

# INCUBATION OF ENTREPRENEURS CONTRIBUTES TO BUSINESS GROWTH AND JOB CREATION: A BOTSWANA CASE STUDY

**Flip Schutte, Gordon Institute for Business Science, University of Pretoria  
Tebogo Direng, Gordon Institute for Business Science, University of Pretoria**

## ABSTRACT

*In Botswana, a business incubator was established with the intention to develop and grow businesses as a way of fostering economic growth and job creation. The objective of this article was to determine if the coaching provided during incubation has an impact on the development of entrepreneurs, and if job creation resulted as a spin-off from the incubated firms. Qualitative research by means of interviews was conducted. The results showed that entrepreneurs are benefitting from the incubators and jobs were created in the process, but some fine tuning needs to be done.*

**Keywords:** Entrepreneurs Development, Business Growth, Economic Growth, Business Incubators.

## INTRODUCTION

Like other countries in Africa, Botswana had experienced significant economic growth since it gained independence. The success is attributed to a combination of a strong focus on peace, political stability and the effectivity of government to use mineral revenues towards the development of a not-only-mining economy (Hernández & Carrá, 2016). For this reason, there are a focus on entrepreneurship and the development of entrepreneurs through incubation.

The government of Botswana has thus the vision to grow their economy not only by mining related activities, but also through entrepreneurs. Koshy (2010) stated that the most significant benefit of a business incubator, as development instrument, is to increase the survival rate of entrepreneurs starting a business. Therefore, the Botswana government are allocating higher amounts of their budget towards entrepreneurship development and incubation. However, there are an 80% failure rate of entrepreneurs in the country (Temtime & Pansiri, 2004). This is not too high if you compare it to South Africa, who according to Fatoki (2014), have a start-up failure rate of up to 95% within the first five years of operations. Countries who thus want to foster their entrepreneurs, need effective and well-functioning incubators.

The economic slowdown that has been experienced since 2008, brought about some challenges such as unemployment, high levels of poverty and increasing inequality between rich and poor. The ability of the government to eradicate poverty and reduce inequality stays a challenge (Themba & Josiah, 2015). According to Dubihlela (2014), SMME's are expected to play a significant role in creating jobs and lower unemployment. One of the institutions that have been established to develop and promote entrepreneurs in Botswana is the Citizen Entrepreneurial Development Agency (CEDA) whose mandate is to fund and promote

entrepreneurship. The Ministry of Youth also offers grants to young people to encourage them to become entrepreneurs.

The Local Enterprise Authority (LEA) was set up to promote entrepreneurship and SMME development through various support services, especially through incubation coaching (<https://www.lea.co.bw/lea-mandate>). They must also render services related to skills development and start-up support (Meittinen & Naidoo-Swettenham, 2014). Said, et al. (2012) state that incubation is vital for economic development in most countries because the development of entrepreneurs lead to an improvement in the economy through job and wealth creation. However, Sawers & Lourens (2013) are not convinced that LEA is acting according to their mandate and deliver the expected outcomes. There are currently only five business incubators overseen by LEA, but no statistics about successful sustainable entrepreneurs after incubation is available.

The intention with the LEA incubators was to develop and grow businesses as a way of fostering economic growth and job creation. In the absence of clear research done on incubation in Botswana, there was a need to investigate whether the government is achieving its mandate of entrepreneurship development and job creation through incubation in Botswana. This research article has been written to address that question. The topic is quite critical to the Botswana context because as indicated by Naude (2009), from an economic development view, entrepreneurial development and job creation are pertinent issues that were identified as key for economic growth. It is therefore essential to find out through research if incubation coaching is an effective tool that can develop entrepreneurship and contribute to job creation.

The other reason for conducting this research is that except for academic researchers in South Africa, there seems to be limited literature on incubation in the African context (Masutha & Rogerson, 2014; Lose, et al., 2016). There is thus a theoretical need for more research in this area to be published.

The objective of this article is thus to determine if the coaching provided during incubation has an impact on the development of entrepreneurs in Botswana, and if job creation resulted as a spin-off from the incubated firms. These research objectives have been translated into five research questions which will be answered by this article, namely:

1. To investigate the type of support that incubatees receive during incubation.
2. To research the skills that the incubatees acquired during incubation.
3. To investigate the entrepreneurs' growth in their businesses during incubation.
4. To research the increase in employment by the entrepreneurs' businesses during incubation.
5. To establish the contribution, according to the entrepreneurs that incubation has made to their skills development.

## **LITERATURE REVIEW**

Around the world, business communities, governments, and academia have been looking for ways to support and encourage new businesses in order to enhance economic development and to create jobs (Isabella, 2013). One such mechanism is incubation, which is a relatively recent approach to supporting entrepreneurs (Masutha & Rogerson, 2014). According to Isabelle (2013), there is uncertainty about the current landscape of incubators worldwide. There are also gaps in the literature regarding the understanding of different incubation models and the incubation process as well as a lack of peer-reviewed studies on the success rate of incubator coaching.

## Definition and Scope of Incubators

Schiopu & Vasile (2015) refer to business incubators as agents that provide support to start-up firms with the aim of helping them overcome the numerous challenges inherent at this phase of their lifecycle. Alborn & Ribeiro (2016) confirm this definition by stating that incubators are organizations designed to accelerate the growth and success of entrepreneurial companies through an array of business support, resources and services that could include physical space, capital, coaching, shared services, and networking connections. Incubators provide thus, according to Buys & Mbewana (2007) protected environments for businesses during their start-up stage. According to them, many start-ups cannot survive on their own and need the services of business incubators. Tengeh & Choto (2015) also support the view that to foster new business development, business incubation is a sine qua non if you want start-ups to succeed.

Since entrepreneurs are seen as critical to job creation and economic growth (Wenger, 2018), the role of incubation as a tool for entrepreneurship development becomes more important. Naude (2009) & Isabella (2013) agree with this argument by stating that incubators are relevant and appropriate, almost a necessity, especially in the early stages of the entrepreneurial venture. Buys & Mbewana (2007) underline the criticality of incubation to the development of entrepreneurship by comparing the relationship to that of hospitals nurturing a prematurely born baby. This demonstrates how sensitive a start-up is, as well as the level of support it requires to survive. It also indicates that it is in the early stages that start-ups are susceptible to failure.

Incubators' primary objective is to assist businesses to develop and become self-sustainable to achieve their business objectives for which they were initially started. Miettinen and Naidoo-Swettenham (2014, see also Smilor & Gill, 1986; Lewis et al., 2011), highlight that most countries consider business incubators as an entrepreneurship development tool for economic and social development.

More successful start-ups would enhance innovation, job creation and social cohesion when nurtured by an incubator (Lewis et al., 2011). Incubation plays a significant role in the development of a company and is an essential survival tool that is required by start-ups (Hansen et al., 2008). Firms which have undergone incubation, have a higher chance of survival than those that didn't experience it (Masutha & Rogerson, 2014). Even though there seems to be a strong case for incubation, there is still a need to establish how effective coaching is to entrepreneurship development and job creation. Although the theory supports that incubation is required for the survival of start-ups, it is not explicit on how effective it is in developing entrepreneurs. The voices of the incubatees are also not often heard in the available literature and research on what they deem as useful to them for their growth. This article aims to address this gap in the literature to investigate if incubation is helpful in developing entrepreneurs and does it contribute to job creation through coaching as viewed by the incubates.

## The Incubation Process

The generally accepted assumption is that incubators assist in giving support to start-up companies to ensure their survival. Most incubators offer a range of mostly administrative or infrastructural services to incubatees such as shared office, retail or manufacturing space, equipment as well as facilities-related services such as reception and clerical services (Bergek & Norman, 2008), or access to financial resources, to initiate their business activities (Mas-Verdu,

Ribeiro & Roig, 2015). To this, Smilor & Gill (1986), as well as Barrow (2001) add the access to networks. Concerning the issue of whether networks play an essential role, Schwartz & Hornych (2010), as well as Bruneel, et al., (2012), are convinced that networks have to be part of the support that incubators provide. It is not only important for marketing and relationship building activities, but also for motivation, meeting of peers and benchmarking of the entrepreneur's own growth.

The objectives of incubators are therefore, to help promote venture creation and to develop the economy by nurturing incubatees through providing services to them (Masutha & Rogerson, 2014; Albort & Oghazi, 2016). This support to entrepreneurs gives recognition to the fact that the right kind of business environment is increasingly being acknowledged as an essential factor contributing to the success of small businesses (Dubihlela & Van Schalkwyk, 2014), and as an entrepreneurial tool for promoting innovation, economic growth and employment creation. This is because incubators are viewed as a development tool that are designed to accelerate growth and success of entrepreneurial ventures by providing a range of business resources and support services (Wilber & Dixon, 2003). Lose & Tengeh (2015) add that entrepreneurs need assistance not only from incubators but also from other businesses within the same industry so that there can be skills and knowledge transfer.

According to Van Weele, et al. (2017), an entrepreneurial development program is a program to develop entrepreneurial abilities. It refers to incubation, development and polishing of entrepreneurial skills of a person to enable him or her to start, and successfully run his or her enterprise. Lewis (2011) state that the higher the level of support that incubatees and new start-ups are provided with, within the first 18 months of their business, the higher the success rate. This stresses the importance of quality coaches and mentors at the incubator.

Training within the incubator is usually characterised by formal classroom training, workshops, seminars and networking sessions. These training often carry lectures on entrepreneurship topics (Bruneel, et al., 2012) and it is mostly the management team that provides this coaching and training support. This comes with its challenges because, as mentioned above, some of the incubation management often does not have the required skills, knowledge, background, own entrepreneurial experience or necessary training to undertake this coaching.

Davidsson & Honig (2003); Pena (2004); Colombo & Grilli (2005); and Bruneel et al. (2012) found in studies they conducted that management training accompanied by the assistance services provided by the incubator are essential for growth and highly valued by entrepreneurs. It contributes to increase not only their knowledge, but it also has a positive impact on their development and performance. Training and coaching that is done well and on a high standard are proven to really make a difference to the performance of entrepreneurs during start-up.

The Impact of Incubation on Entrepreneurship Development Most researchers use entrepreneurial survival and growth after incubation as indicators of incubator success and goal achievement (European Commission, 2002; Aerts, et al., 2007; Hackett & Dilts, 2008). This is not surprising, given that governments aim to accelerate economic development through business incubators (Ratinho & Henriques, 2010) and thus wish to stimulate incubatee survival and growth. Most governments, including that of Botswana, are supporting entrepreneurial and economic growth by means of allocating funding and providing business support through incubation to entrepreneurs.

Lai & Lin (2015) are of the opinion that economic growth can be partially measured based on the entrepreneurial start-up success rate. They base their argument on Carden (2008),

who indicated that economic growth and employment rates in a nation are proportional to the number of small enterprises and the entrepreneurial activities of the nation, which, on its turn, predicts a healthy economy. That is why Vanderstraeten, et al. (2016) focused on developing strategies, especially customized strategies, to ensure incubation survival for start-ups. They build on the argument of Schwartz & Hornych (2010) who indicated that incubators are expected to stimulate the development of innovative products and services by their incubatees and by doing that, increase start-up survival and growth rates. Entrepreneurial start-up success growth rates again, contributes to job creation and overall economic growth.

### **Incubation in Botswana**

De Klerk & Howenga (2004), in a study they conducted fifteen years ago, found that entrepreneurship in Botswana lack the technical, managerial, accounting and sales skills required for successful entrepreneurs to survive in a global village. Not much has changed since then. It seems as if the issue has only in the meantime been viewed from a different angle. Lose and Tengeh (2015) pinpointed that even though business incubators are tasked with developing entrepreneurs, they often lack the skills required to effectively carry out that role. They further say that this may be because the management staff of incubators may not have the entrepreneurial skills and background required to assist the incubatees with coaching and training. Themba & Josiah (2015) agrees and argue that in Botswana the main problems relating to training and mentoring services within incubators as well as within the Citizen Entrepreneurial Development Agency (CEDA) is the inadequate number of skilled trainers and mentors. Patton (2013) argues that there are different perceptions about the so-called support and resources that incubators supply and how it is perceived by the incubatees. Incubator staff feels that their training, coaching and networking are of great significance to incubated start-ups, but the entrepreneurs do not always agree (Patton, 2013).

Themba & Josiah (2015) although acknowledging great efforts in entrepreneurship developments in Botswana, identified that the growth has been aimed at production rather than marketing. The marketing and selling sides are where the economic success factor can be measured. This needs more attention and development in the incubators. In Botswana, two main parastatals were set up for entrepreneurship development namely the Citizen Entrepreneurial Development Agency (CEDA) and the Local Enterprise Authority (LEA). The research for this article was done within LEA.

The government of Botswana, through the Economic Diversification Drive (EDD) initiative, aims to create more employment opportunities, eradicate poverty and diversify the economy. The Small Medium and Micro Enterprises (SMME's) are expected to play a significant role in this regard. The government mandated the Local Enterprise Authority (LEA) with this task, and since its inception in 2007, they have established five incubators with emphasis on sectors that are expected to provide a high growth potential to the economy. The incubators are geared towards accelerating growth of the enterprises incubated. The incubation model that they use is where they provide space facilities and impact-driven interventions.

The value proposition that LEA is offering is that of empowering entrepreneurs to start and grow their business. Pauwels, et al. (2016) and Timm (2013), recognize that the stimulation of SMME's can be viewed as the right step towards driving an economy to the next level. This resonates with what the Botswana government is trying to achieve.

Salem (2014) also emphasizes that a growing number of studies have established that the concept of incubation has enabled many developed countries to initiate business policies that

support economic development and sustainable job creation. This means that countries have used the incubation model to grow their economies. This is also true in the case of Botswana where there have been business policies that support entrepreneurship growth as a vehicle to job creation and economic growth. The establishment of LEA and the funding arm CEDA are some of the institutions whose policies are mainly driving these focuses.

Economic growth as a result of incubation is linked to job creation. This is because it is assumed that once a business grows, it will require more people to meet its business objectives. Albort & Ribeiro (2016) emphasize that business growth through growth in sales and profit eventually result in employment growth. They make a strong argument for the premise that profit growth must not be the only growth measure, but the measurement must rather be employment growth and the increase in sales volumes. This is because according to them, small businesses often do not make a profit at the initial stages. Masutha & Rogerson (2014) offer a complementary view namely that growth measure of an incubator must be based on the number of graduated firms from the incubator and the number of jobs they have created. Their argument is linked to the services rendered by incubators that since they are offered technical, consultancy and infrastructural support services their growth measure must be on the graduation levels from the incubator.

This incubator success is seen to enhance job creation and employment growth (Ferguson and Olofsson, 2004; Schwartz & Hornych, 2010; Von Weele et al., 2017). Incubators also tend to use growth measures interchangeably. Sales growth, profitability growth, or growth in the number of employees, all are seen as enterprise growth.

There is thus an assumption that incubators are meant to support growth and job creation in start-ups (Colombo & Delmastro, 2002; Tola & Contini, 2015; Lukes, et al., 2018). In general, the economic contribution of SMME's are seen as something that is having positive effects on job creation, innovation, and productivity (Hansen, et al., 2008). The overall view is thus that incubation leads to some form of job creation.

## METHODOLOGY

The research philosophy for this paper was a pragmatic one as suggested by Saunders & Lewis (2012), because the research was aimed at answering a specific question namely if incubator coaching has an impact on entrepreneurship development and job creation in Botswana. The research was an inductive, qualitative one. Conducting interviews meant that the study was of an exploratory nature. The research was exploratory in design because incubation is relatively new in Botswana and therefore the study is aimed at understanding the functioning of incubators within the Botswana context. The inductive approach of the study allowed the researcher to critically explore and measure whether incubators have the impact that they are expected to have particularly on creating employment and growing businesses. There was also a critical review of the academic literature done.

The suggestions from Saunders et al. (2012) is that a topic on which there is much literature, can be used to define a theoretical framework. Since there are limited literature and frameworks on incubation coaching for entrepreneurship development, the research was aimed at testing the theory that incubation is effective in entrepreneurial growth and job creation. Data were collected through semi-structured interviews with incubatees at two LEA incubators in Gaborone, Botswana. The research was done during September 2018. The survey used open-ended questions.

## **Population**

The population comprised of entrepreneurs with start-up, as well as established businesses, who were under incubation. The Local Enterprise Authority staff, acting as incubation coaches, were interviewed to provide the context in which the incubator operates. The data that were collected from the respondents were audio recorded, then transcribed and analyzed through the use of ATLAS TI. The unit of analysis was entrepreneurs coached under an incubation program (LEA) in Botswana.

## **Sampling Method and Size**

A recommended sample size of 12 entrepreneurs, as suggested by Kele & Petzer (2018) was identified by means of purposeful sampling (Creswell, 2009). However, the interviews were conducted with only 11 entrepreneurs as a result of the non-availability of the twelfth person on the day of the interviews. The sample of 12 incubatees was deemed to be a good sample size taking into consideration that the total number of incubatees was 16.

## **Measurement Instrument and Data Gathering Process**

The suggestion for the measurement instrument recommended for qualitative data collection by Saunders, Lewis and Thornhill (2007) is a questionnaire. The questionnaire was “Piloted” on one of the respondents. During the actual data gathering process the research instrument was.

Consent for the meetings was obtained beforehand so that respondents could have an opportunity to get clarity on any matter of concern as recommended by Bell & Waters (2014). Maximum care and attention were taken to ensure that the interviews were conducted in an ethical manner and as per the commitment made on the consent form signed by the participant. This reassured them of confidentiality and anonymity.

## **Analysis Approach**

The data collected was transcribed from the audio into interview transcripts, and there were categories and codes developed to describe the data that was analyzed. Then the codes were allocated to the relevant data. There was a search for patterns in the data, that according to Saunders & Lewis (2012), is done through analysis of the common words and phrases that were used to answer the questions. It is from these data that the research questions were answered. This process is referred to as a systematic process (Wenger, 2018).

## **Data Validity and Reliability**

According to Saunders & Lewis (2012) qualitative research can be subjective and be affected by the biases of the interviewer and that of the participant. In recognizing this, and in an attempt to minimize or eliminate these biases, the creation and adherence to a systematic analysis or a coding scheme to increase the validity, which was done during this study. The other way that is proposed by Saunders & Lewis (2012) to increase validity is that, the same questions must be asked to each of the participants. This allowed for consistency and avoiding research bias.

This was also done during the interviews. The researchers also did not offer any comments or opinions, only acknowledging the information they were provided with.

## FINDINGS

All the respondents were from the Local Enterprise Authority (LEA), the only institution in Botswana that currently offers business incubation, and the majority of them were funded by the Ministry of Youth. This was also the respondents' first business and the reason they were under incubation was because LEA had assisted them in developing their business plans for funding.

A systematic analysis and coding system called ATLAS TI was used to increase the results' validity. The transcripts were put into ATLAS TI and codes were created for theme groups and subgroups (Quinlin, et al., 2015). To increase validity and to improve consistency, as well as to avoid bias, the same questions were asked to all the participants.

Part of the introductory questions was to identify the incubatee's type of business, the period of time they were in incubation, the reason why they joined incubation, and the way in which their business was funded. Most of the respondents were manufacturers, invited by LEA, with grant funding, and between 1-2 years in incubation. They answered the question as follows:

<b>Participant</b>	<b>Type of business</b>	<b>Period in incubation</b>	<b>Reason for incubation</b>	<b>Start-up funding</b>
1	Manufacture	2-3 years	Invite from LEA	Grant funding
2	Manufacture	1-2 years	To acquire skills	Grant funding
3	Manufacture	1-2 years	Cheap rental space	Grant funding
4	Manufacture	2-3 years	Cheap rental space	Debt funding
5	Manufacture	Less than a year	Invite from LEA	Grant funding
6	Manufacture	1-2 years	Invite from LEA	Grant funding
7	Manufacture	Less than a year	Invite from LEA	Grant funding
8	Machine production	1-2 years	Cheap rental space	Self-funding
9	Machine production	2-3 years	To acquire skills	Self-funding
10	Add value to existing products	1-2 years	To acquire skills	Grant funding
11	Add value to existing products	2-3 years	Invite from LEA	Grant funding

Results for research question 1: To investigate the type of support that incubatees received during incubation.

Most of the respondents, nine of the 11, highlighted bookkeeping as the best and most important support that they got from incubation, followed by marketing and the support to get access to markets. They listed the other coaching and support that they received by stating that the coaching helped them with improving the quality of their products; improving their sales; help them to find suitable expos for their products; trained them to be expo ready; help them to find new customers; learned them about quality assurance; and, introduced them to retailers. In explaining the value of the incubation support, one of the respondents answered (Table 1).

*"They are really helpful because I can even approach them with my customer's requests and needs and they can guide me on what needs to be done as per the customer's request."*



It seems as if most of the support the incubatees received, was administrative and skills development support. Five of the participants that were under incubation had been there for a period between 1-2 years, and four had been there for 2-3 years. Two were in incubation for less than a year. The respondents also indicated how they were funded to start their businesses. Most of the respondents were recipients of government funding through the youth development fund. Regarding the types of businesses that are typically incubated, the small-scale manufacturing and processing services sectors are the most common.

Results to research questions 2: To research the skills that the incubatees acquired during incubation.

The aim of this question was to determine what business skills the participants acquired during the incubation. They listed the following:

1. "That was very important because now I realize that I need to have processes."
2. "I learned how to cope under pressure."
3. "The space they gave me has helped me to gain exposure and sell me to the people out there."
4. "It is effective because we gained a lot of general business and management knowledge."
5. "It helped me to guide my decisions when I am in the workplace."
6. "It has helped me in expanding my business."
7. "Quite effective, I learned how to grow my business by adding more products."
8. "The quick registration process for the business helped me."

Results for Research Question 3: To investigate the entrepreneur's growth in their business since incubation commenced.

The interviewees acknowledged various areas of growth namely: production capacity increase; manufacturing skills improvement; sales and revenue growth; and, more knowledge and focus. Some linked their being in incubation to a better perception of what customers want from their business. Others measured growth in terms of the number of people they were now employing versus those that they had when they started in the incubator. The participants' responses varied as follows:

1. "It has helped me grow. I am getting more clients."
2. "With their help we have been able to test our products, and we have been able to get it to a few retail stores here and there. We have also been able to register our trademark."
3. "The nice thing about being in LEA was so that I can get my industrial license. So, it has helped me grow and I am getting more clients."

During the interviews, there were three out of the 11 respondents who stated that even though their businesses had grown, the growth cannot be attributed to the incubator alone. It was hard work and an effort from their side as well.

Results for research question 4: To research the increase in employment by the entrepreneur's businesses since incubation started.

Most of the respondents indicated that there has been an increase in the number of people that they employed after incubation began:

1. "We were two. Now we are four."
2. "There were three of us when we started. We are now six."
3. "It was just me; I have now hired two more."
4. "We had employed seven people when we started. Now we have about 20 staff members."

5. "It was just the two of us. Now I have three part-time and one permanent employee extra on the production side."
6. "I have employed one extra person."

Seven of the interviewees gave exact numbers of employment growth. These are listed in the following Table 2:

Number of employees when business was started	Number of employees after incubation	Increase in employees
2	4	2
3	6	3
1	3	2
4	9	5
7	20	13
2	20	18
1	5	4

From the seven participants who gave numbers, the following statistics can be abstracted: 20 people were employed when the businesses were started and after incubation 67 were employed. 47 more people were thus employed, which gave a growth rate of 235%. The respondents indicated that they believe that their businesses are going to keep on growing and that they are going to create more jobs in future, because each one came up with a number of people they would like to employ within the near future. One of the participants who currently has twenty employees stated that he is aiming at having a hundred employees in five years. Incubation is considered an essential tool in creating employment. Of the 11 participants, there had been a varying degree of growth in the number of people they have employed after the commencement of incubation.

Results for research question 5: To establish if entrepreneurs think that incubation has complimented them with the skills to enable their businesses to survive after they left incubation.

The expectation was that for those who said they cannot survive; they would emphasize the lack of adequate business skills to run a business successfully. However, most of them confirmed that they acquired enough business skills during the incubation process to survive, but they don't know if they will survive if they have to pay more rent at another premises. If they can find a space for the same or less rent per month, they will all survive. Only one respondent was absolutely sure that he will make it outside the incubator, even if he has to pay more for rent. He responded.

*"I think so because if I use all their tools effectively and grow the business as I should, I would be able to move out and be okay and stand-alone within a year."*

Most of the respondents, when answering the questions, made some recommendations of what they reckoned would be ideal for their needs in respect to incubation coaching. All agreed that their period of incubation was indeed critical for the development of their entrepreneurial skills, but some commented that the essential skills are learned too late in the process. The training of crucial skills must happen quicker and not only after eight or fifteen months.

## DISCUSSION

Discussion of research question 1: To investigate the type of support that incubatees received during incubation. It seems as if most of the support the incubatees received, was administrative and skills development support. This corresponds with the research of Bruneel, Ratinho, et al. (2012) who recognized business support services as crucial elements of learning within incubators. Hansen et al. (2008) also confirm that incubation coaching is an intervention to assist in accelerating knowledge and skills development. Barrow (2001) remarked that these training are conducted by mentors and coaches that are assigned to the businesses. The coaching that the incubators offer is also recognized by Bruneel et al. (2012) as a tool to increase the entrepreneur's understanding of his or her business and to offer assistance to support and ensure their survival.

Bookkeeping has been acknowledged by most of the respondents to be a skill that they needed, and they considered it critical for the survival of their businesses. Since all of them are start-up businesses, it is in line with Schiopu & Vasile (2015) who referred to business incubators as agents that provide support to start-up firms with the aim of helping them overcome the numerous challenges inherent at this phase of their lifecycle. Naude (2010) and Isabella (2013), agree that incubators are relevant and appropriate in the early stages of the entrepreneurial venture to provide these types of crucial support.

Five of the participants that were under incubation had been there for a period between 1-2 years, and four had been there for 2-3 years. Two were in incubation for less than a year. Tola & Contini (2015) suggest that entrepreneurs should be under incubation for between two to five years. LEA's incubation model is designed for a period of three years. It seems not to take into account the maturity level or readiness of an incubatee to leave, it terminates incubation when the time has run out. If incubatees leave too early, it could be detrimental to the effort.

The respondents also indicated how they were funded to start their businesses. Most of the respondents were recipients of government funding through the youth development fund. According Themba & Josiah (2015), Botswana is one of those countries in Africa where the government has put in place policy measures, and programs designed to foster entrepreneurship development. Botswana are more conducive for entrepreneurial development, according to Carden (2008), than most other countries on the continent. The government of Botswana also further recognized the need for these businesses to be developed, guided and coached to support their growth, therefore, setting up organizations like LEA, that offers mentoring and coaching through incubation.

Regarding the types of businesses that are typically incubated, the small-scale manufacturing and processing services sectors are the most common. The size of the operations is substantiated by Tola & Contini (2015) who state that companies that have started their incubation period are usually active in sectors that do not require a high level of start-up investment, or those sectors where a business plan with low risk factors can be implemented.

Discussion of research question 2: To research the skills that the incubatees acquired during incubation. It was challenging to establish a theme because each of the respondents got something different out of the process. The data, however, shows a general business awareness that the respondents are said to have obtained. This is in line with the opinion of Wenger (2018) who states that coaching has to focus on the contextual learning and development of the entrepreneur, whatever the needs are. Buys & Mbewana (2007) view incubators as support givers to entrepreneurs, which this research confirmed because all participants obtained some

skills and support from being in incubation and they acknowledge that it is something that they had not prior to incubation. One of the participants summed it up by saying.

*"It is effective because we now know what we didn't know before."*

One of the respondents acknowledged that it changed his focus and vision because through incubation he learned that *"I could extend my product range by not only manufacturing doors, but also furniture. This is something that I have learnt from them."* Mas-Verdú, Ribeiro-Soriano & Roig-Tierno, (2015) support his insight by stating that when incubators can assist entrepreneurs to initiate business activities and open up new ventures, it has been successful.

Again, the comments were made that although the incubator provides support to them, the training sessions were far apart and that was a disadvantage, because they needed that knowledge earlier in the process. One particular respondent, who was struggling with pricing of her products, indicated that she had highlighted the issue to the incubator early, but was only provided with training a few months later. The importance of training for first generation business incubatees is therefore crucial, and it seems that it can't be stretched over the whole incubation period. It should get attention early in the incubation process.

Discussion of Research Question 3: To investigate the entrepreneur's growth in their business since incubation commenced. Almost all the participants acknowledged some growth in one area or another in their businesses since they have been in incubation. The findings confirmed what Buys & Mbewana (2007) said, namely that the success or growth of a business under incubation is surely possible if all the other factors influencing growth are also favorable. In the case of Botswana, there are favorable government policies that are geared towards developing and growing incubators. The policies are in place and provision for funding as well as training and other incubation services, have been made, which can assist entrepreneurs to grow their businesses.

The findings of this research support the view of Schwartz & Hornych (2010), that incubators are expected to stimulate the development of innovative products and services by their incubatees and increase start-up survival and growth rates. Ferguson and Olofsson (2004), Naude (2009), Schwartz & Hornych (2010) and Van Weele et al. (2017) support this further by saying that incubators are seen as business growth enhancers.

During the interviews, there were three out of the 11 respondents who stated that even though their businesses had grown, the growth cannot be attributed to the incubator alone. It was hard work and an effort from their side as well. Aerts et al. (2007) confirms this by stating that it is the entrepreneur who grows the business, the incubator supplies only the support.

Discussion of research question 4: To research the increase in employment by the entrepreneur's businesses since incubation started. Of the 11 participants, there had been a varying degree of growth in the number of people they have employed after the commencement of incubation.

Pauwels, et al. (2016) confirm that incubation leads to job creation because according to them, during incubation job opportunities are created since the coaching is aimed at business growth. The measure of employment creation as a growth tool has been used by many researchers who have done work on incubation such as Masutha & Rogerson (2014). According to Ferguson & Olofsson (2004), Naude (2009), Schwartz & Hornych (2010) and Van Weele et

al. (2017), an incubator's success is seen when it stimulates entrepreneurs to grow their businesses to enhance job creation and employment growth.

Discussion of research question 5: To establish if entrepreneurs think that incubation has complimented them with the skills to enable their businesses to survive after they left incubation. Tola & Contini (2015) can accommodate the responses of the incubatees because they have found during their research that when the businesses have reached a certain level of development, they leave the incubator and they then have to access a suitable location where they can create sustainability. The findings indicated that some respondents acknowledged that indeed they should be leaving incubation to develop further and obtain their own premises. However, what seemed to be of great concern was the higher costs of the premises they are to occupy compared to what they had been paying under incubation.

The observation is that most of those who feared failure beyond incubation stated that it would be the higher cost of renting a premise that would affect their businesses negatively. There is almost no rental space available in Botswana, and if it could be found, it is very expensive.

This aspect, to get them to graduate successfully from incubation, might need more coaching during incubation, namely, to prepare them to move on after incubation and to grow enough so that they can absorb the extra rental cost. This view is further supported by Lai and Lin (2015) who acknowledge that even though incubators do provide the required services to the incubators, there are very few of them who assist them on overcoming barriers/challenges that come post the incubation stage.

Pauwels et al. (2016) found in their research that graduation from an incubator causes an instant negative act on the survival of the firm in the post-incubation period, mostly because of unforeseen costs and the lack of coaching support. Therefore, Lukes et al. (2018) say that the primary goal of business incubators should not only be to support growth and job creation in incubated start-ups, but also to get them ready to operate independently. Ratinho & Henriques (2010) also confirm that often incubators do not take into account that the incubatees have to create sustainable long-term surviving businesses when designing coaching programs. They state that often incubated firms fail post incubation because incubators do not sufficiently take the needs of the incubated start-ups into account, and do not prepare them enough for when they have to become independent. Sometimes the programs offered to the incubatees are rigid and not tailor-made for the specific needs of the start-up businesses. The view is also shared by Van Weele et al. (2017) who indicate that the intervention must address the specific need of the incubatee.

One of the respondents also stated that "*Some coaches know the textbook and theory, but not the industry.*" These comments indicate that this respondent's view is that the training/coaching, to be effective, must be offered by knowledgeable coaches. Themba & Josiah (2015) are in support of this by confirming that entrepreneurs will only be willing to take advice from mentors who have experience.

## CONCLUSION

The research undertaken for this article strengthened the theory found in the literature and it led to certain conclusions and recommendations. The first objective of the research was to determine if the coaching provided by incubators within LEA, in Botswana has an impact on the development of entrepreneurs. Most of the incubators acknowledged the coaching and confirmed that they got valuable skills and services from it, such as the bookkeeping aspect as well as the facilities which were available to them at an affordable rent. Numerous other skills were

mentioned as well. They doubt if they will survive outside the incubator if they have to pay more for manufacturing and retail space. They also affirmed that they have learned new skills, but they complained that the training sessions were too far apart and stretched over too long a period, with the consequences that they made certain mistakes, and only months later during training learned what they should have done. It thus seems that the scheduling of the training and the prioritizing of certain topics earlier in the incubation process need to be addressed.

Regarding the second objective of the study, namely, to determine if incubated firms in Botswana create new jobs, it was found that the incubated firms did indeed create employment. All the respondents indicated growth in the number of people they had employed since being under incubation and they all anticipate that their employment figures will increase substantially over the next five years. What is of importance to note is that, even though most of them deemed themselves not to be able to survive post incubation at higher overheads, they all believed that they would grow, if they can get space at affordable rent.

## **RECOMMENDATIONS**

Incubation is still in its infancy stage in Botswana because it provides mainly rental space and basic coaching. It is recommended that to convey better coaching and support tools the incubator should partner with other key stakeholders who will offer the expertise that is required by the incubatees. They can either partner with universities that offer specialist focused training, or they can partner with specialized companies in the industry.

A second recommendation is that the training issue should be addressed. The frequency and stretched period of the training were a problem for the incubatees. The training roster should be revisited. Maybe if experienced people will be appointed as coaches it will help to identify a lack of skills and knowledge earlier, which can then be addressed. Maybe they can start a mentorship program for the incubatees so that experienced mentors can address skills and knowledge gaps informally, when mentoring.

### **Implications for Management**

LEA plays a critical part in the development of Botswana's economy. The incubator's management team seems to have used a one size fits all in developing the coaching program for their incubatees and from the findings of the research this is not delivering the desired results on coaching and training. It is therefore recommended that they should better their model of incubation for more effective results.

### **Limitations of the Research**

The sample size was picked from only two of the five LEA incubators; therefore, it cannot be generalized for all the entrepreneurs that are currently under the LEA incubations in the country. The focus of the study was on only two aspects of the incubation namely the coaching and their employment Figures, therefore it cannot be used to measure the overall success of entrepreneurs under incubation. Employment growth was also only measured in incubated companies and not in non-incubated start-ups, therefore it can't be stated as a fact that incubated companies create more job opportunities than non-incubated firms. The study was conducted at a point in time and not over a period. This impact the results in that the views of the

entrepreneurs may be based on their experiences at that specific point and it may not reflect the total growth of the entrepreneur over the whole period of incubation. The length of time under incubation may also influence the responses that the entrepreneurs provided. Some were in incubation for only a few months while others were there for almost three years.

## Future Research

Most of the studies on incubation seem to focus more on incubation rather than on the incubatees, their needs and expectations. More research needs to be done on assessing the success of entrepreneurs post incubation to determine if they survive in the long run. This could also provide insights on whether incubation indeed equips them with the skills they require to survive post incubation. A study can also be done to make a comparison between firms that were under incubation and their chances of success over the long term compared to those that did not undergo incubation.

A more in-depth and focused study of government policy, entrepreneurship development and the parastatals involved in Botswana can be undertaken to assist government in materializing their vision. A study on all LEA incubators to determine if they have been able to accomplish their mandate of entrepreneurship development and sustainability will also be a topic for research.

The article was aimed at researching incubator coaching on entrepreneur development and job creation in Botswana. It concludes with the positive remark that jobs are indeed created by incubated start-up companies and that incubators offer valuable services to entrepreneurs, but there is scope to refine services such as training to make incubation more effective.

## REFERENCES

- Aerts, K., Matthyssens, P., & Vandenbempt, K. (2007). Critical role and screening practices of European business incubators. *Technovation*, 27(5), 254-267.
- Albort, M.G., & Oghazi, P. (2016). How useful are incubators for new entrepreneurs? *Journal of Business Research*, 69(6), 2125-2129.
- Albort, M.G., & Ribeiro, S.D. (2016). A bibliometric analysis of international impact of business incubators. *Journal of Business Research*, 69(5), 1775-1779.
- Barrow, C. (2001). *Incubators*. Chichester: John Wiley & Sons.
- Bell, J., & Waters, S. (2014). *Doing Your Research Project, a guide for first time researchers*. 6th Edition. New York: Mc Graw Hill Education.
- Bergek, A., & Norman, C. (2008). Incubator best practice: A framework. *Technovation*, 28(1-2), 20-28.
- Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2012). The evolution of business incubators: Comparing demand and supply of business incubation services across different incubator generations. *Technovation*, 32(2), 110-121.
- Buys, A.J., & Mbewana, P.N. (2007). Key success factors for business incubation in South Africa, The Godisa Case Study. *South African Journal of Science*, 103(9), 356-358.
- Carden, A. (2008). Making poor nations rich: Entrepreneurship and the process of economic development. *The Review of Austrian Economics*, 21(4), 355-359.
- Colombo, M., & Delmastro, M. (2002). How effective are technology incubators? *Research Policy*, 31(7), 1103-1122.
- Colombo, M., & Grilli, L. (2005). Start-up size: The role of external financing. *Economics Letters*, 88(2), 243-250.
- Creswell, J. (2009). *Research Design, Qualitative and Quantitative and Mixed Methods approaches*. 3rd Edition. Los Angeles. Sage Publications.
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331.

- De Klerk, G.J., & Howenga, J.J.D. (2004). SME networks and clusters and their impact on economic growth. An exploratory overview of Africa. *South African Journal of Science*, 103(9), 356-358.
- Dubihlela, J. (2014). Small Business Incubation and the Entrepreneurial Business Environment in South Africa: A Theoretical Perspective. *Mediterranean Journal of Social Sciences*, 5(23), 264-269.
- Fatoki, O. (2014). The causes of failure of new small and medium enterprises in South Africa. *Mediterranean Journal of Social Sciences*, 5(20), 922-932.
- Ferguson, R., & Olofsson, C. (2004). Science parks and the development of NTBFs Location, survival and growth. *The Journal of Technology Transfer*, 29(1), 5-17.
- Hackett, S., & Dilts, D. (2008). A systematic review of business incubation research. *The Journal of Technology Transfer*, 29(1), 55-82.
- Hansen, M.T., Chesbrough, H.W., Nohria, N., & Sull, D.N. (2000). Networked incubators. hothouses of the new economy. *Harvard Business Review*, 78, 74-84.
- Hernández, R., & Carrà, G. (2016). A conceptual approach for business incubator interdependencies and sustainable development. *Agriculture and Agricultural Science Procedia*, 8, 718-724.
- Isabelle, A.D. (2013). Key factors affecting a technology entrepreneur's choice of incubator or accelerator. *Technology Innovation Management Review*, 3(2), 16-22.
- Kele, T., & Petzer, D. (2018). Business Analysis and Research Methods. Lecture 7
- Koshy, P. (2010). Role and relevance of business incubators in ICT led global educational system: Case for eco-enterprise village. Institute for Development Strategies and Enterprise Research.
- Lai, W., & Lin, C. (2015). Constructing business incubation service capabilities for tenants at post-entrepreneurial phase. *Journal of Business Research*, 68(11), 2285-2289.
- Lewis, D.A. (2010). Business incubators and their role in job creation. U.S. House of Representatives Committee on Small Businesses. Retrieved October 25th, 2010, from <http://www.house.gov/smbiz/hearings/hearing-3-17-10-business-incubators/Lewis.pdf>.
- Lose, T., Nxopo, Z., Maziriri, E., & Madinga, W. (2016). Navigating the role of business incubators: A review on the current literature on business incubation in South Africa. *Acta Universitatis Danubius*, 12(5), 25-32.
- Lose, T., & Tengeh, R. (2015). The sustainability and challenges of business incubators in the western cape province, South Africa. *Sustainability*, 7(10), 14344-14357.
- Lukes, M., Longo, M., & Zouhar, J. (2018). Do business incubators really enhance entrepreneurial growth? Evidence from a large sample of innovative Italian start-ups. *Technovation*, 82, 25-34.
- Masutha, M., & Rogerson, C. (2014). Small enterprise development in South Africa: The role of business incubators. *Bulletin of Geography. Socio-Economic Series*, 26(26), 141-155.
- Mas Verdú, F., Ribeiro, S.D., & Roig, T.N. (2015). Firm survival: The role of incubators and business characteristics. *Journal of Business Research*, 68(4), 793-796.
- Miettinen, J., & Naidoo-Swettenham, T. (2014) Strategies employed to support Regional Innovation and Entrepreneurship in Southern Africa. Southern Africa Innovation Programme. Windhoek. Namibia
- Naude, W. (2009). Entrepreneurship, developing countries, and development economics: New approaches and insights. *Small Business Economics*, 34(1), 1-12.
- Patton, D. (2013). Realising potential: The impact of business incubation on the absorptive capacity of new technology-based firms. *International Small Business Journal*, 32(8), 897-917.
- Pauwels, C., Clarysse, B., Wright, M., & Van Hove, J. (2016). Understanding a new generation incubation model: The accelerator. *Technovation*, 50, 13-24.
- Pena, I. (2004). Business incubation centers and new firm growth in the Basque Country. *Small Business Economics*, 22(3/4), 223-236.
- Quinlin, C., Babin, B, Carr, J., Griffin, M., & Zikmund, W.G. (2015). Business research methods. Hampshire: Cengage.
- Ratinho, T., & Henriques, E. (2010). The role of science parks and business incubators in converging countries: Evidence from Portugal. *Technovation*, 30(4), 278-290.
- Said, F.M., Adham, K.A., Abdullah, N.A., Hanninen, S., & Walsh, S.T. (2012). Incubators and government policy for developing industry and region in emerging economies. *Asian Academy of Management Journal*, 17, 65-96.
- Salem, M. (2014). The role of business incubators in the economic development of Saudi Arabia. *International Business & Economics Research Journal*, 13(4), 853-860.
- Saunders, M., & Lewis, P. (2012). *Doing Research in Business and Management*. Edinburgh Gate: Pearson.
- Sawers J.L., & Lourens, L. (2013). Consulting and assisting in building capacity in incubation activities within SAIS partner institutions and other incubation entities in the partner countries. SAIS Programme, Windhoek.



- Schiopu, P., & Vasile, A.D. (2015). Principles and best practices in successful tourism business incubators. *Technovation*, 30(4), 278-290.
- Schwartz, M., & Hornych, C. (2010). Cooperation patterns of incubator firms and the impact of incubator specialization: Empirical evidence from Germany. *Technovation*, 30(9-10), 485-495.
- Smilor, R., & Gill, M. (1986). *The new business incubator*. Lexington, Mass: Lexington Books.
- Temtine, Z., & Pansiri, J. (2004). Small business critical success/failure factors in developing economies: Some evidence from Botswana. *American Journal of Applied Sciences*, 1(1), 18-25.
- Themba, G., & Josiah, J. (2015). Entrepreneurship development in Botswana: Lessons for other developing countries. *Botswana Journal of Business*, 8(1), 55-63.
- Timm, R. (2013). Global entrepreneurship report puts SA below average. Retrieved from <http://mg.co.za/article/2013-04-26-00-report-puts-sa-below-average>.
- Tola, A., & Contini, M. (2015). From the diffusion of innovation to tech parks, business incubators as a model of economic development: The case of "Sardegna Ricerche". *Procedia-Social and Behavioral Sciences*, 176, 494-503.
- Van Weele, M., Van Rijnsoever, F., & Nauta, F. (2017). You can't always get what you want: How entrepreneur's perceived resource needs affect the incubator's assertiveness. *Technovation*, 59, 18-33.
- Vanderstraeten, J., Van Witteloostuijn, A., Matthyssens, P., & Andreassi, T. (2016). Being flexible through customization –The impact of incubator focus and customization strategies on incubatee survival and growth. *Journal of Engineering and Technology Management*, 41, 45-64.
- Wenger, E. (2018). *Conceptual Tools for CoPs as Social Learning Systems: Boundaries, Identity, Trajectories and Participation*. New York: Cambridge University Press.
- Wilber, P.L., & Dixon, L. (2003). The impact of business incubators on small business survivability. *Journal of Business Venturing*, 10(5), 349-370.