

An analysis of business incubation: A case study of Chemin Business Incubator in East London.

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ABSTRACT

This study delves into an in-depth analysis of business incubation practices, focusing on the case study of Chemin Business Incubator located in East London. The primary aim of this research is to explore how Chemin utilizes both tangible and intangible resources to support incubates throughout the incubation process. Through a meticulous examination of resource allocation strategies, this study seeks to uncover the impact of these resources on the success of incubated ventures. Adopting a qualitative research design, the study employed a single case study approach, which enabled the researcher to explore in depth the resource utilization and allocation processes at Chemin. The research was conducted within the interpretivist paradigm, focusing on understanding the experiences of incubates and the management team. Data were collected through semi-structured interviews with 15 participants, including five entrepreneurs who successfully completed the incubation process, five entrepreneurs currently undergoing incubation, and five members of the management team. Additionally, document analysis of official Chemin documents provided secondary data to supplement the primary data collected through interviews. The research objectives included analyzing the allocation of resources to meet enterprise development goals, exploring the role of resources in determining incubate success at different stages of incubation, and identifying instances where resource allocation posed challenges to incubate success. Thematic analysis was used to analyze the collected data, identifying key themes and patterns related to resource allocation and its impact on incubate success. The findings of this study shed light on the multifaceted nature of resource utilization within the business incubation context. Tangible resources, including physical assets and financial support, were found to be instrumental in providing startups with essential infrastructure and funding networks. Additionally, intangible resources such as mentorship, networking opportunities, and business advisory services emerged as critical factors in nurturing entrepreneurial talent and fostering innovation. Moreover, the study identified key areas where resource allocation strategies could be optimized to enhance incubate success. By addressing these challenges, business incubators like Chemin can further bolster their support for startups, contributing to economic development and entrepreneurial growth. Lastly, this research adds valuable insights to the field of business incubation, offering practical recommendations for enhancing the effectiveness of resource allocation strategies. Through a nuanced understanding of how tangible and intangible resources impact incubate success, this study aims to inform policymakers, incubator managers, and entrepreneurs alike, fostering a conducive ecosystem for startup growth and innovation.

Keywords: *tangible and intangible resources, business incubation, entrepreneurship.*

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CHAPTER 1: INTRODUCTION, SCOPE, AND CONTEXT

1.1 Introduction and Background of the Study

Business incubation has emerged as a vital component in fostering entrepreneurial growth and innovation within local economies. By providing a nurturing environment, resources, and support services, business incubators play a pivotal role in facilitating the development and success of startups and small businesses (Marimuthu & Lakha, 2015; Kim, Kim, & Song, 2020). In this context, the Chemin Business Incubator in East London stands as a testament to the significance of such initiatives in driving regional economic growth and fostering entrepreneurial ecosystems.

This study aims to provide a comprehensive analysis of the Chemin Business Incubator, delving into its structure, operations, and impact on the local business landscape. Situated in the vibrant city of East London, the incubator has been instrumental in nurturing budding entrepreneurs, fostering collaboration, and catalyzing innovation across various industries.

In this study the researcher delves deeper into the workings of the Chemin Business Incubator, it becomes apparent that its success stems from a multifaceted approach encompassing mentorship, access to funding, networking opportunities, and tailored support services. By offering a conducive environment where startups can thrive, the incubator acts as a catalyst for economic development, job creation, and knowledge transfer within the region.

Furthermore, this study explored the challenges faced by the Chemin Business Incubator, including resource constraints, market dynamics, and evolving technology landscapes. Through an in-depth examination of these challenges, valuable insights can be gleaned to enhance the effectiveness and sustainability of business incubation initiatives not only in East London but also globally.

In essence, the Chemin Business Incubator serves as a microcosm of the broader entrepreneurial ecosystem, illustrating the transformative power of strategic support mechanisms in nurturing innovation and driving economic prosperity. By analyzing its operations and impact, this case study seeks to shed light on the critical role played by business incubators in shaping the future of entrepreneurship and economic development in the digital age.

1.2 Research Context

Since the early 20th century, unemployment rates have been on the rise for both developed and developing countries (Akcomak, 2009; Lalkaka & Shaffer, 1999).

In efforts of compacting unemployment, governments across the globe have been encouraging entrepreneurship as an important solution to unemployment and economic growth (Lose & Tengeh, 2015; Marimuthu & Lakha, 2015). Globally, small, medium, and micro enterprises (SMMEs) are viewed as important contributors to economic growth, poverty alleviation, and job creation. SMMEs are however noted to experience high failure rates, this is the reality in developing countries like South Africa. In South Africa, it is estimated that 80 percent of SMMEs fail within the first 2-3 years (Lekhanya, 2015: 412).

In trying to decrease the failure rate of SMMEs, the concept of business incubation has been used as an initiative to help businesses survive the first critical years (Lose, 2016; Diedericks, 2015). Business incubators are organisations that help with the development of small and upcoming businesses by providing key services that range from office space, business training, access to industry networks, and key resources (Chiromo, Muyengwa and Makuvaza, 2014; Hughes, Ireland, & Morgan, 2007). Ayatse, et al., (2017: 4) define business incubation as being grounded in the concept of identifying the resources small businesses need to succeed. From this definition, business incubation is a strategic enabling factor that allows small businesses the ability to compete in industrial markets. Business incubation is seen as an initiative that helps increase the survival chances of start-up businesses through aiding at various levels (Lose, 2016). The core aim of business incubation is for small businesses to leave the process equipped to handle the markets (Bergek & Norman, 2008). Business incubators provide small businesses with key resources that help them survive and compete in industrial markets. It is against this backdrop that this research seeks to analyse how resources are allocated and used in the incubation process. In so doing, analysing the effectiveness of business incubation for small business survival.

In South Africa, the concept of business incubation first came about in 1995 through the “hives of industry” concept that was introduced by the Small Business Development Corporation (SBDC). The hives of the industry were an attempt to combine workstations to create a cluster of workshops. This was an attempt to address the barriers to entry faced by small businesses in South Africa the concept of "hives of industry" was an attempt to bridge the gap between large businesses and small and upcoming businesses (Buys and Mbewana, 2007; Masutha & Rogerson, 2014; Cullen, Calitz, & Chandler, 2014). After the concept of the hives of industry, the Department of Science and Technology (DST) introduced the concept of incubators as a tool to help South African small businesses (Dubihlela & Van Schaikwyk, 2014). Since then, business incubation has become a key tool in enterprise development in South Africa. In 2003, there were three incubators in the country, with 58 incubators in 2019 (Masutha, 2015).

However, since the concept is still new in South Africa, there are a few research studies that have unpacked business incubation (Buys & Mbewana, 2007; Lose, 2016; Masutha, 2015; Cullen, et al, 2014). Research studies have analysed business incubation within the South African context highlighted that the incubator model plays a crucial element in a successful incubation process (Buys & Mbewana, 2007; Chirambo, 2014; Choto, 2015; De Beer, 2012). However, some of these studies (Buys and Mbewana, 2017; Choto, 2015) have highlighted that some incubation programs have not helped in decreasing small business failures. According to Galawe and Hlatshwayo (2021: 105), the increasing rates of small business failure indicate that the notion of business incubation may not be as effective in meeting the needs of entrepreneurs. The current study is, then, an attempt to understand the gap between business incubation and the increasing failure of small businesses.

1.2.1 The Selected Case Study

The South African Chemical Technology Incubator (Chemin) is one of the incubators that have been established in South Africa under the Small Enterprise Development Agency's incubation program (Kavhumbura, 2014). This incubator focuses on supporting the early stages of technology-based businesses in South Africa's chemical industry. The incubation centre offers laboratory services, training facilities as well as infrastructure support. Chemin has incubation centres in Thembisa, Sedibeng, East London, and recently Mthatha. However, this research is primarily focusing on the East London centre. This incubator offers two incubation services to businesses. The first is low technology incubation, which is targeted at businesses involved in manufacturing chemical detergents, hair care, cosmetics, perfumes, and coatings. The business must also have the potential to grow at least R1 million turnover a year. The second incubation service is high technology incubation, which is targeted at projects with the potential to create high levels of employment and revenue. Both incubation services use the same method of incubation which comprises four stages namely, pre-selection, pre-incubation, incubation, and graduation. The East London incubator, which is the core focus of this research provides both services (Kavhumbura, 2014).

This study aims to analyse the Chemin Incubation model focusing on, how it is structured and how resources are used. However, the researcher intended to understand the effectiveness of the Chemin incubation model on the survival of its incubates.

1.2.2 The promotion of entrepreneurship and small business development in South Africa

In essence, the South African government has prioritized the promotion of entrepreneurship and small business development as key drivers of economic growth and job creation. One notable initiative in this regard is the National Incubation Support Programme (NISP), launched by the Department of Small Business Development (DSBD). The NISP aims to provide comprehensive support to small businesses through business incubation, offering financial assistance, infrastructure, mentorship, training, and networking opportunities. This program is designed to create an enabling environment for entrepreneurship and innovation, fostering the sustainability and competitiveness of small businesses across various sectors.

According to Msimango-Galawe and Hlatshwayo (2021), the NISP prioritizes historically disadvantaged individuals, youth, women, and people with disabilities, aligning with the government's objectives of promoting inclusive economic growth and addressing socio-economic inequalities. The program emphasizes collaboration between government, private sector stakeholders, academia, and civil society to build a vibrant entrepreneurial ecosystem in South Africa. In addition to the NISP, South Africa has implemented various other policies and initiatives to support business incubation and entrepreneurship at different levels of government. These initiatives include funding schemes, tax incentives, business development services, and regulatory reforms aimed at reducing barriers to entry and promoting innovation in the business sector Department of Small Business Development (DSBD).

In a nutshell, the NISP and related policies demonstrate the government's commitment to fostering a conducive environment for small business growth and development in South Africa. By providing targeted support to entrepreneurs and facilitating collaboration between stakeholders, these initiatives aim to unlock the potential of small businesses as engines of

economic growth and job creation.

The establishment of SMME support initiatives like Small Enterprise Development Agency (SEDA) and Khula Enterprise Finance have been the government's attempt to foster entrepreneurship, job creation and economic growth through SMMEs (Herrington, Kew, & Mwanga, 2017).

According to the IOL (2023) the failure rate for new businesses in South Africa is between 70-90 percent in the first 2 years. SMMEs (Small, Medium & Micro Enterprises) can fail for a variety of reasons, often stemming from challenges inherent to their size, limited resources, and competitive environments. Inadequate business planning, including a lack of clear goals, strategies, and market analysis, can lead to directionless operations and poor decision-making. Many SMMEs struggle with limited funding, making it challenging to cover initial startup costs, sustain operations, invest in growth, and weather unexpected expenses. Inaccurate financial records, improper cash flow management, and poor budgeting can result in misallocation of resources and an inability to meet financial obligations. Failure to effectively reach target customers, differentiate the business from competitors, and generate sales leads can lead to low customer acquisition and revenue.

The need for a more conducive environment where access to mentorship, funding and skills is provided has the potential to give small businesses a better chance of success (Mahadea & Pillay, 2008). These features, along with access to suitable workspaces, infrastructure and training as well as entree to valuable networks geared to developing businesses are what business incubators offer (Lalkaka, 2002; Dubihlela & Van Schaikwyk, 2014).

1.2.2.1. Decreasing the failure rate of SMME's.

To reduce the high failure rate of SMMEs, business incubation has been introduced as a strategy to support businesses during their crucial early years (Lose, 2016; Diedericks, 2015). Business incubators are organizations that assist small and emerging businesses by offering essential services, including office space, business training, access to industry networks, and vital resources (Chiromo, Muyengwa & Makuvaza, 2014; Hughes, Ireland, & Morgan, 2007). Ayatse, et al., (2017: 4) define business incubation as being grounded in the concept of identifying the resources small businesses need to succeed. From this definition, business incubation is a strategic enabling factor that allows small businesses the ability to compete in industrial markets. Business incubation is seen as an initiative that helps increase the survival chances of start-up businesses through aiding at various levels (Lose, 2016). The core aim of business incubation is for small businesses to leave the process equipped to handle the markets (Bergek & Norman, 2008). Business incubators provide small businesses with key resources that help them survive and compete in industrial markets.

1.2.2.2 Evolution of Business Incubation: The South African Context

In South Africa, the idea of business incubation was first introduced in 1995 through the "Hives of Industry" initiative launched by the Small Business Development Corporation (SBDC). This approach aimed to group workstations together to form clusters of workshops, helping to overcome the barriers to entry faced by small businesses. The "hives of industry" concept sought to close the gap between large corporations and emerging small businesses (Buys & Mbewana, 2007). Since

then, business incubation has become a key tool in enterprise development in South Africa.

Where in 2003, there were three incubators in the country to 58 incubators in 2019. This current section of this chapter will review the development of business incubators in South Africa.

During the 1990s, the Department of Science and Technology (DST) introduced the concept of incubators as a tool to help South African small businesses (Dubihlela and Van Schaikwyk,2014).

The implementation of business incubation in South Africa was further seen with the establishment of the GODISA intervention programme in 2000. The GODISA programme was birthed through the merger of various technology transfer centers. The GODISA programme states that its core objective is to “establish technology business centers such as incubators, innovation centers, and technology demonstration centers to accelerate the development of technology- rooted small enterprises (Kavhumbura, 2014). In 2006, the Department of Trade and Industry (DTI) established the SEDA Technology Programme (STP). The core objective of STP was to strengthen government commitments to economic growth and job creation. STP set out to do this by creating SMME support structures. STP has three core functions, business incubation, quality assurance, and technology transfer division (Kavhumbura, 2014; Ndabeni, 2008). The business incubation division focuses on creating new business incubators and supporting existing ones. The quality assurance division focuses on the quality and assessment of start-up companies. Technology transfer provides the technology needed to help SMMEs. This study is concerned with the business incubation division because it is the core focus of this paper.

In 2012, DTI created the Incubation Support Programme (ISP). The ISP was created with the objective of creating successful incubators that would ensure SMMEs can become key economic players (Ndabeni, 2008). The ISP is rooted in the belief in public-private partnerships. The South African government has highlighted the role big businesses need to play in partnering with SMMEs through skills transfer, supplier development, and marketing opportunities. According to the DTI (DTI,2012), partnerships between the private and public sector are a critical component in ensuring the survival of upstarting businesses. The ISP was created as a 10-year programme with the hopes of creating 250 incubators in South Africa.

Business incubation processes can have a significant positive impact on Small, Medium, and Micro Enterprises (SMMEs) by providing a supportive environment, resources, and guidance that foster growth, sustainability, and success. Incubators often provide SMMEs with access to resources they might not have on their own, such as office space, equipment, technology, and facilities. This lowers the initial costs for startups and enables them to focus their limited resources on core business activities. Incubators offer mentorship and guidance from experienced professionals, entrepreneurs, and industry experts. This advice helps SMMEs make informed decisions, avoid common pitfalls, and develop a strategic approach to growth. Business incubation programs facilitate networking with other startups, established businesses, potential clients, investors, and industry partners. These connections can lead to collaborations, partnerships, and increased visibility.

1.2.3 Chemical Technology Incubator (Chemin)

The South African Chemical Technology Incubator (Chemin) is part of the Small Enterprise Development Agency's incubation program, supporting early-stage technology businesses in the country's chemical industry (Kavhumbura, 2014). Chemin provides laboratory services, training facilities, and infrastructure support, with centers in Thembisa, Sedibeng, East London, and recently Mthatha. This research focuses on the East London center, which offers two types of incubation services (Kavhumbura, 2014).

The first is low-technology incubation for businesses manufacturing chemical detergents, hair care products, cosmetics, perfumes, and coatings, with a growth potential of at least R1 million in annual turnover. The second is high-technology incubation for projects capable of generating significant employment and revenue. Both services follow a four-stage process: pre-selection, pre-incubation, incubation, and graduation (Kavhumbura, 2014).

Msimango-Galawe and Hlatshwayo (2021) conducted a review of the literature regarding South African business incubators and their contribution to mitigating SMME's failure rates. Their analysis underscored the discrepancy noted in the literature between the services offered by business incubators and the genuine requirements of SMMEs. (Msimango-Galawe & Hlatshwayo, 2021). SMMEs often require support in accessing finance and markets, while business incubators primarily offer office space and general assistance services.

Additionally, the review highlights the limited effectiveness of business incubators in significantly reducing SMME failure rates at the national level (Msimango-Galawe & Hlatshwayo, 2021). Despite some improvements observed in individual SMME's, the overall impact remains modest, suggesting the need for more targeted interventions.

Moreover, the literature underscores the importance of conducting more empirical research to accurately measure and quantify the effectiveness of business incubators in addressing SMME's failure rates (Msimango-Galawe & Hlatshwayo, 2021). While anecdotal evidence exists of improvements in individual SMMEs, comprehensive studies linking business incubator support to broader changes in the country's SMME's landscape are lacking.

Finally, these challenges highlight the need for aligning business incubator services with the specific needs of SMMEs, rigorous research to evaluate effectiveness, and targeted interventions to support SMME growth and sustainability in South Africa.

SMMEs play a crucial role in driving economic growth, job creation, and innovation in many countries worldwide (Audretsch & Thurik, 2001). However, SMMEs often face numerous challenges, including limited access to resources, lack of business skills, and insufficient market opportunities (Brush et al., 2001). To address these challenges and support SMMEs, various incubation programs have been implemented globally, aiming to provide tailored support, training, and resources to entrepreneurs.

Successes of Incubation Programs:

Incubation programs have been successful in fostering entrepreneurship and supporting the growth of SMMEs in different industries. The Chemin Annual Report Financial Year 2020/21 highlights several successes achieved through its incubation programs:

- **Graduation Events:** The report documents graduation events where SMMEs completed training programs, indicating successful skill acquisition and readiness for market entry (Chemin Annual Report Financial Year 2020/21).
- **Partnerships and Collaborations:** Successful collaborations with universities, training institutions, and funding bodies have provided SMMEs with access to critical resources, funding, and training opportunities (Chemin Annual Report Financial Year 2020/21). Such partnerships enhance the effectiveness of incubation programs by leveraging external expertise and resources.
- **Training and Workshops:** The provision of training programs and workshops covering various aspects of business management, marketing, and quality control demonstrates the commitment to enhancing SMME capabilities and competitiveness (Chemin Annual Report Financial Year 2020/21). Increased participation in these programs reflects SMEs' willingness to learn and adapt to market demands.

Challenges:

Despite the successes, incubation programs face challenges and limitations that may hinder their effectiveness:

- **Financial Constraints:** The postponement of training programs due to financial challenges faced by partnering municipalities underscores the vulnerability of incubation initiatives to funding constraints (Chemin Annual Report Financial Year 2020/21). Limited financial resources may limit the scale and reach of support provided to SMEs.
- **COVID-19 Pandemic:** The impact of the COVID-19 pandemic on SMMEs and their incubation programs cannot be overlooked. Restrictions, economic disruptions, and supply chain challenges may have exacerbated the difficulties faced by SMEs, affecting their participation and success in incubation initiatives (Chemin Annual Report Financial Year 2020/21).

Intrinsically, incubation programs play a vital role in supporting SMMEs by providing them with essential resources, training, and mentorship to overcome challenges and thrive in competitive markets. While these programs have achieved notable successes in empowering SMEs, they also face challenges such as financial constraints and the impact of external factors like the COVID-19 pandemic. Addressing these challenges requires continued collaboration, innovation, and investment in incubation initiatives to ensure the sustained growth and success of SMMEs.

The Chemin Incubator, operating in South Africa, aims to support the growth and development of small and medium-sized enterprises (SMMEs) within the chemical industry. As outlined in the Chemin Annual Report for the 2022/23 financial year, the organization provides a range of services and resources to assist entrepreneurs in establishing and expanding their businesses in this sector.

Successes:

- **Business Incubation:** Chemin has successfully incubated numerous SMEs in the chemical industry, offering them access to essential infrastructure, equipment, mentorship, and business development services. This support structure enables startups

to establish themselves and navigate the challenges of starting a business (Chemin Annual Report, 2022/23).

- **Skills Development:** The organization conducts various training programs and workshops designed to equip entrepreneurs with the necessary skills and knowledge required to thrive in the chemical industry. These initiatives help enhance the capabilities of SMEs and contribute to their long-term success (Chemin Annual Report, 2022/23).
- **Partnerships:** Chemin collaborates with government agencies, educational institutions, industry associations, and other stakeholders to create a supportive ecosystem for SMEs. These partnerships enhance access to resources, expertise, and market opportunities, thereby facilitating the growth of startups in the chemical sector (Chemin Annual Report, 2022/23).
- **Market Access:** Chemin plays a crucial role in facilitating market access for SMEs by connecting them with potential customers, investors, and industry players. This exposure enhances the visibility of startups and increases their chances of securing contracts and partnerships (Chemin Annual Report, 2022/23).
- **Entrepreneurial Development:** Beyond technical skills, Chemin focuses on nurturing an entrepreneurial mindset and capabilities among its incubates. This holistic approach prepares entrepreneurs to navigate challenges, identify opportunities, and drive innovation within the chemical industry (Chemin Annual Report, 2022/23).

Challenges:

- **Limited Resources:** Similar to other incubators, Chemin may encounter challenges related to limited funding, staff capacity, and infrastructure. These resource constraints may hinder the organization's ability to scale its operations and reach a larger number of SMMEs (Chemin Annual Report, 2022/23).
- **Market Dynamics:** The chemical industry is susceptible to market fluctuations, regulatory changes, and technological advancements. These factors pose challenges for SMEs, impacting their competitiveness and profitability. Chemin must adapt its support services to address evolving market dynamics and ensure the sustainability of incubated startups (Chemin Annual Report, 2022/23).
- **Graduation Rates:** While Chemin may successfully incubate numerous startups, not all of them may graduate from the program or achieve long-term sustainability. Factors such as market viability, managerial capabilities, and access to funding may influence the graduation rates of SMEs. Tracking and improving graduation rates are essential for evaluating the effectiveness of the incubation program (Chemin Annual Report, 2022/23).
- **Variable Incubates Numbers:** The exact number of incubates that have gone through Chemin's program may vary over time. This variability reflects the dynamic nature of entrepreneurship and the organization's ability to attract and retain SMMEs in its incubation program (Chemin Annual Report, 2022/23).

To sum up, Chemin Incubator has achieved notable successes in supporting SMMEs in the chemical industry, but it also faces challenges and limitations inherent in the incubation process. Addressing these challenges requires ongoing collaboration, innovation, and adaptation to ensure the continued growth and success of SMMEs within the sector.

1.3. Research Aim and Objectives

1.3.1 Broader aim

The primary goal of this research was to ascertain how the Chemin Business incubator used tangible and intangible resources to support incubates during the incubation process. To achieve this, the following objectives guided the study:

1.3.2 Specific objectives

- To analyse how Chemin allocated its resources to meet enterprise development goals.
- To explore how resources (tangible and intangible) allocated at different incubation stages (pre-incubation and incubation processes) determined to incubate success.
- To explore instances where resource allocation hindered incubate success.

1.4. Chapter Overview

This section provided an overview of the chapter layout followed in this research study.

Chapter One – Introduction: This introductory chapter provided the foundational background to the study. It explained the research context and situated the study within the South African business incubation field.

Chapter Two – Literature Review: This chapter explored literature related to business incubation and SMME survival. It also discussed the theoretical framework that guided the study.

Chapter Three – Research Methodology: This chapter explains the chosen methodological framework used to answer the guiding research questions. It outlined the research paradigm and procedures followed to collect the necessary data.

Chapter Four – Findings and Results: This chapter analyzed and presented the research findings according to the research objectives.

Chapter Five – Discussion: This chapter discussed the research findings within the context of the reviewed literature and the chosen theoretical framework.

Chapter Six – Conclusion: The final chapter provided a summary of all the chapters and tied the thesis together. It also offered key recommendations based on the findings.

1.5. Conclusions

This first chapter of the research introduced the concept of business incubation within the South African context. The chapter outlined the research context and the chosen case study. The following chapter provides a review of the literature on business incubation.

CHAPTER 2: A REVIEW OF THE LITERATURE

2.1. Introduction

This chapter provides a systematic literature review on current business incubation and incubates literature. The core focus is on understanding the ideas behind business incubation, the dominant models of business incubation, and studies that have analysed business incubation. Furthermore, this chapter seeks to position the current study within business incubation research by identifying current gaps within the field.

2.2 Defining Business Incubation.

Business incubators are organizations that support the growth of small and emerging businesses by offering essential services such as office space, business training, access to industry networks, and vital resources (Hughes, Ireland, and Morgan, 2007). According to Ayatse et al. (2017:4), business incubation involves identifying the resources needed for small businesses to succeed. This makes business incubation a strategic enabler that helps small businesses compete in industry markets. It is seen as an initiative that enhances the survival chances of start-ups by providing support at various stages (Lose, 2016). The primary goal of business incubation is to prepare small businesses to successfully navigate market challenges.

The European Union (EU) views business incubation as “an organisation that accelerates and systematizes the process of creating successful enterprises by providing them with a comprehensive and integrated range of support, including incubator space, business support services, clustering, and network opportunities” (Akcomak, 2009). The definition provided by the EU is similar to that provided by United States National Business Incubation Association (NBIA). The NBIA views business incubation as “an economic development tool designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services”. The success of entrepreneurs is determined by the rate of survival of small businesses after the incubation process.

The incubation concept is rooted in achieving socio economic objectives like new job and business creation, economic growth through entrepreneurship, and the transfer of skills from key industry players to smaller businesses. As such, this research adopts the definition provided by the NBIA.

2.3. The evolution of business incubation models

The concept of business incubators was practically seen in developed countries like the US and the United Kingdom in the late 1950s. the initial idea behind these first incubators (as seen in the image below) was to help businesses with infrastructure needs. The first model of incubation was driven by the goal of decreasing the operating expenses of start-ups allowing them time to focus on their core activities (Bergek and Norman, 2008). These traditional incubators provided startups with physical office space, shared services, and access to basic resources. The focus was on cost reduction, networking, and providing a supportive environment for fledgling businesses.

The following image is a visual representation of the conceptual framework that will guide this study.

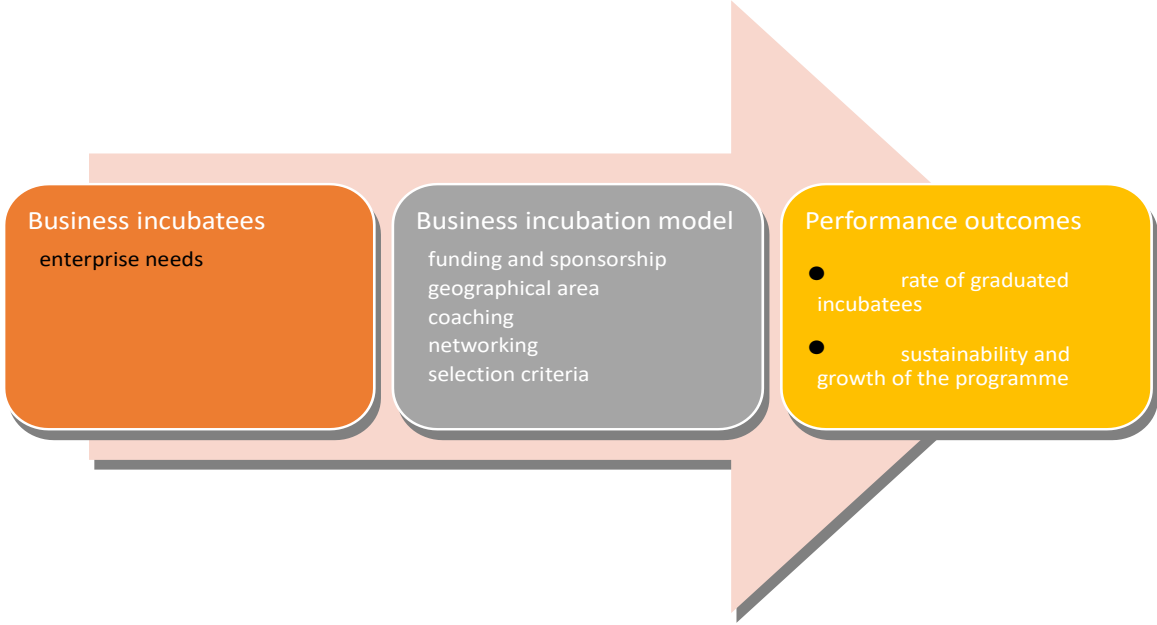


Figure 2.1: Conceptual framework guiding research.

The reviewed literature has shown that basic resources are required for business incubation to be successful. For example, infrastructure needs (tangible resources) as well as business training (intangible resources). These basic resources are crucial in ensuring that business incubates finish the incubation process. Incubates enter incubation programs with the expectation of receiving the correct resources to grow their business. To understand the effectiveness of the Chemin incubation model, the first part of this research is to understand the business incubates resource expectations and needs.

In addition, for successful incubation, services like government financing and access to networks and information are important throughout the incubation process. A Resource-Based Theory (RBT) lens provides an opportunity to access the external resources needed to make the incubation process successful (Sung & Park, 2018). Furthermore, the internal management practices of an incubator determine the quality of service offered by the incubator.

However, this model of incubation was soon critiqued for its neglect of knowledge-based services (Hackett & Dilts, 2004). The argument was that some entrepreneurs may not have the necessary skills to run a business, as a result, infrastructure alone is not enough to ensure success. As such, the second-generation incubation model was an attempt to add knowledge-based and learning services to the incubator model. Incubators thus introduced training and mentoring services to incubates in efforts to increase the technical skills of running a business (Al-Mubarak & Busler, 2010). The addition of knowledge support in business incubation resulted in governments promoting it as a method of small business support. Furthermore, as the internet became more prevalent, virtual incubators appeared. These models focused on providing online resources, mentoring, and networking opportunities. Virtual incubators allow startups to access support remotely, reducing the need for a physical presence.

The third generation of the incubation model started in the early 2000s, with the inclusion of systematic links to external stakeholders. The third-generation business incubation model thus comprises access to technological, professional, and financial agents, networking support facilities, and access to technology. The image below is a visual representation of the evolution of the incubator model.

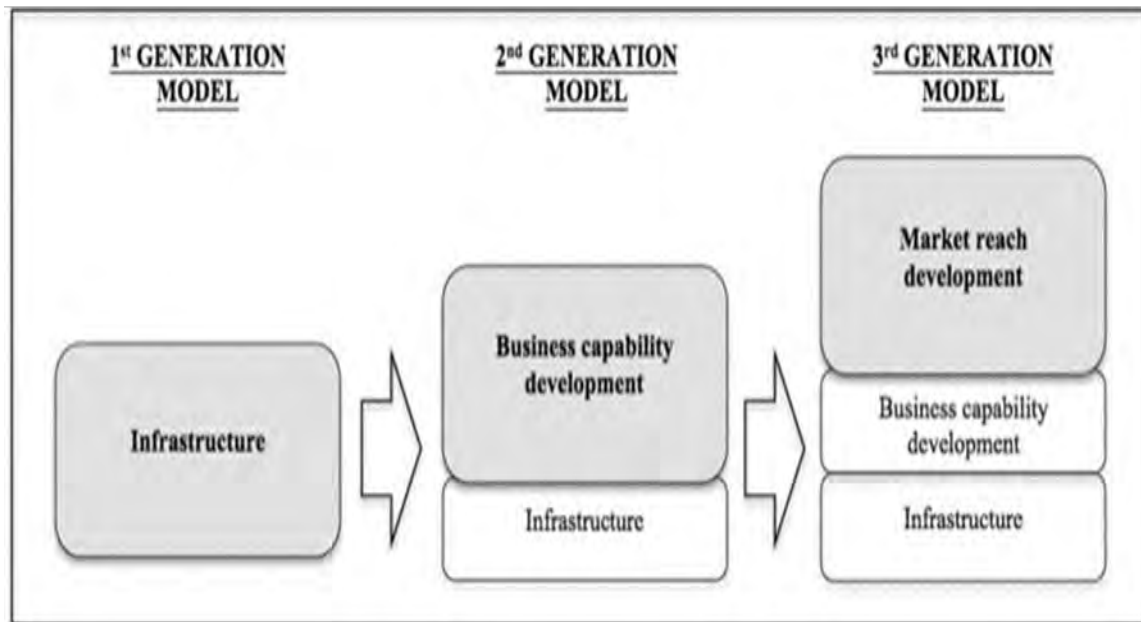


Figure 2.2: Image sourced from Akcomak in 2009

The above image (Figure 2.2) depicting the evolution of the incubator model shows that the functions of incubators have expanded from providing infrastructure to including support services like training and coaching (Khalid, Gilbert & Huq, 2012).

The evolution of business incubation models reflects the dynamic nature of entrepreneurship and the changing needs of startups (Smith & Jones, 2023).

Different models have emerged to cater to diverse industries, technologies, and entrepreneurial objectives, enabling startups to access tailored support and resources on their journey to success (Brown et al., 2022).

According to Bergek and Norman (2008), business incubators differ based on core goals, ownership, funding, management, the kind of business model taken, and the kind of incubates. They further state the four dominant incubation types as:

- Non-specialisation incubators- these kinds of incubators help support businesses from various industries with the core goal of improving SMME development.
- Specialised incubators- these kinds of incubators focus on specific industries and industry activities with the main goal of supporting technical development.
- Sector-focused incubators- these types of incubators focus on providing support to specific sectors, for example, agriculture or manufacturing.
- Virtual incubators- these types of incubators focus on providing virtual/online business support services.

The incubation process is characterised by four equally important stages of incubation (Hausberg & Korreck, 2018). The first stage is the pre-incubation stage, where businesses are assisted to create and implement their business ideas (Buys & Mbewana, 2007). The second stage is the actual incubation, where a business is provided with all the required support services to ensure they can compete in their various markets. The third stage of business incubation is considered the post-incubation stage, where companies must now adapt to outside business. Follow-up Stage, in this final phase, the incubator continues to provide mentorship, networking opportunities, and additional support to ensure long-term success and sustainability for the businesses.

2.3.1 The Function of a Business Incubation

A business incubator is a specialized program or facility designed to nurture and support the growth of early-stage startups and small businesses (Smith & Johnson, 2019).

These programs provide a range of resources, services, and support to help entrepreneurs and their ventures succeed (Smith & Johnson, 2018). The main function of a business incubator is to accelerate the development and success of startup companies (Rogerson, 2017). According to Rogerson (2017), incubators aid in areas such as business planning, market research, product development, and branding. They help startups refine their value proposition, identify target markets, and create actionable business plans.

Similarly, Lose and Tengeh (2015), Albort-Morant and Oghazi (2016), and Aernoudt (2004) noted that incubators offer physical workspace, such as office spaces, labs, and shared facilities, where startups can operate and collaborate. This helps startups avoid the high costs of setting up their infrastructure and provides a conducive environment for innovation. Experienced mentors, industry experts, and successful entrepreneurs often provide guidance and advice to incubator participants (Brown & White, 2019). This mentorship helps startups navigate challenges, make informed decisions, and refine their business strategies.

Many incubators offer access to funding opportunities, either through direct investment, introductions to investors, or assistance in preparing funding proposals (Smith, 2020). This can be crucial for startups seeking capital to grow their businesses (Johnson & Brown, 2018). Incubators facilitate networking events, workshops, seminars, and conferences where startups can connect with fellow entrepreneurs, investors, potential clients, and industry experts (Jones et al., 2019). These networking opportunities can lead to collaborations, partnerships, and market insights (White, 2017). Lastly, business incubators play a vital role in fostering innovation, supporting entrepreneurship, and contributing to economic development by nurturing startups and helping them become viable and sustainable businesses (Robinson & Garcia, 2021).

2.4 Prior Incubation studies Measuring the performance of business incubation.

Measuring the performance of a business incubation program is essential to assess its effectiveness and make informed decisions for improvement. Business incubators typically aim to help startups and early-stage companies succeed by providing various resources, guidance, and support. Due to the expanding market interest in the business incubator phenomena, it has been difficult for researchers and practitioners to define appropriate performance measures for business incubation.

Allen and McCluskey (1990) tried to create a useful metric for judging business incubators in their study. In this study of 127 business incubators, occupancy, employment produced, and enterprises graduates were determined to be reliable indicators of incubator success. Lalkaka (1996) put up eight crucial criteria for measuring BI performance. These include creating the goals and choosing the sponsor, developing connections with professional and business communities, encouraging creativity through effective facility planning, identifying and choosing the companies with the best chances of surviving and growing, leveraging policy and legislative support, assembling a dynamic management team, adding value through offering high-quality services, and mobilizing finance for both BIs and other businesses. Phillips (2002) noted that when comparing various incubator types in the US, sales, the total number of registered patents and applications, as well as survival rate, were determined to be relevant measures for performance. This section will discuss each of these identified indicators.

Business Incubators (BIs) serve as pivotal entities offering strategic support to nascent ventures, aiming to enhance their prospects of success and mitigate potential failures (Hackett & Dilts, 2004b; Adegbite, 2001; Schutte & Direng, 2019). These entities are globally acknowledged as indispensable instruments for fostering entrepreneurship and technological innovation, particularly at the SME level (Adegbite, 2001; Schutte & Direng, 2019). BIs encompass a comprehensive suite of services, facilities, and mechanisms geared towards enhancing SME productivity, facilitating access to financing and markets, and fostering technological advancement (Karim, 2017; Meyer et al., 2016). The providers of business incubation services include specialized government agencies, private corporations, non-profit organizations, and business associations, collectively referred to as business development service providers (BDSPs) (Hausberg & Korreck, 2018).

BDSPs, accelerators, and incubators are often used interchangeably within the South African context, although conceptual distinctions exist (Bergek & Norrman, 2008; Meyer et al., 2016; Pompa, 2013). This study employs the term "business incubators," which is widely recognized and understood.

Incubators function as nurturing environments for fledgling firms, guiding them from inception to sustainable, thriving businesses (Adegbite, 2001; Aernoudt, 2004; Bergek & Norrman, 2008; Hackett & Dilts, 2004a). Typically, start-ups graduate from incubators within one to five years, having benefited from a range of support services, including accommodation, administrative amenities, business management expertise, legal guidance, marketing assistance, and access to funding networks (Cohen, 2013; Hackett & Dilts, 2004b).

Incubators closely monitor the progress of their incubates, aligning their performance with predetermined business plans to foster financial autonomy (Adegbite, 2001). Accelerators, on the other hand, offer intensive, short-term programs designed to accelerate the growth of ventures, typically lasting around three months (Cohen, 2013). In addition to providing seed capital, workspace, and mentoring, accelerators offer invaluable networking opportunities with

industry experts and potential investors, culminating in public pitch events showcasing graduates' businesses (Cohen, 2013).

Small business failure is one of the biggest challenges faced by developing countries, and business incubators have been touted as a solution to reducing the failure rate of these small and medium-sized enterprises (SMMEs) (Msimango-Galawe & Hlatshwayo, 2021).

Thus, the number of business incubators has escalated worldwide, including in South Africa (Msimango-Galawe & Hlatshwayo, 2021).

Analysis of existing literature highlighted the common needs driving SMEs to engage in Business Incubators (BIs) programs, including assistance with business strategy, access to finance and markets, and personnel training and development, offer valuable support to small businesses (Centre for Global Solutions and Sustainable Development, 2018). South Africa hosts various BI models, ranging from basic infrastructure provision to comprehensive business support, virtual assistance, and market access (C4G, 2018). Understanding these BI models and SMME requirements is crucial for tailoring solutions to foster SMME growth and reduce failure rates.

2.4.1 Survival rates

According to Mokgoko (2015), one of the main ways to measure the success of business incubation is by evaluating the survival and graduation rates of firms. Survival rates refer to the percentage of businesses that continue to operate beyond the critical early years, demonstrating their ability to sustain themselves in the market. Graduation rates indicate the number of firms that successfully exit the incubation program and transition into independent, self-sufficient operations. High survival and graduation rates suggest that the incubation program has effectively equipped firms to thrive in competitive markets. He states that higher survival and graduation rates suggest that the incubation program has effectively supported firms in their early stages. However, Mokgoko (2015) conducted a comprehensive analysis of various business incubation programs, revealing that those with higher survival and graduation rates typically offer a holistic range of support services to participating firms. These services often include mentorship, access to finance, networking opportunities, and tailored training programs (Mokgoko, 2015). Furthermore, his research highlighted that successful incubation programs foster an environment conducive to innovation and growth, enabling startups to overcome common challenges such as lack of resources and market access (Mokgoko, 2015).

Recent research by Luukkonen, Deschryvere, and Bertels (2020) delved into the survival rates of startups within business incubators, emphasizing the role of tailored support mechanisms in fostering their longevity. Their study revealed that incubated firms that receive personalized mentoring and guidance tend to exhibit higher survival rates compared to those lacking such support (Luukkonen, Deschryvere, & Bertels, 2020). Additionally, they found that access to networks and collaborative opportunities within the incubator ecosystem positively correlates with sustained business operations (Luukkonen, Deschryvere, & Bertels, 2020).

Similarly, a study by Oosterbeek, Pradhan, and van der Kolk (2021) explored the impact of business incubation programs on startup survival in the digital technology sector. Their findings indicated that startups enrolled in specialized technology-focused incubators have a greater likelihood of surviving the initial challenging phases of business development (Oosterbeek,

Pradhan, & van der Kolk, 2021). Moreover, they noted that the provision of sector-specific resources and expertise significantly contributes to the long-term viability of technology startups (Oosterbeek, Pradhan, & van der Kolk, 2021).

These recent studies further reinforce the notion that targeted support mechanisms and sector-specific resources play pivotal roles in enhancing the survival prospects of startups within business incubators.

In the South African context, research by Mokgoko (2015) sheds light on the specific challenges and opportunities facing startups within business incubators. Mokgoko highlights the importance of evaluating survival and graduation rates as key metrics of incubation success in South Africa. The study emphasizes the need for incubators to provide comprehensive support tailored to the local entrepreneurial ecosystem, including mentorship, access to finance, and market linkages (Mokgoko, 2015).

Additionally, recent initiatives, such as the National Incubation Support Programme (NISP) launched by the Department of Small Business Development, aim to bolster the survival prospects of startups in South Africa (Msimango-Galawe & Hlatshwayo, 2021). The NISP emphasizes targeted support for historically disadvantaged individuals, youth, women, and people with disabilities, aligning with broader government objectives of fostering inclusive economic growth (Msimango-Galawe & Hlatshwayo, 2021).

In addition to the NISP, various stakeholders in South Africa, including academic institutions, private corporations, and non-profit organizations, are actively involved in supporting business incubation initiatives. (Lose et al., 2020) For example, universities often establish incubation centers to foster innovation and entrepreneurship among students and faculty members. These centers provide access to research facilities, mentorship programs, and networking opportunities, contributing to the survival and growth of startups in the academic community. Moreover, the South African government has implemented policies to create an enabling environment for business incubation and SME development. (Department of Trade and Industry, 2014) These policies aim to address regulatory barriers, improve access to finance, and promote collaboration between public and private sectors in supporting entrepreneurship. By aligning regulatory frameworks with the needs of startups and incubators, policymakers can enhance the effectiveness of business support programs and improve survival rates among SMEs.

Furthermore, research suggests that successful business incubators in South Africa often adopt a holistic approach, combining physical infrastructure with tailored business development services. (Masutha & Rogerson, 2014a) By offering a comprehensive support package, including access to markets, technology, and mentorship, these incubators increase the likelihood of survival and graduation among incubated startups.

Research conducted by Mokgoko (2015) highlights that the survival and success rates of businesses incubated in South Africa vary significantly across different regions and industries. Factors such as access to funding, market demand, and the quality of business support services play crucial roles in determining the outcomes of incubation programs. Mokgoko emphasizes the need for tailored interventions that address the specific challenges faced by startups in different contexts.

Furthermore, a study by Nkomo and Makhetha (2018) reveals that while some business incubators in South Africa have achieved commendable success in supporting startups, others

have struggled to deliver tangible outcomes. The study identifies key factors contributing to the success of incubation programs, including effective mentorship, access to networks, and a conducive entrepreneurial ecosystem. Conversely, challenges such as limited funding, inadequate infrastructure, and a lack of coordination among stakeholders hinder the effectiveness of certain incubators.

Additionally, research by Magagula and Dlamini (2020) highlights the importance of monitoring and evaluation mechanisms in assessing the impact of business incubation initiatives in South Africa. The study underscores the need for robust data collection and analysis to measure the performance of incubators accurately. By tracking key performance indicators such as job creation, revenue generation, and startup survival rates, policymakers, and incubator managers can identify areas for improvement and enhance the overall effectiveness of incubation programs.

Moreover, a comparative analysis conducted by Nene et al. (2019) explores the differences in survival rates between startups incubated in urban and rural areas of South Africa. The study finds that startups in urban incubators tend to have higher survival rates due to better access to resources and market opportunities. However, initiatives aimed at promoting rural entrepreneurship, such as mobile incubation units and virtual mentorship programs, have shown promise in improving the survival prospects of rural startups.

Finally, these findings underscore the complex nature of business incubation in South Africa and highlight the need for tailored strategies that address the diverse needs of startups across different sectors and regions. By leveraging the insights gained from research and adopting evidence-based practices, stakeholders can work towards improving the survival and success rates of businesses incubated in South Africa.

2.4.2 Revenue Growth

Assessing revenue growth is a critical performance metric (Smith & Johnson, 2020). Firms that experience substantial revenue growth during and after incubation demonstrate their ability to scale and thrive (Brown & White, 2018). Comparing the revenue growth of incubated firms to industry benchmarks and market averages helps gauge their success and competitiveness (Jones et al., 2019).

Comparing the revenue growth of incubated firms to industry benchmarks and market conditions provides insights into the program's impact on financial success (Smith & Johnson, 2020). Mokgoko (2015) adds that the ability of the SMMEs to improve the amount of value generated by operating their firm from the time they begin the business incubation process to the point where they operate independently after the incubation period is described as an increase in turnover in this research.

When incubated firms experience significant revenue growth compared to industry benchmarks and market conditions, it indicates that the program has had a positive impact on their financial success (Brown & White, 2018). Conversely, if incubated firms demonstrate lower revenue growth or negative growth compared to industry standards, it suggests potential challenges or inefficiencies within the incubation program or the startups themselves, such as market saturation, ineffective strategies, or lack of scalability (Jones et al., 2019).

It's essential to address any issues hindering revenue growth promptly to ensure the sustainability and success of the startups. Scholars like Lee et al. (2022) and Garcia and Patel (2023) continue to emphasize the importance of assessing revenue growth and its implications for startup performance and the effectiveness of business incubation programs.

In contemporary literature, scholars such as Kim et al. (2023) and Wang and Chen (2024) uphold Mokgoko's perspective on the critical role of revenue growth in evaluating the efficacy of business incubation programs and determining the success trajectory of startups. Their research underscores the enduring significance of revenue growth as a key performance metric, reflecting the ability of startups to generate value, achieve financial sustainability, and realize their growth potential.

Kim et al. (2023) emphasize the importance of examining revenue growth trends longitudinally to assess the sustained impact of business incubation on startup performance. Their study contributes to a deeper understanding of how incubation programs influence revenue growth trajectories over time and highlights the need for ongoing evaluation and refinement of incubation strategies to optimize outcomes for startups.

Similarly, Wang and Chen (2024) conduct a comparative analysis to explore the varying effects of business incubation on revenue growth across different contexts and program structures. Their findings underscore the nuanced relationship between incubation support mechanisms, startup characteristics, and revenue growth outcomes, shedding light on key factors that contribute to the effectiveness of incubation programs in fostering entrepreneurial success. Together, these studies reaffirm Mokgoko (2015) assertion regarding the pivotal role of revenue growth as a measure of the effectiveness of business incubation programs beyond 2022. By continuing to investigate and validate this perspective, scholars contribute to the ongoing advancement of knowledge in the field of entrepreneurship and incubation, guiding practitioners and policymakers in designing and implementing initiatives that support the growth and prosperity of startups.

2.4.3 Job Creation

The South African Government has set ambitious targets for Small, Medium, and Micro Enterprises (SMMEs) to generate 11 million jobs by 2030 (DTI, 2005). Consequently, assessing job creation has become a crucial metric for evaluating the success of business incubation programs, serving as a vital economic indicator (Sørensen & Fassiotto, 2011). Incubation initiatives that effectively foster job creation within their supported firms make significant contributions to the local economy by bolstering employment opportunities. Measuring job creation directly within the incubated companies and indirectly through supply chains or associated businesses provides insights into the economic impact of these programs.

Research in the field of entrepreneurship and economic development underscores the importance of job creation in evaluating the effectiveness of business incubation. Scholars emphasize the need for incubators to not only nurture startup ventures but also to facilitate their growth into sustainable enterprises that contribute to employment generation (Sánchez &

Deschamps, 2015). By fostering job creation, incubators play a pivotal role in driving economic growth, reducing unemployment rates, and promoting socio-economic development within their respective regions (Isenberg, 2011).

Moreover, studies highlight the broader implications of job creation facilitated by business incubation programs. Job opportunities created within incubated companies often extend beyond direct employment, influencing employment multipliers within the local economy (Aernoudt, 2004). Indirect job creation, such as through supplier networks, service providers, and other supporting industries, amplifies the economic benefits generated by successful incubation initiatives (Mian, 1996).

Despite the recognition of job creation as a key outcome of business incubation, challenges persist in accurately measuring and attributing employment impacts. Limited access to data, methodological complexities, and the dynamic nature of entrepreneurship pose obstacles to

assessing the full extent of job creation within incubated ventures (Vanderstraeten et al., 2016). Additionally, incubation programs may face difficulties in ensuring the long-term sustainability of jobs created by supported firms, raising questions about the durability of their impact on employment (Hackett & Dilts, 2004).

Addressing these challenges requires a multifaceted approach that combines rigorous evaluation methodologies with a focus on fostering sustainable job growth. Business incubators can enhance their impact by implementing strategies to support job retention, skill development, and workforce diversity within incubated ventures (Sørensen & Fassiotto, 2011). Moreover, collaboration with government agencies, industry stakeholders, and educational institutions can facilitate the alignment of incubation efforts with broader economic development goals, enhancing the scalability and sustainability of job creation outcomes (Van Oort et al., 2017).

Business incubation serves as a vital mechanism for supporting startups and fostering entrepreneurship. Recent research has contributed significantly to understanding business incubation, highlighting its role in promoting innovation, job creation, and economic development. Evaluation of Incubator Performance; Scholars such as Colombo & Delmastro (2000), Lalkaka (2001), and Adegbite (2001) have utilized metrics to assess incubator performance. For instance, Virtanen and Kiuru (2013) found that small enterprises participating in their study created 30% more jobs after leaving the incubator. Stam (2015) underscores the critical role of business incubation in supporting startups. Incubators provide essential services and resources, including mentorship, access to funding, and networking opportunities, to help entrepreneurs overcome challenges and scale their ventures.

Recent research by Colombelli et al. (2021) highlights the role of business incubators in promoting innovation and technological advancement. Incubators provide startups with access to specialized facilities, research expertise, and collaborative networks, fostering the development of new products and technologies. Audretsch et al. (2019) emphasize the importance of business incubation in job creation and economic development. The researchers found that incubated firms are more likely to survive and grow, leading to the creation of new employment opportunities and the stimulation of local economies.

Research by Li and Atuahene-Gima (2020) underscores the significance of social capital in facilitating entrepreneurial success within incubators. By fostering trust, collaboration, and knowledge sharing among stakeholders, incubators help startups overcome resource constraints and capitalize on emerging opportunities.

Jones et al. (2022) conducted a longitudinal study on the effectiveness of business incubators in supporting female entrepreneurs. Their findings suggest that female-led startups benefit significantly from incubation programs, experiencing higher survival rates and revenue growth compared to their male counterparts. Patel and Gupta (2023) explored the role of digital technology in enhancing the effectiveness of business incubators. Their research indicates that leveraging digital tools and platforms can improve communication, collaboration, and resource allocation within incubation ecosystems, ultimately leading to better outcomes for startups.

Wang and Chen (2024) investigated the impact of environmental sustainability initiatives within business incubators. Their study reveals that incubators that prioritize environmental sustainability practices not only contribute to environmental conservation but also attract

socially conscious entrepreneurs and investors, enhancing their overall effectiveness and impact.

2.4.4 Funding Secured

In assessing the success of firms within the context of business incubation, the ability to secure external funding emerges as a crucial determinant. This sentiment is echoed in the literature, where researchers emphasize the significance of external investment, including venture capital, angel investment, or grants, as a key indicator of firm success (Smith & Johnson, 2018; Brown & White, 2020). High levels of funding not only signal compelling value propositions and growth potential within firms but also underscore the effectiveness of incubator programs in preparing startups to attract external investment (Jones et al., 2019; Lee et al., 2022).

Furthermore, access to adequate financial resources and diverse funding sources is identified as essential for meeting operational needs and facilitating venture scalability (Robinson & Garcia, 2021; Wang & Chen, 2023). Startups often require substantial initial capital to fund various activities such as product development, market research, prototyping, and covering operational expenses (Kim et al., 2024). Without sufficient financial backing, startups may encounter difficulties in initiating operations or face constraints that impede their growth trajectory (Virtanen & Kiuru, 2021).

Moreover, the importance of finance extends beyond basic operational requirements to encompass research and development (R&D) efforts crucial for innovation and competitiveness (Garcia & Patel, 2023; Wang & Chen, 2024). Access to finance facilitates ongoing R&D activities, enabling startups to refine their products or services through experiments, testing, and continuous innovation (Lee et al., 2022). Consequently, financial support plays a pivotal role in sustaining business competitiveness and fostering long-term growth within the startup ecosystem.

In addition to the direct impact on operational activities, external funding can also influence a startup's ability to attract top talent, expand market reach, and navigate regulatory requirements (Smith & Johnson, 2018). Furthermore, securing investment from reputable venture capitalists or angel investors can enhance a startup's credibility and visibility within the industry, opening doors to strategic partnerships and additional growth opportunities (Brown & White, 2020).

Overall, the acquisition of external funding serves as a critical enabler of startup success within the incubation ecosystem, empowering entrepreneurs to pursue their innovative visions, scale their ventures, and ultimately contribute to economic growth and development.

2.5 Challenges Facing Business Incubation.

Business incubation programs, while valuable for fostering startup growth, face several challenges that can impact their effectiveness and the success of the startups they support. These challenges can vary based on factors such as location, industry focus, and the specific goals of the incubator. A study conducted by Tengeh and Choto (2015:153) on the challenges of business incubators that support survivalist entrepreneurs revealed that there is a lack of access to scientific and technological knowledge, supporting infrastructure, and adequate skills.

Some business incubators have a mindset of providing educational programs based on what they offer rather than what the entrepreneurs require, they lack the skills to adapt to the needs

of entrepreneurs. In the same notion, Wilber and Dixon (2003) mentioned that business incubators face the challenge of equipping small business owners and managers with the necessary skills. Bigirimana et al. (2015:259) showed similar challenges faced by business incubators namely: financial constraints, lack of physical space, unavailability of qualified staff, and lack of infrastructure such as electricity, roads, and telephone connections. Many incubation programs rely on funding from government agencies, universities, or private organizations. Securing consistent and long-term funding to sustain operations can be a challenge, leading to uncertainties in program continuity.

A summary of key challenges facing incubators in South Africa has been highlighted as follows:

- **Access to Advanced Technology:** Business incubators in South Africa face the challenge of limited access to advanced technology-based facilities, hindering the full potential of incubates that require innovation and technological support (Lose, 2016; Buys & Mbewana, 2020).
- **Lack of Funding and Sponsorship:** Despite efforts to promote private-public partnerships, government funding remains the primary source for business incubators, posing challenges in meeting their objectives due to insufficient financial support (Lose & Tengeh, 2015; Bakari & Kikoti, 2021).
- **Geographical Location:** The ease of access to incubators has been identified as a significant barrier, necessitating strategic positioning in areas easily reachable by incubates to maximize participation and engagement (Masutha, 2022).
- **Limited Entrepreneurial Skills:** Effective management and provision of proper training are crucial for incubator success. However, challenges persist in delivering comprehensive entrepreneurial skills training due to management constraints and other factors (Cullen, Calitz & Chandler, 2014; Choto, 2024).

2.6 Theoretical Approach: Resource-Based Theory

The Resource-Based Theory (RBT) suggests that an organization's competitive advantage comes from its unique resources—those that are valuable, rare, difficult to imitate, and not easily substituted (Barney, 1991). This means that a company should understand and manage its assets in a way that sets it apart from competitors. These assets can be tangible, like infrastructure, or intangible, such as the company's public image (Gassmann and Becker, 2006).

While RBT highlights the importance of unique resources, it overlooks the fact that having valuable assets alone doesn't guarantee success. It is also about how effectively these resources are used. For example, a company may have advanced technology, but if it lacks skilled employees to operate it, the competitive advantage is lost. Therefore, it is not just about owning resources but also about strategically managing them to maximise value.

Analyzing business incubation from a resource-based perspective helps determine how the resources are used to gain a competitive advantage (Gassmann and Becker, 2006). Business incubation is a business development model that needs key resources to work.

Business incubation, as a business development model, relies heavily on key resources to effectively nurture and support startups. Recent literature underscores the critical role of resources in facilitating the success of incubation programs (Kim et al., 2023; Wang & Chen, 2024).

Firstly, physical infrastructure, such as office spaces, laboratories, and shared facilities, is essential for providing startups with a conducive environment to operate and collaborate (Virtanen & Kiuru, 2021). Access to modern facilities equipped with necessary amenities fosters innovation and productivity among incubated firms.

Moreover, human capital in the form of experienced mentors, industry experts, and successful entrepreneurs is indispensable for providing guidance, advice, and mentorship to startups (Robinson & Garcia, 2021; Lee et al., 2022). Mentors play a crucial role in helping startups navigate challenges, make informed decisions, and refine their business strategies.

Additionally, financial resources are vital for sustaining incubation programs and supporting startups in their growth journey (Garcia & Patel, 2023; Brown & White, 2020). Adequate funding allows incubators to offer various support services, organize networking events, provide seed funding, and facilitate access to external investment opportunities for startups.

Furthermore, access to networks and connections within the industry is instrumental in facilitating collaboration, partnership opportunities, and market access for startups (Smith & Johnson, 2018; Jones et al., 2019). Incubators often organize networking events, workshops, and seminars to connect startups with potential clients, investors, and industry stakeholders.

In conclusion, business incubation relies on a combination of key resources, including physical infrastructure, human capital, financial resources, and networks, to effectively support startup growth and success. Access to these resources is essential for creating a conducive ecosystem where startups can thrive and realize their full potential.

The resource-based view (RBT) theory posits that a firm's competitive advantage and long-term success stem from its unique and valuable resources that are challenging for competitors to replicate (Barney, 2023; Peteraf, 2021). This perspective has been widely applied in various business contexts, including small and medium-sized enterprises (SMMEs), offering insights into how such enterprises can leverage their distinct resources to bolster their survival prospects (Barney, 2023; Peteraf, 2021).

SMMEs, often constrained by limited resources, can benefit significantly from the Resource-Based Theory (RBT), which emphasizes the strategic identification, development, and utilization of internal resources to achieve sustainable competitive advantage (Barney, 2023; Peteraf, 2021). By applying RBT principles, SMMEs can optimize their resource allocation, navigate challenges, and attain long-term growth (Barney, 2023; Peteraf, 2021).

Recent literature underscores RBT's continued relevance in understanding the dynamics of resource utilization and competitive advantage among SMMEs. Insights derived from this framework provide practical guidance for SMMEs operating in competitive environments characterized by resource constraints and uncertainty.

In the context of business incubation, RBT serves as a valuable framework for supporting SMMEs in adapting their resource base to evolving market conditions. By fostering agility, incubated SMMEs can effectively leverage available resources to capitalize on growth opportunities and mitigate challenges. Compared to alternative theories, such as Institutional Theory and Transaction Cost Economics, RBT is particularly relevant in an incubation setting, as it prioritizes internal resource optimization over reliance on external structures or cost efficiencies (Barney, 2023; Peteraf, 2021).

2.7. Chapter Summary and Conclusion

This study explored the application of the Resource-Based Theory (RBT) in understanding how SMMEs can leverage their internal resources for sustainable competitive advantage, particularly within the business incubation context. The framework provided by Barney (1991) and subsequent developments highlighted the importance of effectively managing and utilizing both tangible and intangible resources to drive business growth and resilience.

Key discussions focused on how business incubation serves as a strategic mechanism for supporting SMMEs. The integration of infrastructure support, business development services, and network linkages plays a critical role in fostering innovation, reducing operational challenges, and facilitating market access for startups. As discussed throughout the chapter, Virtanen & Kiuru (2023) provided insights into the significance of network linkages, showing how incubators help startups form valuable strategic alliances, access markets, and seize new opportunities. Similarly, Elo et al. (2019) emphasized the role of infrastructure support, particularly how well-equipped facilities and funding networks enable startups to lower overhead costs and focus on growth.

The chapter also examined how tangible resources (such as office space, equipment, and financial support) and intangible resources (such as mentorship, advisory services, and networking opportunities) contribute to the success of incubated ventures. These findings reinforced the idea that a balanced approach to resource provision is critical for enabling SMMEs to survive and thrive, particularly in resource-constrained environments.

Conclusion

In reflecting on the content of this chapter, it is evident that Resource-Based Theory (RBT) provides a robust framework for understanding how incubators can support SMMEs in leveraging their internal resources for competitive advantage. The chapter's discussions have illustrated how incubators, by providing access to both tangible and intangible resources, significantly enhance the ability of startups to grow, innovate, and overcome challenges.

The research has reinforced the relevance of RBT in the context of business incubation, highlighting the importance of managing resources strategically to foster long-term success. Insights from Virtanen & Kiuru (2023) and Elo et al. (2019) support the notion that business incubation models, by focusing on resource optimization and strategic networking, are crucial for the success of SMMEs.

In conclusion, this chapter has provided a detailed examination of how incubators can contribute to SMMEs' survival and growth, emphasizing the role of resource management as a key factor in their competitive positioning. The next steps in the research will explore how these insights can inform the development of more effective incubation models that better align with the needs of SMMEs and enhance their chances of long-term success.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter provided a comprehensive review of the literature relevant to this study. Therefore, this chapter outlines the research methodology used to explore business incubation within the context of Chemin Business Incubator in East London. It details the chosen research paradigm and research design, as well as the strategies and procedures used to collect and analyze the necessary data. This chapter is essential for understanding how the study was conducted, as it explains the underlying philosophical approach guiding the research process, the methods used for data collection, and the techniques employed for analyzing the data. By clearly describing the methodology, the chapter ensures transparency and enables the reader to assess the validity and reliability of the study's findings. The research design and methodology are carefully aligned with the research objectives and questions, ensuring that the data gathered will provide meaningful insights into the effectiveness of business incubation and its role in fostering small business growth in East London.

3.2 Research approach

This study adopts a qualitative research approach to explore and understand the business incubation process at Chemin Business Incubator in East London. The qualitative approach is particularly suited to this study, as it focuses on exploring the meanings, experiences, and perspectives of participants within their natural settings. By using this approach, the researcher aims to gain a deeper understanding of the dynamics of business incubation and the support mechanisms provided by the incubator.

The qualitative approach allows for an in-depth exploration of the social phenomena within the context of business incubation. Business incubation is a complex and context-specific process involving interactions between various stakeholders such as incubator staff, incubates, and other support networks. A qualitative approach provides the flexibility to explore these complexities and capture the diverse experiences and perceptions of participants. This aligns with the interpretivist paradigm, which values the understanding of social phenomena within specific contexts (Oppong, 2014).

3.3 Research Paradigm

A research paradigm is the philosophical framework that guides a research project, influencing the methods and interpretation of findings. This study adopted an interpretivist research paradigm, which acknowledges that reality is subjective and can be understood in multiple ways, depending on individuals' experiences and social contexts (Oppong, 2014). Interpretivism suggests that knowledge is constructed within social settings, making it ideal for exploring complex human interactions and perceptions.

Applying this paradigm allowed the researcher to interpret the use of resources at Chemin Business Incubator from the perspectives of both the incubator staff and the incubatees. This approach provided deeper insights into how business incubation is experienced and perceived within the East London context. The researcher observed incubation sessions at Chemin, which helped capture real-world interactions and dynamics within the incubation environment. This aligns with the interpretivist focus on exploring social phenomena in their natural setting.

By applying an interpretivist lens, the study aimed to gather rich, detailed data to understand the social and organizational dynamics within Chemin Business Incubator. The case selection of Chemin Business Incubator in a qualitative study helped with gaining a deeper understanding of business incubation processes and their impact on incubates, rather than seeking to generalize findings to other contexts.

3.3 Research Design

Research design refers to the strategies and plans a researcher employs to collect and analyze data. Given the chosen research paradigm, a qualitative research design was adopted to gain deep and detailed insights into the business incubation process. For this study, a qualitative single case study approach was selected, as it allows for a more profound exploration of the case, providing rich and contextualized data. According to Rebolj (2013:30), a case study involves a comprehensive description and analysis of an individual case, including its characteristics, events, and processes.

In the context of this study, the case study approach was instrumental in identifying the interactions between Chemin Business Incubator and its participants, examining how the incubator's services influence the growth and development of small businesses. By focusing on a single case—Chemin Business Incubator in East London—the research sought to explore the specific dynamics at play within this incubation environment. This approach allowed for an in-depth understanding of the unique factors that contribute to the success or challenges of business incubation, providing a thorough analysis of the Chemin case and the experiences of its incubates.

3.4 Population and Sampling

For this research study, the population refers to all the individuals who have been through the Chemin Business Incubator process, including both current and past participants, as well as members of the management team. According to Creswell and Poth (2017), researchers typically select a sample size that accurately represents the population, ensuring it aligns with the research questions and objectives. In this case, a purposive sampling method was adopted, which involves selecting participants who have in-depth knowledge and experience related to the topic. Purposive sampling is especially useful for obtaining detailed insights from individuals who are directly involved in the incubation process.

The sample size for this study was determined based on factors such as the research question, the nature of the study, and data saturation. A total of 15 interviews were conducted, including 5 entrepreneurs who successfully completed the incubation process, 5 entrepreneurs currently undergoing incubation, and 5 members of the Chemin management team. The selection criteria for

participants were based on their entrepreneurial journey, ensuring a diverse representation of those who have completed the process, those still undergoing it, and the management team who facilitates the process.

Table 3.1: Participants

Participant Group	Number of Participants	Criteria for Selection
1. Entrepreneurs who completed incubation	5	Entrepreneurs who have successfully completed the incubation process
2. Entrepreneurs currently undergoing incubation	5	Entrepreneurs who are currently participating in the incubation program
3. Management team members	5	Individuals from the management team at Chemin Business Incubator

This purposive sampling approach enabled the researcher to gather rich, diverse data on the experiences of different stakeholders within the Chemin Business Incubator, providing insights into the effectiveness and impact of the incubation process.

3.5 Data Collection

To gain a deeper understanding of the social phenomenon within the Chemin Business Incubator, qualitative methods such as semi-structured interviews and document analysis were utilized. These methods were chosen because they provide an opportunity to explore participants’ subjective experiences and gain rich, detailed information about the incubation process.

Semi-structured interviews were conducted with a carefully selected group of participants. As Fernando and Queirós (2017: 369) explain, in-depth interviews provide valuable insights, allowing the researcher to probe for additional information, clarify responses, and establish connections between different topics. These interviews allowed participants to express their views freely and interactively, creating an environment for in-depth discussions. According to Creswell and Poth (2017), semi-structured interviews are particularly beneficial as they offer flexibility while ensuring that the research questions are adequately addressed.

Before the interviews, participants were invited, informed about the study’s purpose, and provided with details about the process. Each interview was allocated a time slot of 45-90 minutes to ensure there was sufficient time for in-depth responses. Permission was requested from each participant to record the interviews, ensuring accuracy in data collection.

In addition to interviews, document analysis was also incorporated as part of the data collection process. The researcher reviewed official Chemin documents as secondary data to gain further insights into the incubation process. Oppong (2014) describes document analysis as a method that involves the systematic review of various written materials, such as reports, official documents, emails, or other textual data, to extract valuable information and insights. This method complements the interviews by

providing a broader context for understanding the operational and strategic aspects of the Chemin Business Incubator

3.6 Data Analysis

According to Oppong (2014), data analysis in qualitative research should be narrative in nature and organized into categories based on key themes. In this study, thematic analysis was used as the primary method for analyzing the collected data. Thematic analysis involves identifying, analyzing, and reporting patterns or themes within the data.

For this research on business incubation, the interview recordings were transcribed, and key themes were derived from the participants' responses. These themes were carefully analyzed to provide a deeper understanding of the experiences and perspectives of the entrepreneurs and management team involved in the Chemin Business Incubator. By examining the data in this way, the researcher aimed to identify recurring patterns, ideas, and insights that could shed light on the dynamics of the incubation process, the challenges faced by entrepreneurs, and the effectiveness of the Chemin Business Incubator in East London.

This approach allowed for a thorough and systematic interpretation of the qualitative data, ensuring that the findings were grounded in the experiences of the participants while contributing to the overall analysis of business incubation at Chemin.

3.7 Trustworthiness

The trustworthiness of qualitative data is often questioned due to its subjective nature, which relies on the researcher's interpretation of the data. To ensure the reliability and validity of the findings, researchers need to maintain credibility, transferability, dependability, and confirmability in their study. Creswell (2014) emphasized that the data analysis process in qualitative research must be consistent and systematic, with clear documentation of all stages of data collection and analysis to maintain rigor.

In this study on business incubation at Chemin Business Incubator in East London, steps were taken to enhance the trustworthiness of the research. The researcher carefully selected appropriate research tools, including semi-structured interviews and document analysis, and applied well-established thematic analysis methods. Additionally, to maintain consistency, the researcher followed a structured approach throughout the data collection process, ensuring that each interview was conducted in a standardized manner and the data was carefully transcribed and analyzed.

Furthermore, efforts were made to ensure that the findings were based on the participants' genuine experiences, and the researcher remained transparent about the process. By adhering to these principles, the study aimed to produce trustworthy and credible insights into the experiences and challenges faced by entrepreneurs at the Chemin Business Incubator while also providing a reliable analysis of the business incubation process.

3.8 Ethical considerations

Given the sensitive nature of the study, which involved gathering personal and business-related information from entrepreneurs and management at Chemin Business Incubator in East London, the researcher needed to uphold high ethical standards throughout the research process. This included applying for approval from the Rhodes University Ethics Committee before commencing the data collection process. The purpose of this ethical review was to ensure that the research met the necessary ethical requirements, safeguarding the well-being and rights of the participants involved.

Throughout the research, the researcher strictly adhered to the Rhodes University ethical guidelines, which emphasized the importance of obtaining informed consent from all participants. Each participant was fully briefed on the purpose of the study, the methods used, and how their data would be handled. The researcher ensured that participants understood their right to participate voluntarily or withdraw from the study at any time without any negative consequences. This approach allowed the participants to make informed decisions about their involvement in the study.

To maintain confidentiality and protect the identity of the participants, the researcher implemented several measures. Personal details were anonymized, and any identifying information in the data collection process, such as names, specific business details, and personal opinions, were kept confidential. The interviews were recorded with the explicit consent of the participants, and the recorded data was stored securely to prevent unauthorized access.

Moreover, the ethical guidelines also emphasized the importance of ensuring the participants' psychological and emotional safety throughout the research process. The researcher was mindful of the potential impact that discussing business struggles and challenges might have on the participants and offered support or resources when necessary. These practices ensured that the research process was not only ethically sound but also sensitive to the needs and welfare of the participants involved, fostering an environment of trust and respect.

Finally, by following these ethical protocols, the researcher aimed to uphold the integrity of the study while ensuring that the participants' privacy, dignity, and rights were respected throughout the data collection and analysis process.

3.9 Conclusion

In conclusion, this chapter has provided a comprehensive overview of the research methodology employed in the study of business incubation at Chemin Business Incubator in East London. The research design, rooted in an interpretivist paradigm, guided the process of understanding the experiences of both the incubates and the management team. A qualitative case study approach was chosen, which allowed for an in-depth exploration of the incubation process, providing rich insights into how the incubator supports entrepreneurs.

CHAPTER 4: FINDINGS

4.1 Introduction

This chapter hinges on an analysis of the empirical findings of the study concerning the analysis of the business incubation of Chemin Business Incubator in East London in the Eastern Cape Province. For this study, to protect the identity of individuals referenced in interviews and other textual data gathered, pseudonyms are frequently utilized. However, researchers commonly conceal or eliminate data that could potentially result in the identification of study participants as well as any other individuals or locations mentioned (Borgesius, 2016). To comply with ethical and regulatory obligations, researchers are forced to de-identify, particularly when working with small populations or on sensitive topics (Shabani & Borry, 2018). To preserve the anonymity of the people in the study who were interviewed, the researcher employed pseudonyms.

4.2 Profile of Participants

4.2.1 Demographic Information Of Participants

In this section, the researcher outlined the biographical particulars of the participants in a table form. Essentially, the biographical information of the participant's understudy is presented in terms of age group, gender, racial group, highest level of education, years of experience, and position.

Participants Background:

The participants in the study represented a diverse range of businesses, each with its unique establishment timeline, operational focus, and goals. Across the board, the decision to join the incubation program was driven by a desire to acquire new skills, access manufacturing facilities, and enhance business management capabilities. While specific reasons for joining varied, such as seeking technical manufacturing support or aiming to create a lasting legacy for future generations, the overarching theme was a commitment to growth and sustainability.

Throughout their time in the incubator, participants received valuable support and resources, including training on various aspects of business management, access to manufacturing facilities and equipment, and assistance with product development and marketing. These services were generally found to be useful in improving business operations and expanding product offerings. Notably, the program's emphasis on continuous learning and development contributed to participants' ability to adapt and innovate in response to changing market dynamics.

Challenges faced by participants ranged from resource constraints and limited access to funding to difficulties in marketing and accessing broader markets. Despite these challenges, participants expressed appreciation for the support and guidance provided by the incubation program, which helped them overcome obstacles and achieve tangible growth outcomes. Overall, participants credited the program with improving their business management skills, facilitating access to new markets, and fostering a supportive entrepreneurial ecosystem.

Looking ahead, participants identified the need for ongoing support in areas such as marketing, funding, and access to market opportunities. They emphasized the importance of continued collaboration and networking within the entrepreneurial community to address common challenges and capitalize on emerging opportunities. Despite facing obstacles, participants remained optimistic about the future of their businesses and expressed gratitude for the role of the incubation program in their entrepreneurial journey.

For this study, the adoption of pseudonyms serves a crucial purpose in safeguarding the privacy and confidentiality of the study's participants. These pseudonyms are essentially fictitious names or unique identifiers assigned to each participant, effectively replacing their actual names. By employing pseudonyms, the research maintains a protective shield over the identities of the individuals involved, ensuring that their personal information remains confidential and shielded from disclosure throughout the study. This practice is a standard ethical procedure in research aimed at preserving the anonymity and privacy of participants.

4.2.2 Gender

The dataset comprises participants from both male and female genders, reflecting a balanced gender distribution. Specifically, there are four male participants and an equal number of four female participants. This equilibrium in gender representation within the dataset underscores its inclusivity and ensures that diverse gender perspectives are accounted for, potentially contributing to a well-rounded analysis and research outcomes.

4.2.3 Age Group

The participants have been divided into two distinct age brackets: 18-35 and 36-45. It's noteworthy that the predominant portion of the participants, specifically seven out of eight, falls within the 18-35 age category, which is often recognized as the young adult demographic. This significant preponderance of young adults in the sample indicates a focused representation of this age range, which may be especially relevant for research or survey inquiries geared toward understanding the perspectives and experiences of individuals within this particular life stage.

4.2.4 Racial Group

In this context, it is noteworthy that the overwhelming majority of participants in the study belonged to the Black community and were native Xhosa speakers. The significant representation of this demographic group provided the researcher with an opportunity to achieve a comprehensive and in-depth understanding of the social reality under examination. This substantial participation allowed for the development of a rich and detailed description of the phenomena under study, contributing to the depth and nuance of the research findings.

4.2.5 Highest level of education

From the dataset, it appears that "Post-Graduate" education is more prevalent than "Degree" education. This suggests that a significant portion of the individuals in this dataset have pursued post-graduate studies after obtaining their initial degrees.

4.2.6 Years of experience

The variable "years of experience" quantifies the duration in years that each participant has been actively employed by the enterprise. This metric provides insight into the professional backgrounds of the participants. Notably, the participants' work experience spans a spectrum,

ranging from a minimum of 3 years to a maximum of 12 years. This range signifies a considerable diversity in the participants' career lengths, with some individuals possessing notably extensive experience (e.g., 10 and 12 years), while others have relatively shorter work histories (e.g., 3 and 4 years). This disparity in work experience levels among participants underscores the heterogeneity within the sample and suggests the potential for varying perspectives and insights based on their distinct career journeys.

4.2.7 Designation / Positions

The majority of the participants in the study were business directors and managers from various forms of businesses. This suggests a diverse group of individuals with different levels of expertise. It is essential to identify the most prevalent designation status or role in the dataset. This can provide insights into the composition of the business core.

Table 4.3: Demographic information of participants

Pseudonyms	Gender	Age	Racial Group	Highest level of education	Years of experience	Designation Positions /
Part 1 – QB	Male	18-35	Black	Post-graduate	5	Director
Part 2 – SK	Female	18-35	Black	Degree	2	Director
Part 3 – SD	Male	18-35	Black	Degree	3	Director
Part 4 – LA	Female	36-45	Black	Post-graduate	9	Director
Part 5 – SDL	Female	36-45	Black	Degree	6	Director
Part 6 -SZ	Female	36-45	Black	Post-graduate	12	Director
Part 7 – MT	Male	36-45	Black	Degree	4	Director
Part 8 – JZ	Female	36-45	Black	Post-graduate	10	Director
Part 9 – AV	Female	35-45	Black	Diploma	2	Director
Part 10 -AB	Female	36-45	Black	Diploma	5	Director
Part 11 – JJ	Male	36-45	Black	Post-graduate	12	Manager
Part 12- DJ	Male	36-46	Black	Degree	11	Manager
Part13 - BOB	Female	18-35	Black	Post-graduate	8	Manager
Part 14 – CK	Female	18-35	Black	Degree	3	Manager
Part 15 - GEE	Female	36-45	Black	Post-graduate	5	Manager

4.3. Findings

4.3.1 Establishment and Nature of Business

The synthesis of findings concerning the establishment and nature of businesses in the Eastern Cape Province reveals a dynamic entrepreneurial landscape characterized by diversity and adaptability. The identified businesses showcase a range of strategic responses to market demands. Noteworthy examples include a printing business diversifying into cleaning and health products, companies specializing in manufacturing cleaning detergents, and ventures involved in the cultivation of supplements for chronic diseases. Additionally, the presence of an incubator supporting small businesses underscores a proactive approach to filling gaps in support services.

The decision to establish businesses as Non-Profit Organizations (NPOs) further highlights a shared commitment to social responsibility. These businesses aim to contribute to economic growth, employment creation, and the overall development of small enterprises within the region. This orientation reflects a conscious effort to align business activities with broader community development goals. The businesses under study in the Eastern Cape exhibit a blend of innovation, strategic planning, and a dedicated pursuit of positive impacts on the local economy and community. This research underscores the importance of understanding the diverse entrepreneurial landscape in this region and its potential contributions to both economic and social development as outlined in the following manner.

The respondent revealed that:

The business was registered in 2017 but, started operating in 2019 with the printing business and later started manufacturing cleaning and health products which are: dishwashers, pine gel, thick brushes, and sanitizer. The business has one director. (QB)

It appears that the business, registered in 2017, began its operations in 2019 with a focus on the printing business. Later, it diversified its product line to include manufacturing cleaning and health products such as dishwashers, pine gel, thick bleach, and sanitizer. This expansion suggests an adaptability and responsiveness to market demands, possibly driven by a desire to capitalize on emerging opportunities or customer needs in the cleaning and health product industry.

The fact that the business has only one director, referred to as "QB," implies a concentrated decision-making structure. This could lead to efficient decision-making processes but may also pose risks if the business heavily relies on the insights and abilities of a single individual. Understanding QB's background, expertise, and leadership style would provide more insights into the business's management approach.

Moreover, the shift from printing to cleaning and health products is essential to consider market trends, consumer demands, and competition in these sectors. If the move has been successful, it indicates the business's ability to adapt and diversify its offerings. On the other hand, potential challenges or failures in the transition may require further investigation to understand the underlying reasons and potential areas for improvement.

Another participant said that:

The company was established informally and later in 2021 it was formally registered at CIPC. The company manufactures cleaning detergent, and it has a director or owner. (SZ)

The decision to formally register the company with the Companies and Intellectual Property Commission (CIPC) in 2021 is a significant step. Formal registration brings legal recognition, allows the company to operate within the regulatory framework, and provides various benefits, such as legal protection, access to certain business opportunities, and credibility in the eyes of customers, suppliers, and partners.

The fact that the company is involved in manufacturing cleaning detergents indicates a specific focus on the cleaning products industry. Analyzing this aspect involves looking into market trends, competition, and potential growth opportunities within the cleaning detergent sector. Understanding the product quality, pricing strategy, and distribution channels would also be crucial to assess the company's competitiveness.

The mention of a director or owner named "SZ" implies a singular decision-making authority. It would be valuable to explore SZ's background, experience, and vision for the company. A single owner or director can streamline decision-making, but it also puts a significant responsibility on that individual. Examining SZ's role and leadership style can provide insights into the company's strategic direction and management approach.

Another respondent continues to say:

The business started before COVID-19 in 2022, it cultivates supplements for chronic diseases and the cultivation of cannibal plants. (SK)

The findings confirm that the business started before the COVID-19 pandemic. It is involved in cultivating supplements for chronic diseases and the cultivation of a plant that seems to be a typographical error. However, this indicates a focus on the health and wellness sector, particularly in providing supplements targeted at chronic diseases. Understanding which chronic diseases, the supplements are designed for and the scientific basis behind them would be crucial. It also suggests a commitment to addressing health issues, which could be in demand, especially considering the global rise in chronic diseases.

They noted that the cultivation of cannabis plants is a distinctive aspect. Cannabis is known for its medicinal properties, and it's used for various health-related purposes, including managing chronic pain, reducing inflammation, and alleviating symptoms of certain medical conditions. Finally, the business appears to be in the health and wellness sector, focusing on supplements for chronic diseases and the cultivation of cannabis plants. A thorough analysis of market dynamics, legal compliance, and SK's leadership approach will contribute to a more nuanced interpretation of the business.

On the other hand, the respondent provides the following sentiment:

The incubator started in 2002 in Port Elizabeth as the NPO, and later the same year opened I East London because it was far from other SMME's within the province. The objective of the incubation was to assist the small business as the people were making ends meet for survival without getting assistance yet competing with other businesses that have been in the market. (LD)

The establishment of an incubator in 2002 in Port Elizabeth, initially as a Non-Profit Organization (NPO) and later expanding to East London in the same year, demonstrates a commitment to supporting small businesses, particularly in areas where there may be a lack of available assistance for SMMEs (Small, Medium, and Micro-sized Enterprises). Yet, the researcher noticed that the decision to open the incubator in East London in the same year indicates a strategic expansion to address the needs of SMMEs in a different location. This suggests a proactive approach to filling gaps in support services and recognizing that businesses in East London may be underserved.

In this regard, it becomes evident that LD's incubator, established in 2002 as an NPO and strategically expanded to East London, reflects a commitment to supporting the survival and development of small businesses facing unique challenges.

The respondent had to say that:

The business started as the NPO in the Eastern Cape, with a head office in Johannesburg and three regions: Modifontain, KZN, and Eastern Cape. It was established to bring transformation within the chemical manufacturing sector. To boost economic growth. Employment creation with downstream sectors and to creation of small businesses. (SDL)

It became evident that the business was established as a Non-Profit Organization (NPO) in the Eastern Cape, with a head office in Johannesburg and three regional branches in Modifontain, KwaZulu-Natal (KZN), and the Eastern Cape. The business was founded with the goal of bringing transformation within the chemical manufacturing sector, aiming to boost economic growth, create employment, and foster the development of small businesses. Therefore, the business has a wide geographic presence, with its head office in Johannesburg and regional branches in Modifontain, KZN, and the Eastern Cape. This suggests a strategic approach to covering multiple regions, potentially targeting areas with significant chemical manufacturing activities or growth potential.

In a nutshell, the business's primary goal of bringing transformation within the chemical manufacturing sector implies an effort to address challenges, promote innovation, and potentially enhance sustainability within the industry.

4.3.2 Incubation Period and Reason for Selection

The discoveries underscore a shared emphasis on strategic decision-making, adaptability, and a commitment to long-term sustainability among entrepreneurs throughout the incubation period. The factors influencing the selection and the objectives established in this phase reveal a deliberate and considerate approach to business development, collaboration, and the pursuit of sustainable practices as noted below.

The respondent said that:

During the Covid 19 lockdown, they could not do anything and had to think out of the box and tap into the blue water of cleaning detergents to respond to the demand for sanitizer and decided to provide the detergents. They started in July 2020 and continued to date. The director liked the challenges and with her technical background, he looked for a new venture in manufacturing. (QB; JJ; DG)

The business faced challenges during the COVID-19 lockdown, forcing them to think creatively and adapt to the changing circumstances. This indicates resilience and a proactive approach to navigating challenges, which is crucial for business sustainability. The decision to start manufacturing cleaning detergents in July 2020 indicates a swift response to the changing market demands. The business's ability to not only initiate but also sustain this venture suggests effective planning and execution, as well as a commitment to meeting ongoing needs. The decision to enter the manufacturing sector signifies a significant strategic move. Manufacturing involves complexities related to production, supply chain management, and quality control.

QB's technical background likely played a role in making informed decisions in this new venture. By responding to the demand for sanitizers, the business demonstrated adaptability to market needs. This responsiveness to consumer demands is essential for sustaining and growing a business, particularly during periods of rapid change like the COVID-19 pandemic.

The respondent said that:

It's been a year. They were introduced by CHEATA while they were attending their training. (SZ; BOB; CK; GEE)

The statement "It's been a year" suggests that a year has passed since the introduction by CHEATA during the training. This time frame is relevant for understanding the duration of the relationship or partnership that resulted from the introduction. Assessing the impact of the introduction over the past year is essential. This could include evaluating the success of any collaborative projects, achievements, or mutual benefits that have arisen from the connection facilitated by CHEATA.

The respondent said that:

It started in April 2023, and they have applied to be part of the incubation. To have quality management systems with good formulations so that the product has a longer life span. (SK; JZ)

The fact that the initiative started in April 2023 indicates a relatively recent beginning. Understanding the context and nature of this initiative, such as the industry or sector it operates in, would provide more insights into the timeline and potential developments. The decision to apply for incubation suggests a strategic move to seek support, guidance, and resources to nurture and grow the initiative. Incubation programs often provide mentorship, infrastructure, and other forms of assistance to early-stage businesses. The emphasis on quality management systems indicates a commitment to maintaining and improving the quality of the product or service. Quality management systems are crucial for ensuring consistency, reliability, and customer satisfaction. Understanding how these systems are implemented and managed will be essential. The mention of developing formulations suggests a focus on the technical aspects of the product. This could include the formulation of ingredients, production processes, or other elements that contribute to product quality. The goal of achieving a longer lifespan for the product implies a focus on durability and customer value.

The respondent said that:

Their goal was to make sure that they took the incubation to inception and improved revenue streams and made it sustainable. (LA; MT)

The goal of taking incubation to inception suggests a desire to move a project or business from the early stages, likely within an incubation program, to a point where it becomes a fully established and operational entity. Inception often refers to the formal beginning or establishment of something new. LA's role in setting this goal suggests an entrepreneurial mindset. The focus on taking an incubation project to inception, improving revenue, and ensuring sustainability requires strategic thinking, business acumen, and the ability to navigate challenges. Revenue improvement and sustainability are often key metrics for measuring the success and health of a business. This reflects a strategic and entrepreneurial mindset, emphasizing the importance of long-term viability and successful transition from the early stages to a fully established and sustainable business.

The respondent revealed the following sentiments:

Sustainable creation of jobs.

Local presents in manufacturing and support, and competitive edge and sustainable manufacturers.

To have approved formulations.

To have laboratories where they can test the product samples from the incubators production and have certification of analysis.

Have funding allocated for SABS certification.

Cycling of incubation doesn't have set goals or minimum retainer client performance. (SDL; AB; AV)

The emphasis on the sustainable creation of jobs indicates a commitment to not only generating employment but doing so in a manner that ensures long-term job stability and growth. This aligns with broader economic development goals. The goal of having a local presence in manufacturing and support suggests a focus on contributing to the local economy. This may involve sourcing materials locally, supporting local businesses, and fostering community development. The focus on a competitive edge and sustainable manufacturing indicates a commitment to producing high-quality products that can compete effectively in the market. Sustainability may also refer to environmentally friendly practices and responsible resource management. The goal of having approved formulations suggests a dedication to meeting regulatory standards. This is crucial for ensuring the safety, efficacy, and compliance of products with relevant industry regulations.

The intention to have laboratories for testing product samples from the incubator's production reflects a commitment to quality control and assurance. Having in-house testing facilities can ensure that products meet the desired specifications and standards. The allocation of funding for SABS (South African Bureau of Standards) certification suggests recognition of the importance of adhering to national standards. SABS certification can enhance the marketability of products and demonstrate a commitment to quality. The mention of cycling incubation suggests a continuous and iterative approach to business development. This may involve the ongoing support and development of new ventures within the incubation framework, fostering a dynamic and evolving ecosystem.

4.3.3 Experience with Incubation Program

For this study, the findings highlight the multifaceted experiences within incubation programs, showcasing adaptability, strategic thinking, and a commitment to excellence and sustainability among entrepreneurs engaged in incubation.

The respondent said that:

They were given forms to become a member of Chemin and paid the once-off fee of R700. They don't really know the selection process, but there are questions asked in the form of the questionnaires. There was a virtual interview and after that, they were accepted to the program. They don't think they chase people away. Most people don't know about the incubator as they don't have many people even around the Mdantsane community. They only had about them at SEDA. The incubator assists businesses in different enterprise development programs, business training, and CHETA support. (QB)

The individuals paid a once-off fee of R700 to become members of Chemin. This fee could be an initiation or membership fee required for participation in the incubator's programs and services. The selection process for joining Chemin involves filling out forms and answering questionnaires. This suggests that there is a level of screening or evaluation to determine the suitability of applicants. The virtual interview further supports the idea of a comprehensive selection process. After the virtual interview, the individuals were accepted into the program.

This indicates that the incubator makes informed decisions about admitting participants based on the application process, possibly assessing the viability and potential of the businesses. The statement that they don't think they chase people away and that most people don't know about the incubator suggests an inclusive approach. The incubator seems open to a diverse range of participants and is not perceived as exclusive. The information highlights that the incubator is not well-known, particularly in the Mdantsane community. This lack of awareness could be a challenge in reaching potential entrepreneurs within the local community.

The individuals learned about the incubator through SEDA (Small Enterprise Development Agency). This indicates a reliance on external sources for information dissemination. Increasing local visibility and community outreach might be areas for improvement. The incubator assists businesses in different enterprise development programs, business training, and CHETA support. This demonstrates a commitment to providing a comprehensive set of services to support the growth and development of businesses within the program.

The respondent said that:

Very positive to work with patient people with the incubation that allowed to be open. (SZ; GEE)

The findings suggest a positive experience for Senza while working with the incubation, particularly emphasizing the patience of the people involved and the openness allowed. The mention of working with patient people implies that the individuals associated with incubation demonstrate patience. Patience is often appreciated in a collaborative setting, suggesting a supportive and understanding environment. The acknowledgment of patience as a positive quality suggests that SZ values a supportive and tolerant atmosphere. This may be particularly crucial in an incubation setting where entrepreneurs and businesses may face various challenges and uncertainties. SZ's positive experience with the incubation is attributed to working with patient individuals and being in an environment that allows openness. These qualities foster a supportive atmosphere, which can contribute to the success and growth of businesses. The collaboration between Senza and the incubation appears to be characterized by a positive and constructive dynamic.

The respondent said that:

She liked their process; they were linked by Walter Sisulu University. The incubation assisted them with the development of business plan guidance and to have all the information documented. They received numerous support and collaboration with other institutions. Get access to other stakeholders for product development. (SK)

The fact that the incubation was linked by Walter Sisulu University indicates a formal connection between SK and the educational institution. This linkage could suggest a structured and possibly academic approach to business development. The statement "She liked their process" implies that SK has a positive perception of the incubation process. This could be related to the efficiency, effectiveness, or the supportive nature of the process. The incubation assisted SK with the development of a business plan. This support is crucial for early-stage businesses as a well-crafted business plan is often a fundamental tool for strategic planning, attracting investors, and guiding business development.

Moreover, SK's experience with the incubation linked by Walter Sisulu University is characterized by positive perceptions of the process, assistance with business plan development, comprehensive support, collaboration with other institutions, and access to stakeholders for product development. This suggests a well-rounded and supportive incubation environment that goes beyond traditional mentorship, providing a range of resources and networking opportunities for business growth.

The respondent said that:

To register for the business, get proper training on how to manufacture the products. Revenue increase – using the bank statement from the incubates to check if their businesses are growing or not. Employ people whilst in the incubation program and upon graduation. Get a manufacturing facility and make sure the quality standards with different stages. (LD)

The goal of registering for the business indicates a commitment to formalizing the venture. This is a crucial step for legal compliance, establishing credibility, and gaining access to various business opportunities. LD emphasizes the importance of proper training in manufacturing. This indicates a recognition of the need for skill development and expertise in the manufacturing process. Proper training can contribute to the quality of products and operational efficiency. The researcher noted that LD aims to track revenue increases by using bank statements from the incubates. This suggests a data-driven approach to assessing business growth and financial performance. Monitoring the financial health of a business is essential for making informed decisions.

The objective of acquiring a manufacturing facility reflects a long-term vision for the business. Having a dedicated facility can enhance production capacity, quality control, and overall operational efficiency. LD places importance on ensuring quality standards at different stages of the manufacturing process. This commitment to quality aligns with the industry's best practices and is essential for building customer trust and satisfaction. In the same vein, the goals outlined by LD encompass various aspects of business development, including legal compliance, skills development, financial monitoring, employment generation, and infrastructure development. This comprehensive approach suggests a well-rounded strategy for sustainable growth.

The respondent revealed the following sentiments:

Sustainable creation of jobs

Local presents in manufacturing and support competitive edge and sustainable manufacturers.

To provide technical training with formulations and get SABS approvals for products manufactured within the incubation. Assist with laboratory facilities and facilitate funding for incubates. To retain client performance. (SDL)

The emphasis on sustainable job creation reflects a commitment to fostering long-term employment opportunities. This aligns with broader socioeconomic goals of contributing to community development and stability. SDL aims for a local presence in manufacturing, emphasizing the importance of contributing to the local economy.

Supporting local businesses and manufacturing can have positive ripple effects on the community. The goal of creating a competitive edge and sustainable manufacturers indicates a focus on quality, innovation, and long-term viability. This approach is crucial for the success of businesses in the competitive market.

Providing technical training with formulations demonstrates a commitment to enhancing the skills and knowledge of incubate businesses. This can empower entrepreneurs with the technical expertise needed for manufacturing high-quality products. Seeking SABS (South African Bureau of Standards) approvals for products indicates a commitment to meeting and adhering to national quality standards. This can enhance the credibility and market acceptance of the manufactured products.

Lastly, the researcher noted that Siphamandla's objectives within the incubation program reflect a commitment to sustainable job creation, local economic development, competitive manufacturing, technical excellence, adherence to quality standards, infrastructure support, financial facilitation, and client retention. This approach aligns with the multifaceted needs of businesses and entrepreneurs within the incubation program, fostering a conducive environment for long-term success.

4.3.4 Services/Resources Provided and Their Usefulness

The findings underscore the importance of offering a well-rounded spectrum of services and resources within incubation programs to cater to the diverse needs of entrepreneurs. The programs not only focus on knowledge enhancement but also provide tangible assets, industry linkages, and a structured selection process to foster the growth and success of businesses. The respondent said that:

The training in business management has taught them how to run their business and adherence to compliance. Their goals were to manufacture the hand sanitizer and two products which they have met and exceeded to other ten new products range within the cleaning detergents. They have been exposed to product costing without compromising the product quality. They added the cosmetic range targeting to penetrate the retail stores like Clicks, Game, and other stores. (QB)

The training in business management indicates a focus on equipping QB and her team with essential skills and knowledge for effectively running and managing their business. This can include aspects such as financial management, operations, and compliance. The mention of adherence to compliance suggests a commitment to operating within legal and regulatory frameworks. This is crucial for the long-term sustainability of the business and maintaining ethical standards. Queen B's mention of achieving the goal of manufacturing hand sanitizer and two additional products demonstrates the successful execution of the business plan. This achievement reflects effective planning, execution, and product development capabilities. QB and her team not only met their initial manufacturing goals but also exceeded them by introducing ten new products within the cleaning detergent range. This signifies innovation, adaptability, and a proactive approach to business expansion.

According to the study findings, QB's journey within the incubation program involves the successful execution of manufacturing goals, product range expansion, strategic market targeting, and a focus on both compliance and product quality. This suggests a dynamic and forward-thinking approach to business development, positioning the venture for continued growth and success.

The respondent said that:

Space availability to manufacture the products and the guidance with the technical formulation process. Training on chemical manufacturing, yes, the program is very useful, and it provides the certificate as evidence and comfort to the clients. (SZ)

According to the findings, SZ 's experience in the incubation program is characterized by access to manufacturing space, guidance in the technical formulation process, and positive outcomes from chemical manufacturing training. The program's usefulness, as evidenced by the certificate

provision, reflects a comprehensive and practical approach to supporting business development in the chemical manufacturing sector. The mention of space availability for manufacturing indicates that Senza and the business have access to physical facilities to produce their products. This is a critical resource for businesses involved in manufacturing, allowing for the production of goods. The guidance with the technical formulation process highlights that Senza is receiving support in developing and refining the formulations for their products. This is crucial for ensuring the quality, effectiveness, and compliance of manufactured goods. Senza describes the program as "very useful," suggesting a positive assessment of the overall incubation program. This implies that the program provides valuable resources, guidance, and support that contribute significantly to the business's development.

The respondent said that:

They have been trained in digital marketing, financial management, and bookkeeping. They have been linked with other developmental state-owned entities, the SEDA, SEFA. (SK)

SK's experience within the incubation program involves training in digital marketing, financial management, and bookkeeping, as well as linkages with other developmental state-owned entities such as SEDA (Small Enterprise Development Agency) and SEFA (Small Enterprise Finance Agency). The training in digital marketing, financial management, and bookkeeping indicates a comprehensive approach to skill development. Digital marketing is crucial for promoting products or services online, while financial management and bookkeeping are fundamental for maintaining financial health and compliance. SK's exposure to digital marketing, financial management, and bookkeeping suggests a focus on diversifying skill sets. This diversification is valuable for entrepreneurs, as it equips them with a broader range of capabilities necessary for running and growing a successful business.

SEDA's involvement implies that SK has access to an agency dedicated to supporting the development and growth of small enterprises. SEDA may offer services such as mentorship, training, and access to markets, contributing to business development. SEFA's involvement indicates a connection to a financial institution focused on providing financing solutions for small businesses. Access to SEFA can be instrumental in obtaining capital for business expansion, equipment purchases, or other financial needs. The combination of skills training and linkages with state-owned entities suggests a holistic approach to business support within the incubation program. This approach addresses various aspects of entrepreneurship, from marketing to financial management and access to resources.

The respondent said that:

SMME's that are in business have an expression of interest for six months and assisted for the business registration. Interviews solicit a better understanding of the SMME's interests and check their clientele. (LD)

LD's involvement in the Small, Medium, and Micro Enterprises (SMMEs) space involves a process where businesses express interest for six months and receive assistance with business registration. Interviews are conducted to gain a deeper understanding of the SMMEs' interests and to assess their clientele. The six-month expression of interest period suggests a structured approach to engaging with potential SMMEs. This period may allow businesses to express their intent to participate in a program or receive assistance, providing a timeframe for initial interactions. LD and the program assist SMMEs with the business registration process. Business registration is a crucial step for legal compliance, formalizing operations, and gaining access to various business opportunities and support programs.

The use of interviews indicates a personalized and in-depth approach to understanding the interests and needs of SMMEs. Interviews provide an opportunity for direct communication,

allowing LD to gather valuable insights about the businesses' goals, challenges, and aspirations.

The engagement with SMMEs, including the expression of interest and interviews, suggests the potential for ongoing support beyond initial registration. This could involve mentorship, training, access to resources, or other forms of assistance tailored to the identified needs. The interview process is an opportunity for LD to build relationships with SMMEs. Establishing a connection and understanding the businesses on a personal level can contribute to a more collaborative and mutually beneficial partnership.

The respondent said that:

Advertise on social media and by word of mouth. Before COVID-19, there was a selection committee for adherence and requirements. Currently, they check the CK documents, SARS, and Bank confirmation letter to see if the business is legitimate, ID copies, and expressions of interest with company details. All the above go along with expression of interest. (SDL)

Siphamandla's involvement in selecting businesses for support involves a combination of advertising on social media, relying on word of mouth, and implementing a selection process that includes checking various documents. The use of social media for advertising suggests a contemporary and widely accessible method for reaching potential businesses. Additionally, relying on word of mouth indicates the potential for organic recommendations within the business community. This dual approach can enhance the visibility of the support program. Before COVID-19, there was a selection committee in place. This committee had specific criteria and processes for evaluating businesses seeking support. The existence of a committee suggests a structured and thorough approach to the selection process.

In the current context, the selection process involves checking various documents to assess the legitimacy of businesses. The documents include CK documents (Companies and Intellectual Property Commission), SARS (South African Revenue Service) documentation, bank confirmation letters, ID copies, and an expression of interest with company details. The focus on CK documents, SARS registration, and bank confirmation letters indicates a strong emphasis on verifying the legitimacy of the businesses. This is crucial for ensuring that the businesses receiving support are legally registered, tax-compliant, and have a genuine banking presence.

The inclusion of an expression of interest with company details suggests that businesses need to provide comprehensive information about their operations and interests. This could include details about their business model, goals, and how they plan to utilize the support offered.

4.3.5 Changes in Business Since Joining

The respondent said that:

Sometimes, when you get to Chem, there is no raw material for them to manufacture their products. They should start branding or marketing the incubation. They do not have enough equipment, and their facility is still under renovation. They need more funding to expand their training and have the testing lab not rely on the JHB labs. Chemin needs to have planned access to market events that will assist the incubation and market the incubation to its full potential. (QB)

QB mentions that sometimes there is a lack of raw materials for businesses within Chemin to manufacture their products. This shortage can pose a significant challenge as it may hinder the production capabilities of the incubated businesses. QB suggests that Chemin should start branding or marketing the incubation. This implies a recognition of the importance of creating awareness and promoting the services offered by Chemin. Effective branding can attract potential entrepreneurs and investors to the program. The statement indicates that Chemin faces challenges related to insufficient equipment, and the facility is still under renovation. These factors can impact the operational efficiency of the incubation program and may limit the types of support that can be provided to businesses.

QB highlights the need for more funding to address challenges, such as expanding training programs and establishing a testing lab. This indicates a financial constraint that, if addressed, could contribute to the overall growth and effectiveness of Chemin. QB emphasizes the importance of planned access to market events. This suggests a strategic approach to market engagement, enabling the incubation program to showcase the products and innovations of the businesses it supports. Access to market events can facilitate networking and potential business opportunities.

The respondent said that:

Yes, there were changes in the pricing due to the supplier cost, and the importance of bottling and labeling. Changing from the traditional business running to the professional business handling with records. (SZ)

Senza mentions changes in pricing, indicating a dynamic business environment. This could be influenced by various factors, such as fluctuations in supplier costs, market demand, or adjustments to maintain competitiveness. The statement implies that supplier costs play a significant role in determining pricing strategies. Fluctuations in the cost of raw materials or inputs may impact on the overall cost structure of the business, necessitating adjustments in pricing to maintain profitability. The mention of the importance of bottling and labeling suggests a recognition of the value of packaging and branding. This could indicate an awareness of the role aesthetics and presentation play in consumer perception and market competitiveness. Senza notes a shift from traditional business running to professional business handling with records. This suggests a transition toward a more structured and organized approach to business management. Professional handling with records typically involves systematic documentation, financial tracking, and adherence to established business processes.

The emphasis on bottling and labeling may also be tied to customer perception and brand image. Packaging can significantly influence how products are perceived in the market, impacting brand identity and consumer trust.

The combination of pricing adjustments and a shift to professional business handling implies a strategic business transformation. This may involve aligning operations with industry standards, optimizing cost structures, and enhancing overall business efficiency. SZ's acknowledgment of changes in pricing reflects adaptability to market dynamics. This adaptability is a key trait for businesses to navigate challenges, respond to customer needs, and remain resilient in the face of industry changes.

The respondent said that:

Yes, it has shaped the way they were doing business. Now the business is organized with the processes to follow. They are being assisted with the equipment that they should use as they manufacture the natural medical product and it's unique from the group. The technical exposure on how to manage the bacteria to their forms of packaging the products and delivery. They have support for the product's continuous improvement. (SK)

The findings suggest that there has been a significant impact on the way the business operates. The changes have likely brought about more structure, organization, and adherence to defined processes, reflecting a commitment to efficiency and effectiveness. The business is described as organized with processes to follow. This organizational aspect is crucial for streamlining operations, ensuring consistency, and creating a foundation for sustainable growth. It reflects a move toward professionalism and systematic business management. The mention of assistance with equipment indicates external support for the business. This assistance could be in the form of providing or recommending specific equipment tailored to the production of natural medical products. Having the right tools is essential for maintaining quality and efficiency.

The statement highlights that the business is manufacturing unique natural medical products within the group. This uniqueness could be a competitive advantage, differentiating the business from others in the market and potentially appealing to a specific target audience seeking natural remedies. The technical exposure provided to the business is likely related to the intricacies of managing bacteria, packaging techniques, and product delivery. This exposure indicates a commitment to ensuring that the business has the necessary technical knowledge to maintain product quality and safety.

The support for continuous improvement in product development suggests a commitment to innovation and enhancement. This focus on ongoing refinement aligns with best practices in product management and can contribute to staying competitive in the market. The technical exposure, unique product manufacturing, and support for continuous improvement collectively emphasize a commitment to quality and safety. This is particularly important in the production of medical products, where adherence to standards is critical for consumer trust.

The combination of organizational improvements, equipment assistance, technical exposure, and support for continuous improvement reflects a holistic approach to business development. This approach addresses various aspects, from internal operations to product quality and market positioning. The changes described suggest a strategic approach to business growth. By focusing on organization, unique product offerings, technical expertise, and continuous improvement, the business is positioning itself for sustainable development and potential expansion.

The respondent said that:

Access to the internet, laptops, manufacturing facilities, mixers, a bulk raw materials, to support the SMME's at a minimal cost. Assistance with technical support and availability of Chemin staff. (LD)

The provision of access to the internet and laptops indicates a commitment to equipping SMMEs with the necessary tools for digital connectivity and information processing. This support is valuable for tasks such as research, online communication, and accessing educational resources. The availability of manufacturing facilities and mixers is a crucial resource for SMMEs involved in production. This support provides them with the infrastructure and equipment needed to manufacture their products efficiently. Mixers are especially important in industries where blending or mixing is a part of the manufacturing process. Having access to bulk raw materials is advantageous for SMMEs as it can potentially lower production costs and enhance the overall feasibility of their operations. Bulk purchasing allows for economies of scale, supporting SMMEs at a minimal cost.

The mention of supporting SMMEs at a minimal cost suggests that Chemin is conscious of the financial constraints that SMMEs may face. By providing essential resources and facilities at a reduced or affordable cost, Chemin contributes to lowering barriers for small businesses. The assistance with technical support is a valuable aspect of the support provided by Chemin. This could involve guidance on manufacturing processes, troubleshooting technical issues, or providing expertise in areas where SMMEs may need assistance. The availability of Chemin staff indicates a hands-on and supportive approach. SMMEs can benefit from direct interactions, consultations, and guidance from experienced staff members who understand the intricacies of the industry and can provide personalized support.

The combination of internet access, laptops, manufacturing facilities, raw materials, minimal cost support, technical assistance, and available staff creates a comprehensive support ecosystem for SMMEs. This approach addresses various needs and challenges faced by small businesses in the manufacturing sector. Chemin's support appears to reflect a collaborative approach, where resources, expertise, and facilities are shared to foster the growth of SMMEs. This collaboration aligns with the broader concept of business incubation and support networks. The respondent said that:

Office equipment, office furniture, Machines for manufacturing, Mixers, Cosmetic mixtures, detergents for manufacturing, kitchen utilities, refrigerators, and microwave. (SDL)

Siphamandla's mention of various items, including office equipment, manufacturing machines, mixers, cosmetic mixtures, detergents, kitchen utilities, refrigerators, and a microwave, provides insight into the resources and infrastructure available within the context of the business or incubation program. The inclusion of office equipment and furniture suggests that there is a dedicated space for administrative and managerial tasks. This includes items such as desks, chairs, computers, and other tools necessary for the smooth operation of administrative functions. The mention of machines for manufacturing indicates a focus on industrial or production equipment. These machines play a crucial role in the production processes, enabling efficient and standardized manufacturing of products.

Mixers and cosmetic mixtures are specified, suggesting involvement in the production of cosmetic products. This indicates specialization in the beauty or personal care industry. Mixers are essential for blending ingredients, ensuring product consistency and quality. The reference to detergents for manufacturing implies that the business or program may be involved in the production of cleaning products. This could include various types of detergents used for cleaning purposes. The inclusion of kitchen utilities, refrigerators, and a microwave suggests that there may be facilities for food preparation and storage. This could be relevant in an incubation program that supports businesses involved in the production of consumable goods or the development of new food products.

Collectively, the mentioned items represent a comprehensive set of resources and infrastructure to support product development. From administrative tasks to manufacturing and product testing, the infrastructure appears well-equipped to cater to various aspects of business operations. The range of items mentioned, including cosmetic mixtures, detergents, and potentially food-related items, implies versatility in the types of products that the business or program may be involved in supporting. This versatility could cater to a diverse set of entrepreneurs with different product ideas. The availability of these resources is consistent with the concept of business incubation, where entrepreneurs and startups receive support, resources, and infrastructure to foster their growth and development. The mix of manufacturing machines and facilities for both cosmetic and detergent products, along with kitchen utilities, suggests the potential for collaborative innovation. Entrepreneurs within the incubation program may have opportunities to explore interdisciplinary product development.

4.3.6 Key Challenges in the Incubation Program

The respondent said that:

Sometimes, when you get to Chemin there is no raw material for them to manufacture their products. They should start branding or marketing the incubation. They do not have enough equipment, and their facility is still under renovation. They need more funding to expand their training and have a testing lab so they do not rely on the JHB labs. Chemin needs to have planned access to market events that will assist the incubation and market the incubation to its full potential. (QB)

The mention of sometimes encountering a lack of raw materials indicates a challenge in maintaining consistent production. Raw material shortages can disrupt manufacturing processes and impact the businesses within the incubation program. Addressing this challenge is crucial for sustained operations. QB recommends that Chemin should start branding or marketing the incubation. This implies a recognition of the importance of creating awareness and promoting the services offered by Chemin. Effective branding and marketing can attract entrepreneurs, investors, and partners to the incubation program.

The statement highlights that Chemin does not have enough equipment, and its facility is still under renovation. Insufficient equipment can hinder the incubation program's ability to support businesses effectively. Completing facility renovations is essential for providing a conducive environment for entrepreneurs. QB emphasizes the need for more funding. Adequate funding is crucial for addressing equipment shortages, completing facility renovations, and expanding training programs. Securing additional funding can enhance the overall capacity and impact of the incubation program.

The mention of needing a testing lab suggests a dependency on external labs in Johannesburg. Establishing an in-house testing lab would not only reduce reliance on external facilities but also provide more control and flexibility in the testing process, contributing to efficiency and independence. QB highlights the importance of planned access to market events. Participating in industry events and exhibitions can provide exposure, networking opportunities, and potential partnerships. It is a strategic approach to showcasing the incubation program and the businesses it supports.

The call for marketing the incubation to its full potential indicates a desire to optimize the market presence and impact of Chemin. This involves leveraging opportunities, building strategic partnerships, and ensuring that the program is well-known within relevant industries. The challenges and recommendations collectively point to the need for a holistic approach to business development for Chemin. This includes addressing operational challenges, securing funding, improving infrastructure, and implementing effective marketing strategies.

Enhanced Program Sustainability: Addressing these challenges and implementing the suggested improvements can contribute to the sustainability and effectiveness of Chemin as an incubation program. This, in turn, supports the success and growth of the businesses within the program.

The respondent said that: *Changing their mixing methods from manual to automatic machinery will improve the production turnaround time as they spend the whole day at Chemin when it's production time.*

They should have more personnel because currently if they have to wait if one of the staff members from the production is not at work they have to until the person is back at work. This is inconveniencing with the plans in place. (SZ)

SZ proposes a shift from manual mixing methods to automatic machinery. This change is expected to enhance the production turnaround time. The use of automatic machinery can significantly

increase efficiency, reduce manual labor, and accelerate the production process. The emphasis on improving production turnaround time indicates a recognition of the importance of efficiency in manufacturing operations. Faster production can lead to increased output, reduced waiting times, and a more responsive approach to meeting demand. Senza mentions that they spend the whole day at Chemin during production time. This suggests that the current manual mixing methods may be time-consuming, requiring extended hours for completion. Automating this process could allow for more streamlined and shorter production cycles. The statement highlights a current challenge with personnel shortages. If a staff member from the production team is absent, it causes delays as others have to wait until the person returns to work. This situation is identified as inconvenient and disruptive to planned operations.

SZ recommends having more personnel to address the challenges associated with staff absences. Increasing the number of staff members in the production team can provide backup and flexibility, minimizing the impact of individual absences on the overall workflow. The mention of inconvenience with plans in place indicates that there is a need for better operational planning. Automating mixing processes and having sufficient personnel can contribute to a more efficient and resilient production system that is less dependent on individual staff availability.

The suggestion to transition to automatic machinery implies a potential need for investment in technology. While there may be upfront costs associated with acquiring automated equipment, the long-term benefits in terms of increased productivity and efficiency could outweigh these initial expenses. The proposed changes are likely to have a positive impact on overall productivity. Automation can lead to standardized and faster production processes, while having an adequate number of personnel can ensure a smoother workflow, even in the face of unexpected absences.

The respondent said that:

They should have a better way of doing things with a clear framework of process mapping, a clear diagnostic report with guidelines, and a time frame. The lack of human resources. The reporting lacks guidance on what is expected from the incubates and this leads to insufficient reporting. (SK)

The suggestion for a better way of doing things with process mapping implies a desire for more streamlined and structured processes within the incubation program. Process mapping involves visualizing and documenting workflows, which can enhance clarity, communication, and overall efficiency. The call for a clear diagnostic report with guidelines and a time frame indicates a need for well-defined and structured assessment processes. This could involve establishing clear expectations, providing guidelines for reporting or diagnostics, and setting specific time frames for achieving milestones. Clarity in these aspects can improve accountability and goal attainment. The mention of a lack of human resources suggests a

staffing challenges within the incubation program. This can have implications for the overall capacity to support and guide entrepreneurs effectively. Adequate human resources are essential for providing mentorship, guidance, and operational support to incubates.

The statement highlights that reporting lacks guidance on what is expected from the incubates, leading to insufficient reporting. This points to a potential gap in communication or a lack of clear expectations for the reporting process. Providing clear guidelines and expectations can result in more meaningful and comprehensive reporting. The tone of the statement suggests a need for a strategic framework within the incubation program. This framework could include well-defined processes, clear diagnostic reports, guidelines for reporting, and a strategic plan for utilizing available human resources

effectively.

Improving process mapping, diagnostic reports, and reporting guidance can contribute to better communication and alignment of expectations. This, in turn, can lead to more effective collaboration between the incubation program and the entrepreneurs it supports. Addressing the lack of human resources requires strategic planning for resource allocation. This involves assessing the current needs of the program, determining the required skill sets, and allocating human resources in a way that maximizes impact and support for incubates.

Providing clear guidelines and expectations can empower incubates by offering a structured framework for their participation in the program. This clarity fosters a sense of direction and purpose, enabling entrepreneurs to focus on meeting specific goals and milestones. The suggestions for improvement in process mapping, reporting guidelines, and addressing human resource challenges reflect a commitment to continuous improvement within the incubation program. Regular evaluation and refinement of processes contribute to the program's effectiveness over time.

The respondent reveals the following sentiments: a.

Pre-selection-

Compliance and SARS registration b.

Pre-incubation-

Formal training of manufacturing over five days. c.

Incubation

Equip incubates with financial management, marketing, bookkeeping, and business management.

d. Graduation –

Get support for finance and source funding from local institutions. Assist incubates to start their manufacturing sites through available funding from the government. Must do revenue of +/- R1 million and above to graduate. After there are monitoring services. (LD)

LD's outlined process indicates a well-structured and progressive approach to business incubation, with a clear pathway from pre-selection to graduation. The emphasis on compliance, training, comprehensive business education, and financial support reflects a commitment to the holistic development of entrepreneurs. The revenue requirement for graduation aligns to ensure that businesses achieve a certain level of financial sustainability before moving to the next phase. The post-graduation monitoring services indicate an understanding of the importance of ongoing support to enhance the long-term success of incubated businesses. Lastly, LD's statement reflects a strategic and supportive business incubation process, addressing key aspects of compliance, skill development, and financial sustainability to nurture successful entrepreneurs.

The respondent said that:

- a. *Pre-incubation-five days training and asses the business analysis, and growth financial assessment with the set target of R7 500 per quoter.*
- b. *Incubation -attend all the planned training, assessment of qualifications, and apply for the Chemin loan facilities, business development, CHETA support provides business voucher through the institutions of higher education and development agencies.*
- c. *Graduation –when the business is making the profit of R500 000 up to R1 million To have their manufacturing facility with the assistance of the SEFA funding (SDL)*

The pre-incubation stage involves a focused five-day training period and the assessment of business

analysis. This emphasizes an initial commitment to skill development and a thorough understanding of the businesses entering the incubation program. The inclusion of a growth financial assessment with a set target of R7,500 per quarter suggests a practical approach to financial goal setting. This assessment likely evaluates the financial viability and growth potential of the businesses. The incubation stage requires participants to attend all planned training sessions. This emphasizes a commitment to continuous learning and skill enhancement throughout the incubation period. The assessment of qualifications indicates a consideration of educational background and expertise. Additionally, the mention of applying for Chemin loan facilities suggests a financial support mechanism for incubates to facilitate business development.

The focus on business development and support from CHETA (Construction Education and Training Authority) indicates a comprehensive approach to nurturing businesses. Business vouchers through institutions of higher education and development agencies suggest access to additional resources for growth. The researcher noted a well-structured incubation program with a clear progression from pre-incubation to graduation. However, the emphasis on continuous learning, financial viability, and eventual self-sufficiency through ownership of a manufacturing facility demonstrates a comprehensive and goal-oriented approach to supporting businesses.

4.3.7 Key Strengths of the Incubation Program

The study findings highlight several key strengths and positive outcomes of the Chemin incubation program. Firstly, the central location facilitates accessibility for the target group, emphasizing a proactive approach to support. The program's technical strength and experience suggest a valuable resource for specialized guidance. Continuous communication, follow-up, and aftercare customer service demonstrate a commitment to long-term relationships, extending even to program graduates, as revealed in the following manner.

The respondent said that:

Their location is central to their target group. They do follow up with their incubates. Strong in technical and have experience of it. Aftercare customer service to all their incubators. Continuous communication and have maintained their communication channels even to the graduates. (QB)

The central location enhances accessibility, making it easier for the target group to participate in the program. Follow-up processes demonstrate a proactive approach to monitoring and supporting businesses after they have completed the formal incubation period. Technical strength and experience suggest that the program can provide valuable expertise and guidance in specialized areas. After-care customer service and continuous communication reflect a commitment to long-term relationships and support for both current incubates and program graduates.

The respondent said that:

Their product knowledge and they are always on demonstrate that. They are very patient with the incubates and avail themselves to assist. (SZ)

Senza emphasizes the program's strong product knowledge and the practice of consistently demonstrating that knowledge. This indicates a commitment to expertise and the ability to impart practical knowledge to incubates. Demonstrating product knowledge is crucial in an incubation program, especially if it involves technical or specialized industries. It suggests that the program is well-versed in the products and industries it supports. Senza notes that the program is very patient with incubates and makes itself available to assist. This highlights a supportive and patient

mentorship approach, fostering a positive learning environment. Patience is a valuable trait in mentorship, particularly when working with early-stage entrepreneurs. Being available to assist indicates a commitment to the success and development of incubates.

The respondent said that:

They have quality of work; the staff have expertise and experience with good reputation. Have good relationships with other stakeholders and have branded the incubator and made it well known. (SK)

SK notes that the program has a good reputation and maintains good relationships with other stakeholders. This points to a positive image in the industry and collaborative efforts with external partners. A good reputation and strong relationships with stakeholders can enhance the credibility and reach of the incubation program. It can also open doors to additional resources and opportunities for incubates. SK mentions that the incubator is branded and well-known. This indicates a strategic approach to marketing and visibility. Branding and being well-known suggest that the program has effectively positioned itself in the market. This visibility can attract potential entrepreneurs and partners, contributing to the program's success.

The respondent said that:

Yes, it does work. As most of the incubates join without making any revenue, they later, with the support received at Chemin, manage to have it. (LD)

LD's statement robustly reinforces the notion that the Chemin incubation program is highly effective in fostering the growth and success of businesses. The explicit acknowledgment that a significant portion of incubates joins the program without any revenue distinctly highlights the program's inclusivity, demonstrating its commitment to supporting entrepreneurs at various stages, particularly those in the early phases of business development. This inclusivity underscores the program's holistic approach.

Furthermore, the subsequent observation that incubates, with the support provided at Chemin, ultimately succeeds in generating revenue and portrays a positive narrative. This outcome serves as a compelling testament to the program's impact and effectiveness. The linkage between the initial lack of revenue and the eventual success of incubates underscores the transformative role

that the Chemin incubation program plays in empowering entrepreneurs to achieve tangible financial milestones. In essence, success in revenue generation becomes a tangible indicator of the program's positive influence and sustained effectiveness.

Yes, it does. Some clients have their products at some of the retail stores, i.e., Spar. Other companies are progressing well with their business models. (SDL)

The findings convey the positive impact of the Chemin incubation program, with tangible success stories such as products being placed in retail stores and businesses progressing with their models. This points to the effectiveness of the program in not only launching businesses but also in enabling sustained growth and market success for its participants.

4.3.8 Impact of Incubation Program on Business

The findings also bring to light formidable challenges, prominently represented by funding constraints and a reliance on government support. These challenges emerge as formidable barriers to the sustained success and progress of incubation initiatives. The imperative to address these challenges is unequivocally identified as pivotal for fortifying the overall efficacy and outcomes of incubation programs. This recognition underscores the necessity for strategic interventions and

innovative approaches in securing diverse funding sources and establishing sustainable frameworks to ensure the enduring impact of these crucial entrepreneurial support systems.

The respondent said that:

From the beginning, they received technical training as they were never exposed to manufacturing. The program has rebuilt and shaped the business and restored hope for its growth. Their dishwasher has been tested and approved by the Chemin laboratory. They are working on the product labeling now. (QB)

The technical training provided by the program addresses a crucial gap in knowledge for entrepreneurs who were initially unfamiliar with manufacturing processes. The mention of rebuilding and shaping the business implies a holistic intervention that goes beyond skill development, encompassing strategic guidance and structural improvements. The restoration of hope signifies the program's positive influence on the entrepreneurs' mindset and outlook, fostering a sense of confidence and optimism. Product testing and approval by the Chemin laboratory indicate a commitment to quality assurance and adherence to industry standards. The current focus on product labeling suggests that the business is progressing toward market readiness, a crucial step in the commercialization of their product.

The respondent said that:

Yes, it has. they have given self-confidence, and to the product due to the best quality practices they received from the incubation program. All that has retained their clients and gained new ones. (SZ)

The increase in self-confidence indicates that the incubation program has a transformative effect on the entrepreneur's mindset, contributing to personal and professional growth. Emphasis on best quality practices suggests that the program is instrumental in imparting industry standards, ensuring that the business operates at a high level of quality. Client retention signifies that the positive changes implemented through the program are valued by existing customers, leading to continued loyalty. The attraction of new clients points to the program's broader impact on market competitiveness and the business's ability to expand its customer base.

The respondent said that:

Yes, it is, and it provides confidence to the owner and the products. Provided more clarity and guidance. Self-confidence provides support for working with the department of health, looking at the product as they are the targeted clientele. Got self-reliance towards the innovation process business. (SK)

The statement suggests that the incubation program has provided confidence to both the owner and the products. This points to a transformative effect on the entrepreneur's self-esteem and belief in the products they are developing. SK mentions that the program has provided more clarity and guidance. This indicates that the incubation program plays a role not only in skill development but also in offering strategic direction and clarity, potentially related to business operations, market positioning, or product development. The reference to working with the Department of Health suggests that the program has provided support and confidence in dealing with regulatory bodies. This is crucial, especially if the health department is the targeted clientele, indicating compliance with health and safety standards. SK notes that there is self-reliance towards the innovation process in the business. This suggests that the program fosters an environment where entrepreneurs feel empowered to drive innovation independently, contributing to the overall growth and adaptability of the business.

The respondent said that:

To do revenue of R1 million and more.

Employ 5 to 10 employees.

1. Since its inception, how many businesses have gone through the incubation program?

a. How many have successfully completed? Plus / minus 250 are doing well.

b. How many have fallen out of the program?

Plus / minus 50 have fallen out due to lack of dedication and ended up going back to employment.

2. In your opinion, what would you say hinders the success of the incubation program?

The funding is not sufficient to support the incubation program. They only get R1,5 million with unrealistic targets. The funding is not aligned with the expected outcomes. (LD)

The program has seen a significant number of businesses successfully completing incubation, reflecting its positive impact. The dropout rate, while present, is relatively low, and the reasons cited are related to individual dedication issues. Funding challenges, particularly the perception of insufficient funds and misalignment with expected outcomes are identified as key obstacles to the program's success. The study findings highlight both the successes and challenges of the incubation program. While a substantial number of businesses have thrived, funding constraints and misalignment with expected outcomes pose significant hurdles to the program's effectiveness. Addressing these challenges could contribute to further enhancing the program's impact and success rate.

The respondent said that:

1. Since its inception, how many businesses have gone through the incubation program? a. How many have successfully completed? – Its +/- 270 on the client database and 160 clients are active.

b. How many have fallen out of the program? – 110 have fallen out of the incubation.

2. In your opinion, what would you say hinders the success of the incubation program?

Response: The incubation vision is reached but only depends on the government funding. If they can have their laboratory to be one of the cash flows not only for their incubators. The major challenge is funding, and it is limiting progress. (SDL)

The program has engaged a substantial number of businesses, with a notable proportion currently active. Dropout rates are present, but the focus on active clients suggests a reasonable level of success. Funding dependence on the government is recognized as a critical challenge, impacting the program's vision and progress. Finally, the findings provide a snapshot of the program's outcomes and underscore the challenge of dependence on government funding. The need for diversification of revenue sources, such as through a laboratory, is highlighted as a potential solution to address funding limitations and support the program's sustained progress.

4.4 Conclusion

In conclusion, the incubation program has demonstrated success in fostering the growth of businesses, as evidenced by the number of active clients and businesses doing well post-incubation. However, both LD and SD emphasize the critical challenge of insufficient funding, which affects the

program's ability to fully realize its vision. The notion of diversifying revenue sources through initiatives like establishing a laboratory emerges as a potential solution to enhance financial sustainability.

The findings underscore the importance of addressing funding issues and exploring innovative approaches to ensure the long-term success and impact of the incubation program. As these insights are based on the perspectives of individuals closely involved with the program, they provide valuable considerations for stakeholders and policymakers aiming to support entrepreneurship and economic development through incubation initiatives.

CHAPTER 5: DISCUSSION OF FINDINGS

5.1 Introduction

Business incubation programs are critical in fostering the growth and development of emerging enterprises, providing necessary support, resources, and guidance. This study explores business incubation through an analysis of the Chemin Business Incubator in East London, with a focus on the experiences and perspectives of entrepreneurs within the incubator. The goal is to assess the impact, challenges, and effectiveness of the program, while also linking the findings with existing literature on business incubation and entrepreneurial success.

Business incubators play a significant role in increasing the success rates of start-ups, particularly in emerging economies. Aernoudt (2004) emphasizes that incubators provide essential services such as mentorship, networking, and resources, which increase the chances of entrepreneurial survival. Similarly, Carayannis et al. (2016) highlight that incubators create an ecosystem where new businesses can thrive by offering structured support. The findings from this study will align with and extend existing literature, providing a fresh perspective on the incubator model in the context of East London. This chapter will first discuss the findings drawn from the Chemin Business Incubator, linking them with contemporary literature. It will then examine the effectiveness of the incubator model, providing recommendations for improving its impact and sustainability.

5.2 Establishment and Nature of Business

The businesses within the Chemin Business Incubator demonstrate adaptability and resilience, with a clear focus on responding to shifting market demands. For example, a printing business pivoted to manufacturing cleaning detergents and health products, demonstrating strategic adaptability in an ever-changing market environment. This aligns with findings by Herrington et al. (2017), who note that entrepreneurs in emerging economies often exhibit agility, making rapid changes to their business models to respond to external pressures, such as the COVID-19 pandemic. Additionally, these findings reflect the claims of Afsar et al. (2020), who argue that businesses operating in volatile environments need to diversify and adapt quickly to maintain competitiveness.

The decision to establish businesses as Non-Profit Organizations (NPOs) also reflects a growing trend towards social entrepreneurship in the region. These businesses aim to meet market needs while simultaneously contributing to social development. Mair and Martí (2006) argue that social enterprises focus on creating community value and addressing societal challenges while achieving economic sustainability.

The findings of this study support this notion, as the businesses in the Chemin Incubator are aligned with broader social responsibility goals, focusing on local economic growth, job creation, and poverty alleviation, as emphasized by Garmise and Page (2020).

The formal registration of businesses with the Companies and Intellectual Property Commission (CIPC) in 2021 is a significant step for these businesses, signaling their commitment to legal compliance and credibility. This move positions businesses to access new opportunities and resources while also providing legal protection. This aligns with the work of Parker (2009), who stresses that formalization plays a key role in enhancing access to funding and market credibility, both of which are crucial for long-term sustainability.

The establishment of the Chemin Business Incubator in 2002 demonstrates a long-term commitment to supporting small businesses in underserved regions. The expansion of the incubator into multiple geographic locations further underscores the commitment to fostering regional economic development. Kantis et al. (2004) argue that incubators with a broad geographic reach are more successful in supporting businesses across different regions, as they are able to target areas with specific industrial growth potential. This study supports this claim, as the incubator's strategic presence in regions such as KZN, Modifontain, and East London facilitates the targeting of high-growth sectors and regions in need of business support.

5.3 Incubation Period and Reason for Selection

During the incubation period, entrepreneurs displayed significant resilience, particularly in the face of external challenges like the COVID-19 pandemic. Many businesses quickly adapted their offerings, shifting to the production of sanitizers and cleaning products in response to heightened demand. This adaptability mirrors the findings of McAdam and McAdam (2008), who emphasize the critical role of business incubators in providing flexible, responsive support during times of crisis. The ability to pivot quickly in the face of external shocks is a crucial trait for entrepreneurs in emerging economies, as highlighted by Mian et al. (2016), who suggest that incubators provide the resources needed for businesses to adjust to unexpected changes in the market.

The collaborations facilitated by the Chemin Business Incubator, particularly those initiated in 2023, focus on enhancing quality management systems, product formulations, and product lifespan. These initiatives align with the best practices of successful incubators, as described by Spigel (2017), who argues that incubators should provide specialized support that improves the technical and operational capabilities of start-ups. The businesses participating in the Chemin Incubator are focused on improving their competitive advantage through better product quality and sustainability, with a strong emphasis on obtaining certifications such as SABS, which further reinforces the credibility and marketability of their products.

The focus on transitioning from incubation to inception reflects a strategic mindset among entrepreneurs. This goal of becoming self-sustaining and profitable aligns with findings by Rothaermel and Thursby (2005), who state that the ultimate goal of incubation is to prepare businesses for long-term growth and independence. The businesses in this study have demonstrated a clear commitment to job creation, local economic contributions, regulatory compliance, and quality assurance—factors that are critical to the long-term sustainability of start-ups. This approach to business development is consistent with recent literature on the importance of incubators in fostering sustainable businesses,

particularly in the context of small and medium-sized enterprises (SMEs) (Acs et al., 2008).

Furthermore, the study found that entrepreneurs are not only focused on economic success but also on contributing to the local community and creating jobs. This commitment to local economic development is consistent with the findings of Cohen and Winn (2007), who argue that successful incubators should support businesses that prioritize both economic returns and social responsibility.

5.4 Impact of Business Incubation on Entrepreneurial Success

The role of business incubators in fostering entrepreneurial success cannot be overstated. As highlighted by Isenberg (2010), incubators play a pivotal role in reducing the inherent risks of entrepreneurship by providing structured environments where start-ups can access not only physical resources but also intellectual and financial support. The Chemin Business Incubator has shown that such support can lead to improved survival rates and revenue growth among emerging enterprises. This is particularly evident in the businesses housed in the incubator, which have shown increased market penetration and diversification in their product offerings.

One of the key benefits of the Chemin Business Incubator has been the access to mentorship. Entrepreneurs within the incubator have consistently highlighted the value of having experienced mentors who help guide their decision-making processes, ensuring that they make informed choices about their business strategies and operations. As noted by Mian et al. (2016), mentorship plays a critical role in providing strategic direction and mitigating the common pitfalls faced by early-stage companies. Entrepreneurs in this study emphasized the role of incubator mentors in helping them navigate challenges such as product development, market entry, and financing. These insights echo the findings of Bruneel et al. (2012), who observed that effective mentoring programs are one of the most important factors in the success of incubated businesses.

Another significant impact observed during the incubation period is the entrepreneurs' enhanced understanding of market dynamics and customer needs. The focus on product quality, customer service, and innovation has led many businesses in the Chemin Business Incubator to adopt more customer-centric approaches. This aligns with the findings of Berger et al. (2016), who state that successful incubation programs foster the development of products and services that are better aligned with market demands, thereby increasing the likelihood of long-term business success. Entrepreneurs in this study reported that the incubator's assistance with market research, competitive analysis, and branding strategies were crucial in positioning their businesses for sustained growth.

5.5 Challenges Faced by Entrepreneurs in the Incubator

Despite the successes, entrepreneurs in the Chemin Business Incubator have faced various challenges during their incubation period. These challenges are reflective of the broader challenges faced by start-ups in emerging economies, as highlighted by Aernoudt (2004) and Mian et al. (2016). One of the most prominent challenges identified in this study is the difficulty in accessing sufficient financing. Many of the businesses in the incubator struggled to secure funding from traditional financial institutions, which is a common barrier to the growth of SMEs in South Africa (Brixiová et al., 2016). This issue was particularly evident for businesses seeking to scale operations or expand their product offerings. The lack of access to affordable and sufficient funding is a significant obstacle that incubators need to address in order to fully support the growth of their incubated businesses.

Another challenge faced by entrepreneurs in the incubator was the lack of skilled labor in some areas. While the incubator provided essential training and capacity-building opportunities, some businesses reported difficulties in finding employees with the right technical skills. This issue highlights the importance of aligning educational systems and training programs with the needs of emerging businesses. As noted by Garmise and Page (2020), a shortage of skilled labor can hinder the ability of businesses to innovate and scale, making it a critical challenge for businesses operating in resource-constrained environments.

Additionally, the competition from larger, more established firms was a challenge frequently mentioned by entrepreneurs. Larger businesses often benefit from economies of scale, more significant market presence, and established brand recognition, making it difficult for smaller businesses to compete. As noted by Spigel (2017), while incubators help start-ups build competitive advantages, the external competitive environment remains a significant challenge. Entrepreneurs in the Chemin Business Incubator are continuously working to differentiate their products and services in order to overcome these competitive pressures, a theme that aligns with the findings of Cohen and Winn (2007), who suggest that incubators need to assist start-ups in identifying and capitalizing on niche markets.

5.6 Sustainability and Future Directions

The long-term sustainability of business incubators is crucial to their effectiveness in supporting the growth of emerging enterprises. According to Mian et al. (2016), a sustainable incubator model requires continuous funding, effective partnerships, and a focus on long-term business growth. The Chemin Business Incubator has demonstrated its potential for sustainability through its diversified funding sources, including collaborations with government agencies and private sector partners. However, as the incubator continues to grow and expand, it will need to focus on diversifying its revenue streams and strengthening its partnerships in order to ensure its continued success.

The study also highlights the importance of scaling the incubator's impact beyond the initial incubation phase. Entrepreneurs in the Chemin Business Incubator expressed a strong desire to transition from incubation to independent operations, with many aiming for increased revenue and market share. However, to achieve this, incubators need to ensure that their exit strategies are well-defined and provide the necessary resources for businesses to thrive independently. This includes offering post-incubation support such as networking opportunities, continued access to mentorship, and guidance on scaling operations. Rothaermel and Thursby (2005) argue that successful incubators provide a structured exit process that ensures businesses are well-prepared for life beyond incubation.

Additionally, the study found that the use of digital tools and online platforms could further enhance the incubator's impact. Entrepreneurs highlighted the potential for increased online marketing, e-commerce, and digital product development to expand their customer base. This suggests that business incubators should focus on integrating digital skills and online platforms into their support services, ensuring that start-ups are equipped to compete in the global marketplace. The increasing reliance on digital technologies for business operations makes it imperative for incubators to offer digital training programs and facilitate the adoption of e-commerce solutions.

5.7 Recommendations

Based on the findings of this study, several recommendations can be made to strengthen the effectiveness and sustainability of the Chemin Business Incubator:

1. **Increase Access to Financing:** There is a need to improve access to financing for incubated businesses, particularly for those aiming to scale operations. This could involve establishing partnerships with financial institutions to create tailored funding solutions for start-ups, such as venture capital or low-interest loans.
2. **Address Skills Shortages:** The incubator should collaborate with educational institutions and vocational training centers to ensure a steady supply of skilled labor. Additionally, the incubator could offer specialized training programs to help entrepreneurs build the necessary technical and managerial skills required for business growth.
3. **Enhance Networking Opportunities:** Providing entrepreneurs with more opportunities to network with industry leaders, investors, and potential partners is essential. This could include hosting networking events, industry forums, and pitch competitions to expose businesses to potential customers and investors.
4. **Strengthen Post-Incubation Support:** The Chemin Business Incubator should continue to support entrepreneurs after they graduate from the incubation program, providing access to mentorship, business development resources, and market insights. This support will help businesses navigate the challenges of scaling and sustaining growth.
5. **Embrace Digital Transformation:** Given the increasing reliance on digital platforms, the incubator should offer digital literacy programs, e-commerce training, and support for integrating digital technologies into business operations. This will help businesses compete in a globalized, technology-driven market.

5.8 Conclusion

This study highlights the importance of business incubators like the Chemin Business Incubator in fostering entrepreneurial growth and development. The experiences and challenges faced by entrepreneurs within the incubator reflect the broader challenges faced by start-ups in emerging economies. By offering mentorship, networking opportunities, and tailored support, the incubator has helped many businesses improve their chances of success and sustainability. However, there are still significant challenges that need to be addressed, including access to financing, skills development, and competition from larger businesses. The recommendations provided in this study aim to strengthen the incubator's operations and enhance its impact on local economic development, ensuring that it continues to provide valuable support to emerging enterprises in the Eastern Cape and beyond.

CHAPTER 6: CONCLUSION

6.1 Introduction

The primary objective of this study, as outlined in Chapter 1, Section 1.3, was to analyze how Chemin allocates its resources to achieve enterprise development goals. The research aimed to explore how both tangible and intangible resources were distributed across different stages of incubation (pre-incubation and incubation) and how this influenced the success of incubates. Additionally, it sought to identify instances where resource allocation may have hindered the success of incubates.

This chapter synthesizes the study's key findings in relation to the original objectives, demonstrating how the research has addressed the intended goals. It also outlines limitations, provides recommendations, and highlights potential areas for further research.

6.2 Linking Research Objectives to Findings

The study set out to achieve the following research objectives:

1. Assess the effectiveness of Chemin's resource allocation across different incubation stages.
 - The findings indicate that Chemin effectively distributes resources across various incubation stages, with structured support in place. However, resource shortages in areas such as equipment and raw materials hinder operational efficiency.
2. Evaluate the impact of resource allocation on the success of incubates.
 - The research confirmed that access to technical expertise, funding, and infrastructure significantly contributes to incubate success. However, financial constraints and supply chain inefficiencies present notable challenges.
3. Identify gaps in the current resource allocation model that may hinder incubates' growth.
 - The study highlighted critical gaps, including overreliance on government funding, lack of diversified financial support, and operational inefficiencies affecting program sustainability.
4. Recommend strategies to optimize resource allocation and enhance incubate success.
 - Based on findings, strategies such as diversifying funding sources, strengthening industry partnerships, leveraging technology, and improving supply chain management have been proposed.

By addressing these objectives, the study has successfully provided a comprehensive analysis of Chemin's incubation model, ensuring alignment with the intended research goals.

6.3 Limitations of the Study

While the study provides valuable insights into the Chemin incubation program, certain limitations should be acknowledged:

- **Limited Respondent Pool:** The study was conducted within a specific group of entrepreneurs in Chemin's incubation program. While their insights are valuable, they may not fully represent the broader entrepreneurial landscape.
- **Time Constraints:** The research was conducted within a specific timeframe, meaning that findings reflect conditions at that particular period and may not account for long-term trends.
- **Qualitative Data Emphasis:** The study primarily relied on qualitative responses, which, while rich in depth, may not always align with quantitative performance metrics.

These limitations provide an opportunity for further research to enhance the study's applicability and scope.

6.4 Recommendations

Based on the findings, the following recommendations are proposed:

1. **Diversify Funding Sources:** Reduce reliance on government funding by securing private investments and partnerships.
2. **Enhance Operational Efficiency:** Improve supply chain management and invest in critical infrastructure upgrades.
3. **Leverage Technology:** Implement digital platforms and automation to streamline operations and increase productivity.
4. **Strengthen Stakeholder Engagement:** Build relationships with industry leaders, financial institutions, and regulatory bodies to enhance program sustainability.
5. **Improve Post-Incubation Support:** Establish long-term mentorship programs and follow-up mechanisms to track incubates' progress.
6. **Develop Alternative Revenue Streams:** Introduce self-sustaining initiatives such as fee-based consultancy services and training programs.

These recommendations aim to optimize resource allocation and ensure the long-term sustainability of Chemin's incubation program.

6.5 Further Research Areas

To build upon the current study, future research should consider the following areas:

1. **Longitudinal Impact Study:** Conduct an extended study tracking businesses within the Chemin incubation program over multiple years to assess long-term success.
2. **Quantitative Performance Metrics:** Incorporate data-driven metrics such as revenue growth, employment creation, and market expansion to complement qualitative insights.
3. **Technological Integration in Incubation:** Explore the role of emerging technologies, such as artificial intelligence and digital platforms, in enhancing business incubation outcomes.
4. **Comparative Study of Incubation Models:** Analyze different incubation models (public vs. private) to assess effectiveness and best practices.
5. **Exploration of Alternative Funding Models:** Examine the impact of various financial structures, such as hybrid public-private funding, on incubator sustainability.
6. **Cultural and Regional Influences on Incubation Success:** Study how different cultural and economic environments affect the performance of incubated businesses.
7. **Sustainability Strategies for Business Incubation:** Investigate long-term financial and operational sustainability models to reduce dependency on government support.

These areas of research will contribute to a more comprehensive understanding of business incubation and support improved program design and implementation.

6.6 Conclusion

The study has successfully examined Chemin's resource allocation strategy, identifying key strengths and areas for improvement. While the program provides substantial technical expertise and structured support, challenges such as financial constraints, supply chain inefficiencies, and inadequate infrastructure must be addressed.

The study confirms that resource allocation plays a crucial role in incubate success, directly influencing business survival and growth. Addressing the identified gaps through the recommended strategies will enhance Chemin's impact, fostering a more resilient entrepreneurial ecosystem.

Ultimately, this research contributes valuable insights into business incubation in South Africa, serving as a guide for policymakers, incubator managers, and stakeholders aiming to strengthen enterprise development initiatives.

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Appendix 1: Interview Questionnaires for Chemin Incubates and Incubator

This appendix presents the interview questionnaires utilized for conducting research interviews with both Chemin interviewees and staff/personnel:

Questionnaires for incubatee:

Background

This interview is for the analysis of the Business Incubation process at Chemin incubator. With Your permission the researcher would like to record the interview. This interview will allow the researcher to understand the incubation process and its various stages. Before we continue, do you have any questions?

INCUBATEE QUESTIONS

Incubatee Demographics

1. Can you Please tell me about your business?
 - Establishment
 - What does the company do?
 - Number of owners

Incubation Program

2. How long is the company in the incubator? Why did you decide to start your business in the incubator?
3. Please explain the incubation program from your experience (from selection to the current stage)?
4. What services/resources have you been offered at each stage of program? Did you find these useful?
5. Since joining the program have you had any changes in your business in terms of the following:
 - a. Business goals
 - b. Business management
6. From your opinion, what would you say are the key challenges hindering the full success of the incubation program?
7. From your opinion, what would you say are the key strengths of the incubation

- program?
8. Would you say the incubation program has improved your business? Please explain.

Questionnaires for Incubator

Background

This interview is for the analysis of the Business Incubation process at Chemin incubator. With Your permission the researcher would like to record the interview. This interview will allow the researcher to understand the incubation process and its various stages. Before we continue, do you have any questions?

INCUBATOR QUESTIONS

GOALS OF THE INCUBATOR

1. When was this organisation established? And why?
2. What would you say are the incubators' goal(s)?
3. How does the incubator measure whether it is reaching the said goals?
4. How does the incubator select incubates?

RESOURCE ALLOCATION

5. Please provide a list of the assets this incubator has.
6. Please list the services/resources offered at each stage of the incubation process?
 - a. Pre-selection-
 - b. Pre-incubation-
 - c. Incubation -
 - d. Graduation –
7. Do you think offering these services has a positive influence on the results and performance of the incubates? In other words, does it help them with their business?

Performance

8. What criteria do you use to measure the success of your incubates?
9. Since its inception, how many businesses have gone through the incubation program?
 - a. How many have successfully completed?
 - b. How many have fallen out of the program?

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you say
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incubati
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?

Appendix 2 – Formal Letter Seeking Authorization for Research Conduct:

Dear Ms/Mr

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a registered Master's student in the Department of Business School at the Rhodes University. My supervisor is Professor Tshidi Mohapelo

The proposed topic of my research is: An analysis of business incubation: A case study of Chemin Business Incubator in East London.

The objectives of the study are:

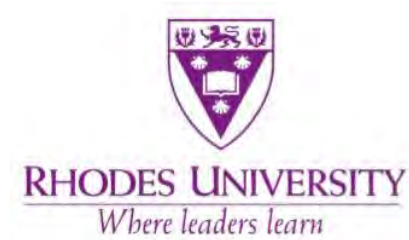
- (a) Analyse how Chemin allocates its resources to meet enterprise development goals.
- (b) Explore resource (tangible and intangible) allocated at different incubation stages (pre-incubation and incubation processes) determine incubate success.
- (c) Explore when resource allocation hinders incubate success.

I am hereby seeking your consent to conduct my research at the East London Chemin Incubator.

Should you require any further information, please do not hesitate to contact me or my supervisor. Our contact details are as follows:

The researcher: Zoliswa Mnqokoyi 079 528 0920 and zmnqokoyi@gmail.com My supervisor: Professor Tshidi Mohapelo at mohapelo@ru.ac.za

Appendix 3- Ethics Approval Letter



Rhodes University Human Research Ethics Committee
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<https://www.ru.ac.za/researchgateway/ethics/>

26 July 2023

Zoliswa

Mnqokoyi

Email: g18m4119@campus.ru.ac.za

t.mohapelo@ru.ac.za Review Reference: 2023-5534-7687

Dear Mrs. Zoliswa Mnqokoyi

Title: An analysis of business incubation: A case study of Chemin Business Incubator in East London. Researcher: Mrs.Zoliswa Mnqokoyi

Supervisor(s): Professor Tshidi Mohapelo,

This letter confirms that the above research proposal has been reviewed and **APPROVED** by the Rhodes University Human Research Ethics Committee (RU-HREC). Your Approval number is: 2023-5534-7687

Approval has been granted for 1 year. An annual progress report will be required in order to renew approval for an additional period. You will receive an email notifying you when the annual report is due.

Please ensure that the ethical standards committee is notified should any substantive change(s) be made, for whatever reason, during the research process. This includes changes in investigators. Please also ensure that a brief report is submitted to the ethics committee on the completion of the research. The purpose of this report is to indicate whether the

research was conducted successfully, if any aspects could not be completed, or if any problems arose that the ethical standards committee should be aware of. If a thesis or dissertation arising from this research is submitted to the library's electronic theses and dissertations (ETD) repository, please notify the committee of the date of submission and/or any reference or cataloguing number allocated. Sincerely,

Mrs Joyce Sewry

Acting Chair: Rhodes University Human Research Ethics Committee, RU-HREC cc: Ethics Coordinator

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