THE ROLE AND EFFECTIVENESS OF BUSINESS INCUBATORS IN GROWING SMALL BUSINESSES: A FOCUS ON THE MANUFACTURING INDUSTRY

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ABSTRACT

Business incubation has been known as one of the most viable tools for increasing the number of small businesses around the world. In South Africa, there seems to be very little work done to understand what the role of incubators are and how effective are the mechanism they have in creating small businesses.

This article seeks to explore the role that business incubators play in growing small businesses in South Africa. In addition, the research seeks to determine how effective are the mechanisms which business incubator have implemented in ensuring small businesses stay self-sustaining after the incubation period has ended.

An exploratory qualitative method was used in this study whereby semi-structured interviews were conducted with incubators and incubatees in the manufacturing industry in South Africa. The results showed that the safe and secure working space provided by an incubation hub, the networking opportunities and the training and mentoring provided, are the outstanding benefits and contribution incubators make to the sustainable development of small businesses.

Keywords: Business Incubation, Small Businesses, Development.

INTRODUCTION

Most developing nations in the world depend on the growth and development of new businesses to create jobs and to grow the economy. One of the vehicles that is widely adopted to facilitate the creation of new businesses and increase entrepreneurial activity, is the establishment of business incubators.

Business incubation is a process through which entrepreneurs can gain skills and get support to create successful start-ups. The process traces as far back as 1959 (Dubihlela & Van Schaikwyk, 2014), although it was first introduced in South Africa around the mid-90s. Today the Department of Trade and Industry (DTI) recognizes business incubation as a viable tool to help SMMEs to grow and become successful.

Given the need for job creation in South Africa, small business development provides a good opportunity to accelerate this process as well as fulfilling the need to grow the economy of the country. In achieving its goal of creating 11 million jobs by 2030, the National Development Plan (2011) expects small business to contribute 90% of these jobs. Along with job creation, SMMEs are identified as accelerating national priorities of rural and township development, skills strengthening and economic growth (SEDA, 2017).

The challenge that faces South African small business today is that they have a high percentage of failure at the beginning of their ventures. According to the DTI, the failure rate of

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small businesses in South Africa is around 80% (DTI, 2014) and most businesses fail within the first five years of their existence. In addition, SMMEs which have undergone business incubation still faces challenges to stay in business few years after the end of the incubation period (Dubihlela, 2014) which further exacerbate the problem.

The poor performance of small business development puts a lot of pressure on the government who allocates many resources which are aimed at the establishment of new businesses.

In 2014, the South African government established the Department of Small Business Development with the aim of focusing on small business development to be able to grow the economy and create jobs (DSBD, 2014).

This article will focus on small businesses under incubation to establish what role does business incubation play in developing their business skills to stay in business and how effective are the mechanisms employed by incubators to support start-ups to be able to stay in business and be self-sustaining after the incubation period has ended. Insights gained from this exploratory research could be useful in shedding light on some of the shortcomings in business incubation as experienced by incubates. The research will be exploratory because the role of incubators in South Africa is not clearly defined and incubators have different ways of supporting entrepreneurs. This research seeks thus a better understanding of the support offered by incubators in the manufacturing industry, well aware of the fact that this research will not provide conclusive results.

The research focused on business incubators in the manufacturing environment which are operating in Gauteng. Gauteng Province is the economic hub of South Africa. Manufacturing in South Africa has seen a decline over the past decade and continue to shrink at a rapid pace. This fact makes research in that industry crucial. According to data from the South African Manufacturing Insights, the contribution of manufacturing to the country's GDP has reduced from 22% in 1993 to 13% activity in 2015 (SAMI, 2019).

LITERATURE REVIEW

There are many definitions of business incubation. Most of these definitions have as underlying theme that this is a process that involve a start-up business that is under the stewardship of a well-established business/hub/training facility over a defined period of time with the aim to make the start-up business able to run as a well-establish business after the incubation has been completed.

Bruneel, et al. (2012) define business incubation as a highly unique and flexible combination of business development processes, infrastructure and people, designed to nurture and grow new and small businesses by supporting them through the early stages of development and change. It is thus a business support process that accelerates the successful development of start-ups by providing resources, certain services, support and training. The concept has evolved over time from being associated with a business to being the providers of office space (Hong and Lu, 2016), to offering in-house business support services which are aimed at accelerating the growth of the firm, and many other financial and marketing functions.

Business incubators provide protected environments for businesses in its start-up stages (Buys and Mbewana, 2007) by equipping them with new skills and networking opportunities which enable them to be self-sustaining after the incubation period has ended and helping them overcome the numerous challenges inherent at this phase of their lifecycle (Schiopu et al., 2015).

Incubation models

During the 1980's business incubators were known as primary providers of office space (Hong and Lu, 2016) as well as being able to accommodate different small businesses under one roof. Most of them were known to be funded by the government (Lewis et al., 2011) which necessitated policy frameworks to support their development over time. Since then, the concept has been developed through various stages and it put different models in the industry.

The first model of business incubation was developed in 1985. According to Campbell, et al. (1985) this model focused on the diagnostics of business needs, the selecting and monitoring of the services provided, investment of capital and access to the working network of the incubator. Critique against this model was that it ignores the capabilities of the potential entrepreneurs joining the programs as well as the potential barriers that the environment might present, which could pose a risk to the success of the process.

This model was refined and replaced by another incubation model which came to be known as the Smilor's model. In this model, four dimensions of business incubation was proposed which would represent the optimal operation of the business incubation process. The dimensions were credibility development, shortening of the learning curve, faster troubleshooting and access to networks for the entrepreneurs (Smilor, 1987).

Critics of this model felt it had focused its attention too much on the external environment thus lacking on critical considerations of the internal environment. In 2008, another model for business incubation was developed which aimed at addressing the issues of external and internal focus of the firm. This incubation model covers all the aspects of the incubation process and its focus is both internally and externally. Components of this model comprise of the selection of the entrepreneur, business support, mediation, through training and evaluation, coaching and mentoring and graduation from the incubator (Bergek & Norman, 2008). This model is the most widely accepted by the industry.

Measuring Success

Incubation is closely linked to entrepreneurship such that it supports the entrepreneurs by guiding them at early stages of their businesses to improve their survival rates, therefore has a potential to increase entrepreneurial activity. Countries such as Brazil has seen benefits by investing time and efforts in business incubation since it has resulted in more successful entrepreneurs entering the market (Tiez, et al. 2015).

Measuring incubation effectiveness has become a challenging task due to the fact that there is not a single standard way defined how it can be measured. Theory is limited in this regard and no frameworks exist that provide a comprehensive assessment of effectiveness (Theodorakopoulos, et al. 2014).

In China, the government uses the financial performance of SMMEs under incubation to measure the effectiveness of business incubation (Hong & Lu, 2016). According to Rogova (2014) many universities are involved in business incubation, and they have each their own way of measuring progress and success.

Systems

The incubation process involves a couple of players with varying roles which affect the way the process is undertaken to ensure effective operation of the process. It is therefore imperative to consider all elements of business incubation as part of a system and hence the application of system theory. Flood (2010) states that with system thinking it is important to look at the whole ecosystem where the organisation operates as part of the system. This means that for the organisation to operate effectively, it is important for every component of that organisation to be fully operational. This is caused by the fact that there exists interrelatedness between the organisation and its ecosystem.

In business incubation, it can be deduced that incubators, entrepreneurs, the environment and support systems involved can be viewed as part of a system (Lose et al., 2016). The interrelations that exist between the different players can determine how effective the whole system operates. The stakeholders can become collaborative partners supplying economic resources, political support and specialist knowledge in a relationship that provides mutual benefit (Hong & Lu, 2016). Internal stakeholders can include both the incubators and entrepreneurs, suppliers of any training materials and funders of the programs. External stakeholders are competitors as well as the environment in which the businesses is situated. Using the stakeholder theory and the existing interrelations one could try to understand what role each plays in the success or failure of the incubation process.

From the entrepreneurship theory perspective, one will focus on the behavioural characteristics of entrepreneurs to ascertain whether a specific behaviour (effectuation, causation or bricolage) has any influence on the outcome of the incubation process. This theory tests the entrepreneurial nature of small business start-up owners to try predicting their likelihood to succeed in the program (Fisher, 2012).

There is consensus across the academic and business worlds that business incubation is one of the key mechanisms which could be used to grow SMMEs (Mulolli et al., 2017).

RESEARCH METHODOLOGY

An interpretivism research philosophy (Saunders and Lewis, 2018) was adopted for this research given the fact that the research is trying to get the reasons behind the high failure rate of start-up businesses after the incubation period. The research was done by using a qualitative research design. Data was collected through one-on-one, semi-structured interviews with participants who are part of the incubators in the manufacturing incubation hub in Gauteng. This research investigated the reasons behind the high failure rates by trying to understand the phenomenon of business incubation as experienced by the people who are directly affected by the process. In addition, the nature of the research is exploratory because it seeks to discover information on what influences the performance of business incubators and incubates. Semi-structured interviews were used to collect data for this research as it is the best method given the fact that we are trying to generate data to enable theory development. This ensured that participants were allowed maximum freedom to express their views on the phenomenon of business incubation and what they are experiencing with the aim to gain deeper insight into the problem. These methods allow insights which will later be used to generate themes useful in answering the research questions.

The interviewees were encouraged to express their views honestly and without any reservation to allow the researcher to collect valid data. The validity of the data was also tested against the data found in the literature. It was triangulated by asking the same questions to the staff of the incubator as well, who confirmed the data by giving the same answers.

Population and Sampling

The population is a complete set of group numbers, in other words, all the incubators involved within the manufacturing industry in South Africa. The selected sampling method was purposive sampling. The sample was selected with the assistance of the incubators as they knew their entrepreneurs as well as those that were willing to participate in the research. The sample consisted of 12 entrepreneurs with businesses in the manufacturing space but in different fields and serving different clients as well as incubators who form part of the manufacturing incubation hub. After the seventh participant was interviewed it became apparent that no new information was added, and that saturation of data was reached.

Ethical Considerations

The interview questions were approved as part of the ethical clearance process through the university. Each of the participants who took part in the study signed a letter of consent. Each participant gave permission for the interviews to be recorded and for the information they provided to be used in the study.

Research Questions

The main research question was to explore the role that incubators play in growing small businesses within the manufacturing industry in South Africa. Sub-questions directed at the incubatees and incubators were: What is your responsibility while in the program? How do you ensure maximum learning? What is your view on the incubation program? How do you ensure maximum learning in the incubation hub?

Questions directed to the incubator were: What is your responsibility leading the program? How do you measure the performance of the program?

Data Collection and analysis

Data was collected using semi-structured interviews. This process was facilitated by the incubator who arranged the participants and notified them beforehand. An ethical clearance form was signed with the incubator to get permission to have access to the entrepreneurs. All participants had manufacturing businesses and they were with the incubation hub for a minimum of six months. Face to face interviews were conducted and recorded. After transcription, data was analysed, using Atlas.ti software.

FINDINGS

Interviews were held with 12 participants of which all were coming from incubators related to the manufacturing industry situated in Gauteng, South Africa. The results have been summarised and categorized in groups to find key themes which would then be used to answer the research questions. Since the research is an exploratory research the codes were grouped together to form themes which would then provide clarity on the research question.

The Role of business Incubation in South Africa

The question was asked to all respondents to ascertain whether they have any understanding of what business incubation is and what it was meant to address. Their responses vary but overall shown to have a clear understanding of the process, as can be seen below:

Participant 3: "for me incubation is the umbrella for entrepreneurs who come to the program and get assistance such as business advice."

Participant 6: "business incubation is a place where start-ups get help in every facet of the business."

Exploring the Role of Entrepreneurs

This question was asked to the entrepreneurs to ascertain whether they are clear on what are expected from them throughout the duration of the incubation. Most of the respondents viewed their role in the incubation as taking ownership of their business.

Participant 1: "my role is to drive my business and to show leadership in taking my business forward. This is the expectation!"

Participant 2: "we are expected to send monthly progress reports on our business and the financials to the incubator and we must also indicate how many new jobs have we created during that month."

Participant 4: "It is expected from me to create jobs and be profitable with my business."

Participant 6: "my role is to learn new skills like finance, marketing and accounting to ensure that I can be able to track my business' progress and have the ability to market my business after the incubation period has ended."

The respondents show that to be successful, they must be ready and willing to take full advantage of the opportunity provided by this process. The respondents also indicated that they see themselves as the main players in this process who can positively make their businesses succeed.

Exploring the Role of the Business Incubator

The question was asked to the respondents to find out what role the incubator played in the incubation process. The respondent's views were based on what they were receiving from the incubation hub. Most of the respondents felt the incubator was there to assist start-ups.

Participant 1: "my understanding is that it is meant to provide support and assistance to companies that are starting up. So, it's meant to increase the chances that a business succeeds."

Some respondents felt the incubator helps businesses to build networks and to be noticed by bigger companies, thus improving market access.

Participant 2: "they posted my business on their website and I was noticed by the DTI who contacted me and offered to connect me with other big retailers, so in a way they provide networking opportunities for us."

Participant 4: "they help us by creating a network between us and the bigger businesses therefore creating market access for us."

Other respondents felt the incubator guides them in getting their product to the marketplace and ensure that it is well positioned in the market.

Participant 3: "they help positioning the product, in distributing, and forecasting sales. They also helped in pricing, to make sure that the product went out at the right price."

Other respondents mentioned the fact that the incubator gave them an opportunity where they are able to collaborate with like-minded individuals and share ideas.

Participant 5: "they create an environment where we can collaborate with one another and share experiences."

The role of the business incubator as described by the participants indicate thus that they find the incubators to be very useful in providing the ecosystem that enables them to learn and get the guidance they need to run their businesses.

Effectiveness of business incubation in growing small business in South Africa

The question was asked to all entrepreneurs to determine if there are any specific skills, they have learned during the incubation period that help them in running their business better.

Participant 3: "they provide us with the marketing tools to be able to market our products and it's up to us to use those tools to grow our business."

Participant 1: "I think the financial, especially, the accounting part, is the most important skill for my business and I still need to learn more."

Participant 9: "HR related, SAGE accounting and accounting skills because I find that very beneficial in ensuring that my business can operate."

Participant 11: "Finance and Marketing is the most helpful."

The incubation hub assists the entrepreneurs by providing training programs aimed at equipping them with the skills in areas which the entrepreneurs feel they need to be able to run their businesses.

Measuring Progress during the Incubation Period

This question was posed to both the entrepreneurs and the incubation hub to ascertain if they have an instrument to track progress of the skills development training programs that they offer entrepreneurs during the incubation period.

Participant 5: "Nothing like that, all I know is that they measure turnover and number of employments created." Almost all the participants gave the same answer.

The incubator also confirmed the above by stating: "we do not track the progress of the skills offered, it's not in our best interest."

The skills and training programs which the incubator provide are not evaluated or measured because the skills are offered on voluntarily basis and the entrepreneur has to indicate if they require any specific skills.

A question was asked to all the entrepreneurs to determine if they have any KPI's (Key Performance Indicators) set for them which would indicate the progress they are making during the duration of the incubation period.

Respondents confirmed that there are no set KPI's, but each business must submit as part of the lease agreement, a monthly progress report.

Participant 7: "we are not subject to anything except the monthly stats that say how much turnover have you made and how many people have you employed and that is it."

This was also confirmed by the incubation hub. There are thus no set KPIs for entrepreneurs to measure progress.

Selection of Entrepreneurs to the hub

The question was asked to the incubator. Their response was: "There is a selection criteria which are published on our website. Applications are evaluated by the senior management. Firstly, it is obligatory that they come for a tour and an information session at the incubator. Then if they think they will fit in, we often ask for bank statements and if things look good, they come in for an interview. The interview panel asks some questions. Then their input is presented to the Investment Committee. It is quite thorough, as we take our governance very seriously."

The incubation hub has a clear policy that informs how they operate including how they select their candidates onto the program.

Duration of the Program

Participant 1: "It is for a maximum of three years, and the lease is renewable annually and renewal isn't automatic. We have to take full advantage of the premises because they don't like it if someone is using it as a storeroom when someone else will be able to use the facility better."

The incubator did indicate that it does happen that some entrepreneurs leave the incubator earlier if they feel that they are ready to go on their own.

Participant 4: "The 3 years equals the first 1000 days of the business, which you know, is the crucial part."

The Attitude of the Entrepreneur towards Business Incubation

All the respondents had their businesses up and running prior to coming into the program. Some respondents mentioned the issue of location and convenience, as the facilities were closer to their area of residence.

Participant 6: "I was referred by a friend, so I found it to be more convenient since it was closer to my home."

Participant 3: "The facilities are within close proximity from where I am staying so I liked the offering and the convenience it provides."

Safety and security were another reason which some respondents felt they needed to have for their business as the incubation hub provided that and had good facilities.

Participant 4: "I looked at the security. I feel my business and equipment are safe here. I also feel safe to come and work here every day."

Others mentioned the fact that they needed to be mentored and felt without a guidance of someone who is knowledgeable they would lose track of their business.

Participant 6: "So, I wanted that accountability to have a mentor."

Participant 4: "I needed someone to keep track of me, to guide me, to ensure that I have all the skills for my business."

Another reason some respondents gave for deciding to join the incubation hub was around networking.

Participant 5: "I wanted to leverage the networks which the incubation hub has to offer and grow my business through it."

Other respondents spoke about the price and the complimentary services provided by the hub as their main drivers to join the incubation hub.

Participant 7: "I came to the program because the rent is cheap compared to renting facilities for business and the fact that I can be able to get assistance with whatever training and support for my business free of charge."

The respondents provided thus different reasons for joining business incubation. Most of the entrepreneurs have had businesses before as they are able to quickly notice the opportunity that the business incubator provides them.

Additional Support Needed

The question was asked to all entrepreneurs what, in their view, can be done better in the program to ensure that they get the maximum out of the process. The question was meant to encourage the participants to give suggestions based on their current experience in the program. The answer to this question varied from one participant to the other but the common themes that emerged, revolved around the need to have access to resources which would unlock the entrepreneur's full potential.

As an example, one participant spoke about the need for him to have bigger space where he can be able to operate as well as additional machinery which would be helpful for him:

Participant 1: "in order to grow bigger I will require a bigger space than this as well as machinery which will allow me to automate the processes and enable me to produce at bigger volume."

Another theme that emerged from the research was around the issue of access to funding.

Participant 6: "Nobody gives funding for enterprises that are less than one year old. You need to have your financials and get them audited."

Another theme which emerged was around the issue of the price of the rental which most entrepreneurs felt was high and they find it difficult to pay sometimes.

Participant 5: "I think what they could do differently is to try lessening the financial burden on access. Rent of R13000 a month for a small business is a lot."

Participant 10: "If they can make the rent cheaper, I think that will assist us a lot because we do not make money every month."

The other participants felt strongly about the difficulty which entrepreneurs face when they have to start up new businesses and how policies are not supporting them.

Participant 6: "Imagine if you're not in an incubator, and you didn't know about all the taxes, and you did not register for VAT. Then you miss the deadline and SARS will punish you."

And their suggestion was:

Participant 6: "Give a two-year grace period for start-up businesses to comply with all the regulatory frameworks and from the third-year start punishing them. This will encourage businesses to start up and will reduce the burden of having to comply while trying to start a new business at the same time."

DISCUSSION

This article aimed to clarify what role business incubation plays in the development of small businesses with special focus on manufacturing businesses in Gauteng. One of the main themes that emerged from the findings was the importance of having a secure and safe space

where the entrepreneurs can operate. Another key theme that emerged was the value they put on the training in the soft skills or non-technical areas. In most cases manufacturing business owners come from a traditional working environment where they were not exposed to skills in areas such as finance, accounting and human resource management.

The incubator provides the entrepreneurs thus with working space where they can operate their businesses at an affordable rate, provide training programmes to support the entrepreneurs with the skills and knowledge that is necessary for them to be able to operate as well as acting as a link between the entrepreneurs and the major retailers with the aim of marketing the entrepreneur's products in the wider market. All these incubator functions are supported by scholars such as Masutha and Rogerson (2014); Ayatse et al. (2017).

The manufacturing incubators do not have a formalised program which is aimed at teaching or training the incubator throughout the period of the incubation. The approach is that they assess each entrepreneur individually and determine what gaps exists in the knowledge and what specific skills do they need to be able to run their business. This approach was informed by the fact that the incubator has got different types of entrepreneurs and each one of them have got different needs since they come from different backgrounds and have different levels of skills and knowledge.

In terms of the delivery of these skills and training programs, the findings show that the incubators arrange for skills to be taught to the entrepreneurs by contracting the experts in the fields necessary to get the skills to be delivered. The incubator has a pool of service providers whom they utilize to support them in delivering specific skills to the entrepreneurs whenever necessary.

The incubators do not measure the outcome of every training program or intervention. They only measures on a monthly basis the financial performance and the number of people employed by the entrepreneurs. This is in line with Khorsheed et al. (2017) who are of the opinion that incubated businesses need to be evaluated on their ability to create new jobs. According to Avatse et al. (2017), there is no consensus and standard measuring instrument to evaluate incubation success. Those incubators who measure progress and success, do it all differently (Stokan, et al., 2015).

In terms of attitude towards the program the research showed that most entrepreneurs had the willingness and drive to run their businesses with confidence despite the tough business climate and economic conditions that they were faced with on a daily basis.

CONCLUSION

Recommendations for Business

Having considered the literature as well as the data and findings from interviews, the following recommendations are presented:

- Incubators should do more to share expertise and relevant industry knowledge that can help small businesses to grow.
- Government policies, such as tax, labour laws and ICT costs need to be revised to encourage the development of small business. Assistance and support, as well as a phase in period to comply, should be considered.

Limitations of the research

- The population of the study is geographically focused in Gauteng. A study including other provinces or large centres may have yielded different results.
- None of the respondents had failed businesses because all were still using the incubation hub. This was not pre-determined but having failed business owners who already left the hub, might have impacted the findings.

Suggestions for Future Research

While there is literature on business incubators, there is a need for research on incubator operations, particularly in South Africa. The following are suggestions for future research:

- An exploration in understanding the differences between state-, corporate- and private-run incubators in success post-incubation and their effectiveness.
- A comparison between business incubators in Gauteng and other big centra in the effectiveness of growing sustainability.
- An exploration in the relationship between including entrepreneurial focused subjects in the school curriculum and the impact on entrepreneurial activity.
 - Developing a programme or curriculum focused specific on manufacturing incubators.

CONCLUSION

Key findings of this exploratory, qualitative study were analysed and then contrasted with existing knowledge on business incubators from the literature. The exercise yielded insights on factors that drive success in businesses incubation, such as the safe and secure space in which entrepreneurs can run their ventures, training, and networking opportunities. The soft skills training in finances, accounting, marketing and human resource management were well received within the manufacturing environment, because the background of the entrepreneurs was more technical and mechanical. But attention needs to be given to the constant problem of funding, as well as complying to all the government regulations, which make it difficult for entrepreneurs to enter the formal economy. Measuring progress as concept might also need investigation, because turnover and employment figures cannot be the only two KPI's to measure growth and potential survival after incubation.

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