse key themes:

201905272131 Consolidated Code Database ongoing updates.xlsx - Excel

James Milne

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | AA | AB | | | | | | |
|----|--|---------------|----|----|----|----|----|----|----|---|----|----|----|----|----|----|----|----|----|-------------|---|---|---|---|---|---|----|----|--|--|--|--|--|--|
| 1 | Count of Quotation | Column Labels | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Row Labels | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | Grand Total | | | | | | | | | | | | | | |
| 3 | Analysing funding support to Incubatees | 6 | 12 | 6 | 12 | 12 | 7 | 8 | 5 | 3 | 7 | 2 | 3 | 1 | 4 | 3 | 2 | 2 | | 98 | | | | | | | | | | | | | | |
| 4 | Challenges in linking Incubatees to Finance | 1 | 4 | 1 | 2 | 5 | 2 | | 3 | | | | | | | | | | | 18 | | | | | | | | | | | | | | |
| 5 | Importance of Incubatee Funding | 1 | 1 | 3 | 4 | 3 | | 1 | 1 | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | | | 29 | | | | | | | | | | | | | | |
| 6 | Improving Access to Funding for Incubatees | 3 | 5 | 4 | 5 | 2 | 1 | 4 | 1 | 1 | 4 | 1 | 1 | 1 | 2 | 1 | 1 | | | 38 | | | | | | | | | | | | | | |
| 7 | Improving Funding Support to Incubatees | 1 | | | | | | | 1 | | | | | | | | | | | 4 | | | | | | | | | | | | | | |
| 8 | Monitoring & Evaluation | 1 | 1 | 1 | 2 | 1 | 1 | 2 | | | | | | 1 | | 1 | | | | 9 | | | | | | | | | | | | | | |
| 9 | Common funding sources of Incubators | 8 | 7 | 16 | 6 | 11 | 11 | 15 | 3 | | | | | | | | | | | 77 | | | | | | | | | | | | | | |
| 10 | Alternative Funding Sources for Incubators | | 1 | 2 | 4 | 3 | | | | | | | | | | | | | | 13 | | | | | | | | | | | | | | |
| 11 | Incubator Funding Composition | 6 | 3 | 10 | 3 | 6 | 8 | 3 | 1 | | | | | | | | | | | 40 | | | | | | | | | | | | | | |
| 12 | Private Sector Funding to Incubators | 1 | 1 | 4 | 1 | | | 8 | 2 | | | | | | | | | | | 18 | | | | | | | | | | | | | | |
| 13 | Public Sector Funding to Incubators | 1 | 3 | 1 | | | | 1 | | | | | | | | | | | | 6 | | | | | | | | | | | | | | |
| 14 | Common Funding Support to Incubatees | 11 | 18 | 15 | 11 | 5 | 10 | 9 | 9 | 1 | 3 | 5 | 2 | 1 | 1 | 1 | 1 | 2 | | 105 | | | | | | | | | | | | | | |
| 15 | Additional Funding Channels for Incubatees | 5 | 7 | 6 | 6 | 2 | 3 | 6 | 4 | 1 | 2 | 1 | 1 | 1 | | | | | | 47 | | | | | | | | | | | | | | |
| 16 | Private Sector Funding to Incubatees | 4 | 6 | 6 | 2 | 2 | 2 | 2 | 4 | | | 1 | | 1 | | | | | | 30 | | | | | | | | | | | | | | |
| 17 | Public Sector Funding to Incubatees | 2 | 5 | 3 | 3 | 1 | 5 | 1 | 1 | 1 | 4 | | | | | | 1 | 1 | | 28 | | | | | | | | | | | | | | |
| 18 | Enhancing funding support to Incubators | 10 | 4 | 3 | 10 | 18 | 10 | 4 | 8 | | | | | | | | | | | 67 | | | | | | | | | | | | | | |
| 19 | Alignment between public and private sector Incubator funder | 2 | 4 | 2 | 3 | | | 3 | 6 | | | | | | | | | | | 20 | | | | | | | | | | | | | | |
| 20 | Improving private sector support to Incubators | 7 | 2 | 3 | 2 | 1 | | | | | | | | | | | | | | 15 | | | | | | | | | | | | | | |
| 21 | Improving public sector support to Incubators | 3 | 2 | 1 | 3 | 14 | 6 | 1 | 2 | | | | | | | | | | | 32 | | | | | | | | | | | | | | |
| 22 | Funder impact on the work of Incubators | 4 | 13 | 9 | 2 | 9 | 7 | 10 | 2 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 2 | 2 | | 70 | | | | | | | | | | | | | | |
| 23 | Alignment of Incubator and Funder | 6 | 6 | 2 | | | 3 | | | | | | | | | | | | | 18 | | | | | | | | | | | | | | |
| 24 | Impact of Funder on Incubator | 4 | 7 | 3 | 8 | 6 | 7 | | | | | | | | | | | | | 35 | | | | | | | | | | | | | | |
| 25 | Impact of Incubator Funding Source on Incubatees | | | | | | 1 | | 2 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 2 | 2 | | 17 | | | | | | | | | | | | | | |
| 26 | Grand Total | 39 | 54 | 49 | 41 | 55 | 45 | 46 | 25 | 6 | 7 | 14 | 7 | 4 | 3 | 6 | 5 | 5 | 6 | 417 | | | | | | | | | | | | | | |

Pivot Table Codes Sorted A-Z Incubator Respondents Incubatee Respondents

Select destination and press ENTER or choose Paste

100%