

**Gordon Institute
of Business Science**
University of Pretoria

**A proposed business model framework for development process of
manufacturing entrepreneurs: Start-up, sustainability and growth**

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Master of Business Administration**

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Abstract

Unemployment is the biggest social challenge facing South Africa as a developing nation. In response to this challenge, ordinary young and old citizens have sought means to create their own jobs by starting small companies. However, many of the small companies have dismally failed during the initial stages of entrepreneurship. This has contributed to a high wastage of limited resources.

This study sought to understand the causes of small business failure by focussing particularly in the manufacturing industry because of its potential to create more jobs and contribute to economic growth. The study investigated the role played by different stakeholders in the development process of the manufacturing industry by conducting semi-structured interviews with both the entrepreneurs and the supporting stakeholders in the form of the development finance and the large manufacturing corporates. The analysis of the collected data was thematic and inductive in its approach with the intention to formulate and propose a business model framework that could be useful to the industry. The creation of the business model framework was informed by the data that indicated the required conditions that can assist to start-up, sustain and grow the manufacturing entrepreneurs.

Keywords: unemployment, manufacturing entrepreneurs, stakeholders, business model framework.

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

N. Nkomzwayo

Date

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CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 Context of the study

Unemployment is a serious issue to the economic and social development of many third world countries. South Africa as a developing nation is also not immune to this challenge. Evidence to this effect is to be found in that the rate of unemployment increased to an alarming 25.5 percent in the third quarter of 2015 whereas in the previous period it was also at a concerning 25 percent. Not surprisingly, those who gained employment were as low as 1.1 percent (Statistics South Africa, 2015).

The unemployment rate contributes to numerous social challenges that cripple political stability and economic development in a country such as South Africa (Kumo, Rielander, & Omilola, 2014). The unemployed are likely to be involved in protest marches demanding handouts and service delivery from their municipalities and the government. South Africa has witnessed many of these protest marches in the recent years, as reported in the media. Crime rate is another factor bothering not only the citizens of the country but potential investors to the detriment of the economy.

As a possible solution to the high and ever growing unemployment rate, entrepreneurship has long been identified as the driver of job creation across the globe in advanced markets and in particular among developing nations (Acs, 2006; Business Environment Specialists, 2013; Fanta, 2015; Esterhuizen, 2012; Schussler, 2012; Tsai, 2014).

One sector that has recently been identified as the largest contributor to the economy's growth is the manufacturing industry. The contribution of the manufacturing industry to the Gross Domestic Product (GDP) was at 1,2% based on the manufacturing growth of 9,5% due to higher production in several of its sectors (SAnews, 2015). However, South Africa has not witnessed the expected success in the manufacturing area as the production growth rate has continued to decline since 2005 and has remained stagnant at circa 2% from 2013 (CIA World Factbook, 2014). This has happened despite the fact that the South African government has prioritized entrepreneurship and the advancement of small businesses as the catalyst to achieving economic growth and development in the country (Department of Trade and Industry (DTI) 2008). The government's commitment is further spelled out in the strategic plan

of the National Small Business Advisory Council (NSBAC) (2010:12) which highlights that an important area of focus for the DTI is to improve small business programmes in order to boost their potential. The NSBAC (2010:6) indicates that it intends to find ways in which to reduce or eliminate institutional barriers that hamper the development of a significant entrepreneur sector in South Africa. The following are stated as focus areas requiring immediate attention:

- to enhance access to financial and non-financial support for entrepreneurs;
- to enhance market access and create demand for SMMEs; and
- to reduce regulatory and bureaucratic constraints (Strategic Plan 2010:18).

In addition to enabling policies and strategies, the Department of Economic Development provides the much needed financial support through its entities such as the Khula Finance Limited, Industrial Development Corporation and SA Micro-finance Apex Fund (Ngcobo & Sukdeo, 2015). Available financial support includes the loans that are made available through the development finance institutions (DFIs). The availability of financial resources is a significant government support in struggling economies because “[i]n countries where credit is hard to come by, only a few small firms manage to enter into the industry” (Fanta, 2015: 28).

It appears that the South African government has clear objectives that are aimed at supporting small businesses. However, Fanta (2015: 32) argued that the link between government support and economic growth is debatable because it is not always clear whether the development of small businesses gives rise to economic growth or it is established economic growth in a particular country that leads to success of small businesses. The situation is further compounded by the fact that some of these available resources are not well communicated to the public and in some cases the policies are considered by entrepreneurs as inhibiting to small business success (Ngcobo and Sukdeo 2015).

This suggests that developing nations still have a long way to go before the impact of small businesses can significantly contribute to economic growth. It also points to the need for efforts to be made at all levels of society to assist struggling economies rather than relying on government intervention alone. Current indications are that in South Africa the failure rate of small businesses is between 57% and 80% which makes their contribution to the alleviation of unemployment to be insignificant (Fin24 2010; Global Entrepreneurship Monitor 2009). This also suggests the need to look beyond entrepreneurs by investigating the role of external and critical stakeholders to the success of small businesses.

1.2 Purpose of the study

South Africa as a developing nation is a struggling economy as evident in the ever increasing unemployment rate. Government efforts aimed at reducing unemployment in South Africa have not yielded positive results because despite its policies that are coupled with financial support the small business sector has not made a significant contribution to the economy. This calls for additional efforts to be made in support of government and society if entrepreneurship is to succeed in the struggling economy. One other aspect requiring attention is the role of the major players in this industry in order to determine as to how they might offer solutions to the problems experienced.

The purpose of this study was, therefore, to contribute to knowledge that can enhance understanding on how entrepreneurship can assist towards the reduction of unemployment. This was done by investigating the role played by different stakeholders in the life-cycle of entrepreneurs particularly in the manufacturing industry. The different stakeholders that were chosen for this research study were the entrepreneurs themselves, the selection of the development finance institutes (DFI's) and the large companies referred to as Original Equipment Manufacturers (OEMs). These actors required attention because their existence ensures that the sector generates, regulates and 'performs' in the market for finance (Bracking, 2012) and for optimal allocation and redeployment of investible public resources (Marcelin & Mathur, 2014). DFIs are deigned as "an institution promoted or assisted by Government mainly to provide development finance to one or more sectors or sub-sectors of the economy" (Adesoye & Atanda, 2014). And large companies (OEMs) are defined as major players in market economies (Moscarini & Postel-Vinay, 2012) large enough to be prone to inertia, and the bureaucratic processes whilst being the driving force behind new innovations (Stella, Aggrey, & Eseza, 2014).

To sum up, the main objectives of this study were:

- 1.2.1 To uncover the challenges faced by the manufacturing entrepreneurs;
- 1.2.2 To understand the role of different stakeholders in the development process of manufacturing entrepreneurs; and
- 1.2.3 To identify and propose a business model framework that can contribute to the success of the manufacturing entrepreneurs.

1.3 Benefits of the study

The benefit of this study is that it aimed to contribute toward the reduction of unemployment in South Africa. Unemployment is critical to tackle because it is the largest social challenge facing South Africa (Kumo, Rielander, & Omilola, 2014) as a developing nation that attained democracy as recently as 1994. The study identified entrepreneurship as a solution to this challenge because of its potential to serve as a driver of economic growth through the creation of new jobs in a dwindling economy (Acs, 2006; Nyankomo & Stephen, 2015; Ramukumba, 2014; Tsai, 2014). Moreover, the study is beneficial because it went further by focussing particularly on the manufacturing industry as it has been found to be the prominent generator of new jobs in other developing countries (Charoenrat & Harvie, 2014) and the largest contributor to South Africa's GDP (SAnews, 2015). However, South Africa has been unable to significantly benefit from its manufacturing industry in recent years despite having put in place sound policies that support development of SMMEs (Mathibe & van Zyl, 2011).

The main issue that concerned the study was that starting up a business is a difficult and risky activity (Pisano, Pironti, & Rieple, 2015). One of the primary factors that have consistently been associated with the difficulty experienced by entrepreneurs is finances (Nieman & Nieuwenhuizen, 2009; Chimucheka & Rungani, 2013; Ramukumba, 2014; Ngcobo & Sukdeo, 2015; Black Industrialists Policy (BIP), 2015) that are critically required at all levels of a business. The failure of entrepreneurs is an urgent matter because it results in a huge wastage of limited resources that are invested by both the entrepreneurs and the government. It was then considered an urgent and beneficial matter to uncover the causes of business failure that are associated with financial matters and in an effort to provide solutions that would be beneficial to the country's dwindling economy.

In its selection of the manufacturing industry the study's investigation went beyond the initial stages when small companies generally experience serious challenges that contribute to their failure. Rather, the reported study investigated the life-cycle of a business. As argued by van Scheers and Whitehead (2015), it is when employment created by SMMEs succeeds in the long term that SMMEs are able to contribute to the development of the economy. This understanding entailed looking at the start-up, sustainability and growth of manufacturing entrepreneurs, from the perspective of various stakeholders in the field. Moreover, the gathered information was used to develop and propose a business model framework that

could be applied to provide a novel insight (Wakkee, Barua, & Van Beukering, 2014) into enabling the South African manufacturing sector perform at its best by generating more new jobs that would lead to the employment of many citizens (Charoenrat & Harvie, 2014). The proposed business model framework was viewed as beneficial because efforts in promoting an enabling business environment to ensure success of the manufacturing sector has remained limited (Sefiani & Bown, 2013).

The study is further made significant by the fact that its participants were black entrepreneurs. It is hoped that the proposed business model framework will mostly benefit black entrepreneurs against the backdrop in which the Black Industrialists Policy (BIP, 2015: 10) of the Department of Trade & Industry's emphasises that:

It is important that a dedicated support programme is established to actively promote the growth and competitiveness of black-owned and managed enterprises in the manufacturing sectors of the economy. (1.4.1)

While the "support programme" alluded to in the BIP (2015) specifically refers to the rationale for the Black Industrialists Policy, the reported study also viewed its contribution in the form of a business model framework as an important support for the growth of "black-owned and managed enterprises in the manufacturing sectors." The focus on black entrepreneurs should, however, not be construed as racist. Rather, interest in black entrepreneurs is made important by the fact that their success will contribute to the economic empowerment and participation in the mainstream industrial economy of the majority of previously disadvantaged citizens in South Africa (Chetty, 2014). As further argued by Laha (2014) in reference to business model frameworks, there is a causal link between entrepreneurship development through institutional support mechanism and economic growth.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction to entrepreneurship

Ngcobo and Sukdeo (2015) described entrepreneurship as a process that involved identifying a new business opportunity and starting your company. While such companies are developed with the purpose of creating income for the owner(s) and those that would be employed, they are also designed to provide a much needed service to the community. These types of companies could either be formal or be informal and they may vary in sizes. The variation in size has led to them being referred to as either small, medium and micro enterprises (SMME's) or small and medium enterprises (SMEs). The two terms, SMME and SME, were used interchangeably in the reported project to refer to entrepreneurship and to small businesses in general. The association between SMMEs and entrepreneurship is to be found in that they both entail an element of innovation. In addition, Timmons and Spinelli (2007:50, cited in Ngcobo & Sukdeo 2015) argued that SMMEs may be vehicles for entrepreneurship.

Of importance in this study that investigated the issues of unemployment eradication was that there is general agreement amongst governments, business consultants and experts, and economists that SMMEs are the key drivers of economic growth in any economy. The SMME sector contributes significantly to the economy by creating employment and generating output and in doing so serves as an important tool in achieving economic growth objectives (Tsai, 2014). In recognition of this factor, the DTI (2008:23) and the South African Government have prioritized entrepreneurship and the advancement of SMMEs as the catalyst to achieving economic growth and development. Yet, their efforts have not resulted into any remarkable improvement as the rate of unemployment escalates every year. In this regard, Statistics South Africa (2015) noted that in the third quarter of 2015 the rate of unemployment increased to 25.5 percent while new employment was at a mere 1.1 percent.

This chapter on literature review aims to provide the theoretical background to the entrepreneurship with particular reference to the manufacturing sector. The objective is to uncover the existing challenges and to learn how they could be addressed through a proposed business framework.

2.2 Entrepreneurship in South Africa and its economic benefits

There is empirical evidence that shows that small companies have a high employment rate creating more than 80% of new jobs every year (Nyankomo & Stephen, 2015) as compared to large companies. With statistics showing almost 25% of population (and 65% of young people) without work, unemployment is South Africa's largest social challenge (Kumo et al., 2014). The development and support of SMMEs is therefore critical in the South African context in light of these alarming statistics.

In a dwindling economy, such as that of South Africa, entrepreneurship is a critical factor in economic growth because the existence of entrepreneurs helps in creating new businesses, and new businesses in turn create jobs, intensify competition, and may even increase productivity through technological change (Acs, 2006). In recognition of the fact that entrepreneurship is the main factor determining economic growth (W. Tsai, 2014), the South African government has targeted it as an economic empowerment for previously disadvantaged people (Chetty, 2014) and for uplifting the current state of economy in general. The Government has recognised the need for supporting entrepreneurship as a stimuli to economic growth and job creation by strongly encouraging various stakeholders such as public development finance institutions (DFI's) and large corporates to promote entrepreneurship through SMME development. The South African government has adopted policies and practices aimed at the promotion and support of SMMEs by implementing various business support programmes (Mathibe & van Zyl, 2011).

However, Chinomona (2015) pointed out that "the government of South Africa has been unable to solve the socio-economic issues of high unemployment and poverty reduction because of the constraints that hamper entrepreneurship". The Global Entrepreneurship Monitor Report of 2014 classified South Africa as an efficiency driven economy where factors such as higher education and training, goods market efficiency, labour market efficiency, financial market sophistication, technological readiness and market size are essential for economic growth through entrepreneurial activity (Singer, Amoros, & Mosak, 2015). Despite this classification, South Africa continued to rank worse in early-stage entrepreneurial activity especially when compared to other developing countries (Singer et al., 2015). The necessity

for effective entrepreneurship development in South Africa is increasing with growing unemployment and economic uncertainty.

It is encouraging to note that the newly enacted Black Industrialists Policy (BIP) (2015) promises to change the course of economic downfall in South Africa. The promise is evident in the proposed funding measures that go hand-in-hand with creating the much sought after markets. All of these measures are stated as “bolder intervention” efforts that are directed at altering “the patterns of ownership within the economy” in order to rebuild the South African “economic prosperity” (BIP, 2015). It however remains to be seen if these claimed intentions will actually materialise in the near future. For all it is worth, the BIP could end up being one of many enabling policies in South Africa that appear good on paper but never get to be implemented or followed through.

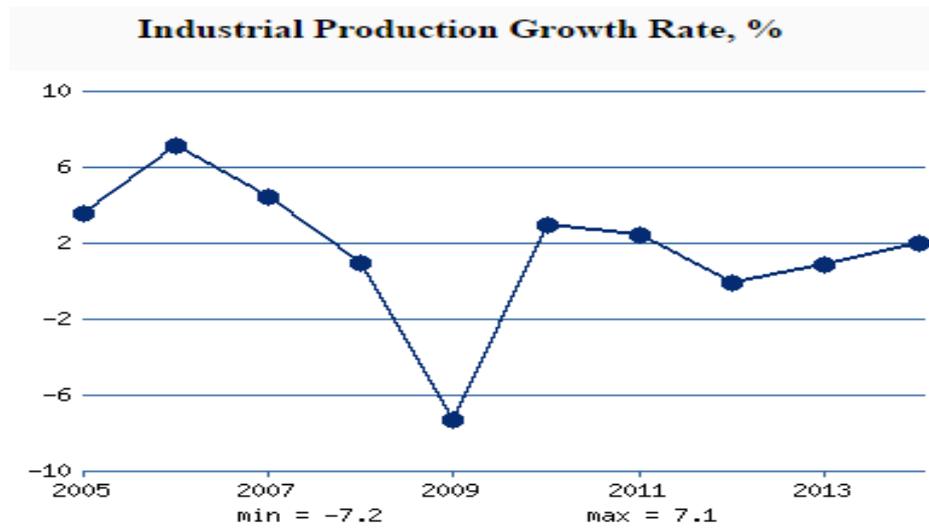
2.3 Entrepreneurship in the manufacturing sector

Manufacturing entrepreneurship is an important factor from an economic development point of view. As it has been alluded to in this literature review, entrepreneurs create jobs and contribute to economic development of a country which makes them a key driving force of economic growth in modern economies (Cini, Cuclari, & Gushi, 2014). This has resulted in the drive by many countries, particularly those in factor-driven and efficiency driven economies, focussing on development process of manufacturing entrepreneurship. This focus is aimed at addressing the challenges that most manufacturing entrepreneurs encounter during their development process.

The success of the manufacturing sector has a positive link with economic development (Dewangan, Agrawal, & Sharma, 2015) and that in developing countries this sector remains the prominent generator of new jobs and employment (Charoenrat & Harvie, 2014). In contrast, South Africa has been unable to capitalize on this advantage in the last 20 years of democratic dispensation, despite having put in place sound policies that support development of SMMEs (Mathibe & van Zyl, 2011). This failure has been attributed to the fact that starting up a business is a difficult and risky activity (Pisano, Pironti, & Rieple, 2015).

Moreover, the importance of manufacturing in economic growth has been widely debated in academic literature (Szirmai & Verspagen, 2011a). With economies in the developing countries largely dependent on manufacturing, South African industrial production growth rate has declined from 2005 and remained stagnant at circa 2% from 2013 (CIA World Factbook, 2014) (see figure 1 below).

Figure 1: Industrial Production Growth rate



Source: (CIA World Factbook, 2014)

The results of this stagnation on South African production rate can be attributed to a shrinking manufacturing sector in South Africa. Compared to other sectors, manufacturing has reported the worst negative growth rate on average (National Treasury, 2015). This has been as a result of demand-side stresses, rising in cost of production due to factors that includes wage increases, inputs and administered prices, recent economic downturn, electricity crisis, and labour unrest in South Africa (Mavuso, 2014). Although there has been government intervention, the challenges facing South African manufacturing have been mounting. To this effect, reports show that while the manufacturing sector accounted for 20.9% of the country's domestic product (GDP) in 1994, its contribution has since declined to 12% (Industrial Development Corporation (IDC), 2013). This has resulted in large enterprises having to restructure and downsize and SMMEs in the manufacturing sector coming up and playing an increasing role in South Africa's economy and development.

Although it has been acknowledged that during the shrinking economic conditions in large manufacturing companies, manufacturing entrepreneurs positively contribute to addressing poverty and employment creation, the conditions and challenges facing entrepreneurs, particularly in Africa, ‘make simply surviving a miracle’ (Ndabeni, 2008). According to Ramukumba, (2014) four critical challenges facing SMMEs are “existence of business opportunities (access to markets), management ability (skills), adequate capital and credit (access to funding) and existence of modern business methods (business model framework)”. In this research these challenges were explored by adopting an exploratory study on the role of different stakeholders that have a mandate of job creation and economic development through promotion of entrepreneurship in the manufacturing sector.

The South African government has introduced and legislated various policies that are the basis for the formation of support programmes and institutions. Such programmes mandate the development finance institutions to provide funding for the formation of SMMEs and also put in place legislation that will compel enterprise development by the private sector. Studies have shown that these business support programmes are ineffective due to lack of proper framework that measures the effectiveness of these programmes. For example, it has been proven that private sector provides poor quality training and mentorship programmes to SMMEs (Mathibe & van Zyl, 2011).

With the GEM classifying South Africa as the efficiency-driven economy, the survival of entrepreneurship will depend on such factors as higher education and training, goods market efficiency, labour market efficiency, financial market sophistication, technological readiness and market size (Singer et al., 2015). The current rating for South Africa according to world economic report can be seen in figure 2 below.

Figure 2: Global Competitiveness – South Africa



Source: (Schwab, 2014)

Figure 2 above shows that South Africa compares well in most elements when it comes to Sub-Saharan Africa, with health and primary education lagging behind. Despite the far better financial market development, market size and business sophistication, South Africa ranks low on innovation which is the main catalyst for entrepreneurship. The resultant factor for the lack of innovation and indeed the basic foundation of primary education is that South Africa lags far behind most of other African countries on all phases on entrepreneurial activities according to GEM 2014 Report as shown in table 1 below.

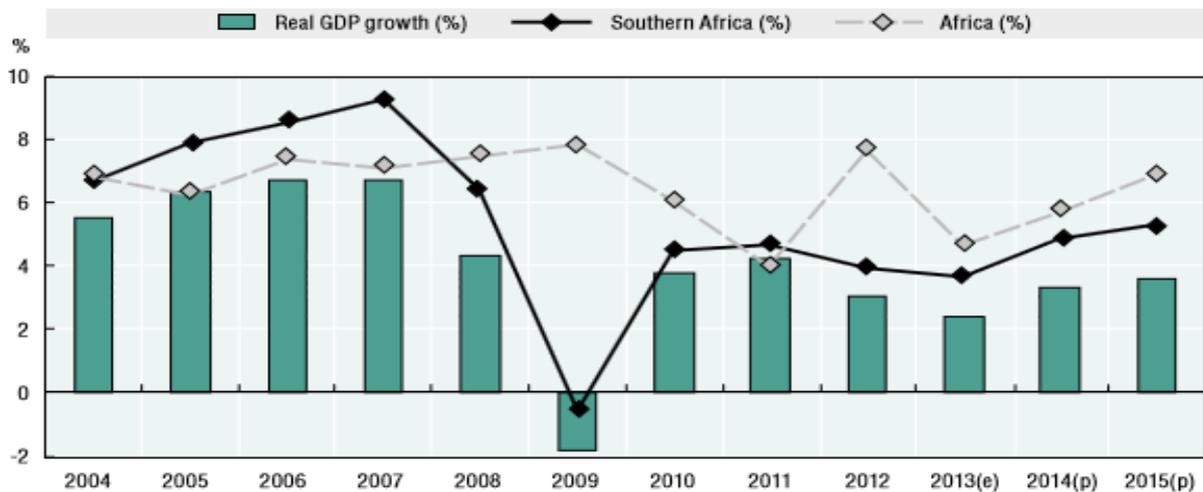
Table 1: Phases of entrepreneurial activity in the GEM economies 2014

| Region and economies | | Nascent entrepreneurship rate | New business ownership rate | Early-stage entrepreneurial activity (TEA) | Established business ownership rate | Discontinuation of businesses (% of TEA) |
|----------------------|-----------------------------|-------------------------------|-----------------------------|--|-------------------------------------|--|
| Africa | Angola | 9.5 | 12.4 | 21.5 | 6.5 | 15.1 |
| | Botswana | 23.1 | 11.1 | 32.8 | 5.0 | 15.1 |
| | Burkina Faso | 12.7 | 9.7 | 21.7 | 17.7 | 10.8 |
| | Cameroon | 26.4 | 13.7 | 37.4 | 11.5 | 17.7 |
| | South Africa | 3.9 | 3.2 | 7.0 | 2.7 | 3.9 |
| | Uganda | 8.9 | 28.1 | 35.5 | 35.9 | 21.2 |
| | Average (unweighted) | 14.1 | 13.0 | 26.0 | 13.2 | 14.0 |

Source: (Singer et al., 2015)

Although some literature has argued that evidence on whether entrepreneurship matters for economic growth is not straightforward (Naudé, 2013), there is a growing consensus on the role that entrepreneurship as small businesses plays in economic growth and job creation (Ramukumba, 2014). The lack of entrepreneurial activity coupled with global economic downturn can be said to have contributed to the lagging behind of South African real GDP growth as compared to those of Southern Africa and indeed the whole of Africa, as shown in figure 3 below.

Figure 3: Real GDP Growth



Source: (Kumo et al., 2014)

In order for South Africa to improve its economic conditions there need to be a focus on development of entrepreneurship particularly in the manufacturing sector. South Africa is ranked among the best in institutions and financial sector in the global competitiveness report. However, that advantage does not filter down to the ordinary people with innovative ideas that can help in the development of entrepreneurship. In consideration of the fact that businesses do not operate in a vacuum, but rather are influenced and dependent on the environment (Chae & Hedman, 2015), the success of entrepreneurial activity in South Africa depends on the support provided by development finance institutions through government policies and programmes, and large corporates' enterprise development programmes. It is believed that the application of a business model lens or framework may provide novel insight into enabling the analysis of how government supported policies programmes and corporates enterprise development programmes are designed and implemented in collaboration with local entrepreneurs in the manufacturing sector (Wakkee et al., 2014).

Hence, the scope of this research focused on proposing a business model framework for the whole life cycle of the entrepreneur in the manufacturing sector. This was done through an exploratory study based on semi-structured interviews with selected stakeholders. The selected stakeholders included the entrepreneurs in the manufacturing space, the development finance institute, and the large corporates who are in the manufacturing sector.

While manufacturing has been believed to be the main engine of economic growth and wealth creator for a country (Dewangan et al., 2015), recent research has raised questions on the role of manufacturing in economic growth (Szirmai & Verspagen, 2011b). This disconnect in researchers opinions has raised questions relating to the importance of promoting entrepreneurship in the manufacturing sector as a driver for economic growth. Research has shown that the services sector is today the largest and fastest growing sector globally contributing more to the global output and employing more people than manufacturing sector (Lashmi & Kumar, 2012). Despite this fact, some research has a strong view that manufacturing remains the engine of high and sustainable growth (Elhiraika, 2008). There is also a growing evidence that points to the fact that SMMEs in the manufacturing sector play a critical role as both the generator of jobs (Moscarini & Postel-Vinay, 2012) and as critical supplier of important input products to large corporation (Arráiz, Henríquez, & Stucchi, 2013).

The development of suppliers in the manufacturing value chain is critical to ensure that the company remains agile for competitiveness in the ever-growing and ever changing market environment (Costantino, Dotoli, Falagario, Fanti, & Mangini, 2012). On the other hand, a competitive large manufacturing entity is an important factor in economic growth and job creation prospects. While large companies do not necessarily create new jobs (Moscarini & Postel-Vinay, 2012), their sustainability ensures that small and medium enterprises (SMEs) survive by providing access to markets for SMEs and also providing them with support structures through enterprise development.

In general, regulatory environment create a red tape to entrepreneurial development as a result of the complexity of explaining actions and structures within the governmental organizations, particularly where there are multiple logics in play (Delbridge & Edwards, 2013). This suggests that there is a feeling among those who wish to pursue entrepreneurship in the manufacturing sector that some governments have regulated beyond their realism. In most

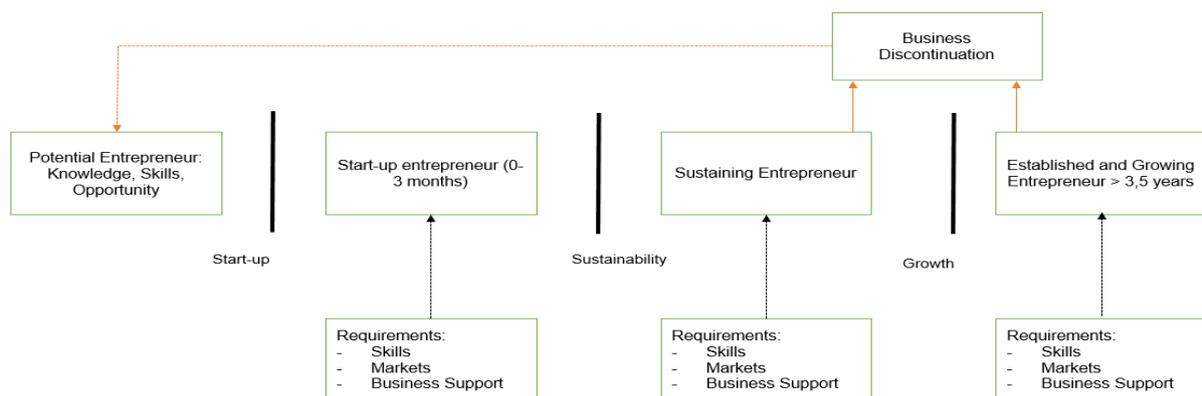
developing countries the small business operators still struggle with understanding the formalisation of their business that is necessary under the regulatory environment (Chiloane-Tsoka & Rasivhetshele,) and this has adversely affected the development process of the entrepreneurs in the manufacturing sector.

The successful development process of the manufacturing entrepreneur from start-up, sustainability to growth is therefore a function of both external and internal factors (Sefiani & Bown, 2013). The dependence on the external factors is best described by complex theory that posits that the business operates in non-linear and unpredictable environment (S. D. Tsai & Lan, 2006) and those entrepreneurs that best adapt to this environment have a chance of successful start-up, sustainability and growth.

2.4 Entrepreneurship development process

The literature on the development process (start-up, sustain, and grow) for the entrepreneur in the manufacturing sector is an important area to review with reference to external and internal factors. This was done by following a modified business model framework adapted from the GEM model of Total Early-stage entrepreneurial Activity (TEA), as represented by the model in figure 4 below.

Figure 4: Modified Entrepreneurship development process



Source: (Singer et al., 2015)

Figure 4 above illustrates various stages of entrepreneurial development process. In each stage requirements that are necessary for the success of that stage are indicated. In this research this development process was discussed and contrasted with the literature review of each stage, that is, start-up, sustainability and growth stages of entrepreneurs in the manufacturing sector.

2.4.1 Entrepreneurial development process: Start - up

Academic research has shown that SMMEs comprise over 90% of African business operations and contribute to over 50% of African employment and economic growth in general (Ramukumba, 2014). However, there is limited information on how these new businesses actually start-up and come into existence and the number of nascent entrepreneurs who attempt to start businesses (Reynolds, Carter, Gartner, & Greene, 2004). The start-up of entrepreneurial business largely depends on external and internal factors (Sefiani & Bown, 2013) and understanding these factors determines how well and how soon the nascent entrepreneur moves from idea generation to start up, sustainability and growth. The recent global economic downturn is an indication of external factors that entrepreneurs are facing in the business environment.

When events like recession or global economic downturn happen the probability of success in business start – ups is low as a result of entrepreneurial risk perception linked to the way in which a recessionary economic context is appraised (Nabi & Liñán, 2013). It is due to this unpredictable and volatile external environment that some academic researchers posit that business start-up is best explained more accurately in terms of complex theory rather than the traditional life cycle theory (S. D. Tsai & Lan, 2006). The basic assumption of life cycle theory is that it looks at the development of a start-up business from a holistic point in which organizations are defined as stable systems that can achieve a state of balance, while in reality the unpredictable nature of business environment is best described by the complex theory which focuses on the individual point of view that assumes that the business environmental change is a rule (Tsai & Lan, 2006). During the start-up stage, manufacturing entrepreneurs faces the environment in which the business operation is unpredictable, chaotic and uncertain at best. In this complex environment entrepreneurs need an anchor to understand what key requirements need to be considered when starting up new businesses (Pisano et al., 2015).

The dominance of small manufacturing firms has been a success in developing countries (Dallas, 2014). However research has also shown that as much as these small firms have many hopes of success and expectations during their start-up (Preisendörfer, Bitz, & Bezuidenhout, 2012), lack of key support system that includes the inability to form strategic partnerships lead to many of them to fail (Paradkar, Knight, & Hansen, 2015) despite the fact that Velu (2015) has argued that the strategic partnership does not guarantee success of entrepreneurial start-up. Because of this intricate balance between the external and internal factors that contribute to small firm's success during start-up it has been considered that a useful theoretical framework should be proposed and applied (Nabi & Liñán, 2013).

The framework explains that a well-structured path needs to be followed to ensure success in the business start-up. This path to success involves making smart decisions, ensuring access to market is guaranteed and having both financial and business skills before you start (Oprea, 2015). The required skills set for start-up process can be classified as an internal factor for the entrepreneur. The lack of skills set required for business start is believed to adversely affect competitiveness in almost a third of those small firms that are starting up (Giambona & Birchall, 2011). During the start-up phase of the entrepreneur development process, the entrepreneurs find themselves in a context characterized by a high level of complexity due to scarcity of resources that will need them to apply several skills to ensure perseverance (Lamine, Mian, & Fayolle, 2014). One of the main reasons hindering companies' performance during start-up phase has been the lack of skills. This challenge has been addressed in other research by applying the skills brokerage business model that aims to address this challenge through venture creation (Papagiannidis & Li, 2005).

The importance of external factors for business start-up is a key matter of consideration. External factors that include financial resources, access to markets and enterprise development have been found to be critical success factors at all stages of entrepreneurial development. The fact that start-ups are often small in size initially and have a high failure rate as compared to established companies, the success factor will be to develop some enterprise relationship or cooperative with established companies to ensure that difficulties faced due to ever changing external factors are mitigated for survival of start-ups (Wu, 2007). This cooperative leads to a sustainability phase of entrepreneur where they have moved along the total early-stage entrepreneurial activity from nascent entrepreneur that are involved in setting up a business to a sustainable owner-manager of a new business (Singer et al., 2015).

Entrepreneurs face external and internal challenges during the start-up stage and addressing these challenges fulfils the requirement for a start-up to succeed. Some of the major challenges for starting up are listed in table 2 below with relevant literature.

Table 2: Internal and External entrepreneurial start-up challenges

| Challenges | Literature |
|--|---|
| <u>Internal Challenges</u> <ul style="list-style-type: none"> • Entrepreneur skills set • Understanding of Environment | <ul style="list-style-type: none"> • (Papagiannidis & Li, 2005), (Giambona & Birchall, 2011). • (Pisano et al., 2015) |
| <u>External Challenges</u> <ul style="list-style-type: none"> • Access to markets • Lack of support structure • Economic recession • Scarcity of resources | <ul style="list-style-type: none"> • (Oprea, 2015) • (Paradkar et al., 2015)\ • (Nabi & Liñán, 2013) • (Lamine et al., 2014). |

2.4.2 Entrepreneurial development process: Sustainability

The ultimate goal of the business is to make money 'now' and in the 'future'. The well planned start-up with the right capabilities can be seen as contributing to the business' ability to make money 'now', while the success of the business to make money in the 'future' depends on how sustainable the business is. Blaga (2013) defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". de Lange (2013) argued that sustainability is a broad concept that advocates that human endeavours, often achieved through organizations, should be concerned with three dimensions.

The listed dimensions are:

- (1) care for the natural environment so that it remains intact;
- (2) social consciousness that results in actions that build and strengthen the social fiber of our communities; and
- (3) economic viability oriented toward the long term that generates benefits for current and future generations.

The understanding of the dynamic business environment complexity by the entrepreneur plays a crucial role in the long term sustainability of the business (Sun, Hyland, & Cui, 2014). The likely-hood of entrepreneurial success largely depends on the willingness by the entrepreneur to embrace that rapid changing environment (Guthrie, Griffiths, & Maron, 2008). The main reason attributed to the failure of the entrepreneur has been their inability to be nimble and anticipate change over and above the fact that some entrepreneurs lack managerial and business skills (Mathibe & van Zyl, 2011). This has led to small businesses not being sustainable.

The sustainability of small business also largely depends on both external and internal factors that entrepreneur encounters. The external factors can be defined as those factors that are outside the control of the entrepreneur while the internal factors related to those that the entrepreneur has control over. The institutional variables like government policies, safety and security, effectiveness of the judiciary, corruption, red tape (Ahwireng-Obeng & Piaray, 1999), access to markets, economic conditions and enterprise development by large companies are examples of external factors that have a direct influence on the sustainability of entrepreneurship. The government policies extends to over and above the legislative requirements but also to those policies that ensure access to funding and markets during sustainability phase of the entrepreneur.

The legislative environment provided by the government ensures that large companies play a crucial role in strategies like enterprise development in which they invest time, knowledge and capital to help small and medium enterprises establish (Chetty, 2014) and sustain. This enterprise development support by large companies ensures that large companies develop their suppliers as part of their value chain and these has led to increasing supplier

development which has had a positive outcome to development process of an enterprise (Wynstra, Anderson, Narus, & Wouters, 2012). However, some studies have found that increased supplier development does not necessarily lead to positive results (Eisenhardt & Tabrizi, 1995). The environment that is provided by the government is supported through various support programmes that the government has initiated. However it has always been argued that most entrepreneurs are not aware of government driven programs and even how and where to access finances as a result of either entrepreneur's own ability to source such information or to the fact that staff responsible for business support programmes appears to be incompetent, and therefore, deliver poor quality services (Mathibe & van Zyl, 2011).

The internal factors that contribute to sustainability of the entrepreneur relates to the strategic orientation of the entrepreneur. Sibila et al. (2014) posited that "entrepreneurs' personal goals and preferences strongly influence the company's vision and objectives, including whether they are sustainable or not". Thus the entrepreneur's ability to be nimble particularly in the fast changing business environment is a key success factor as there is no single approach to achieving sustainability (Guthrie et al., 2008). The entrepreneurial skills, gaining of adequate market share and availability of financial resources (Sefiani & Bown, 2013) are said to be some of the critical factors that contribute to small business sustainability. Research has shown that lack of education which results in poor skills set, social support and access to funding are some of the most important challenges entrepreneurs face (Rauth Bhardwaj & Wahi, 2013) when they want to grow and sustain their businesses.

Research has also suggested that sustainability discourses seem to have been appropriated by large corporations as a form of domination and justification for increasing profits (Franca Barros, Felipe Rammelt Sauerbronn, & Mello da Costa, 2014) with little or no focus on small businesses to adopt strategies that will render them sustainable. The rapid changes in the economic structure with the decline of large businesses contribution to economic growth and job creation as compared to small businesses (Nyankomo & Stephen, 2015) has necessitated that the subject of sustainability of small businesses be an area of deeper research and understanding in the development process of small and medium enterprises. However, the delivery of sustainable environment requires more than technological innovation and increased regulation (Aho, 2013). This sustainable environment requires the involvement of critical stakeholders that provides support to the development process of the small business over and above internal capabilities of the entrepreneur.

Research history has shown that sustainability of the business can be financially rewarding and thus various business model frameworks have been developed towards the subject of sustainability. With sustainability regarded as the only business success strategy of the future (Danciu, 2013), the development of these business model frameworks have taken more centre stage and small businesses can financially reap rewards from these frameworks. However, there is always a challenge that sustainability is a commitment to future generations (Reeves, Haanaes, Love, & Levin, 2012) which as much as it is essential most entrepreneurs do not appreciate as they tend to live from 'hand to mouth' and they mostly do not see sustainability as survival. Concerning this issue, Guthrie et al. (2008) argued that "Influencing the mind-set of entrepreneurs is regarded as the critical step toward creating sustainable business" that will be able to grow.

Entrepreneurs face external and internal challenges during sustainability stage and addressing these challenges fulfils the requirement of entrepreneurs to sustain their businesses. Some of the major challenges for sustaining businesses are listed in table 3 below with relevant literature.

Table 3: Internal and External factors that affect sustainability of entrepreneurs

| Challenges | Literature |
|--|---|
| <u>Internal Challenges</u> <ul style="list-style-type: none"> • Managerial and business skills • Adaptability in changing environment • Entrepreneurial Strategic Orientation | <ul style="list-style-type: none"> • (Mathibe & van Zyl, 2011). • (Guthrie et al., 2008) • (Sibila Lebe and Matjaž Mulej, Sonja et al., 2014) |
| <u>External Challenges</u> <ul style="list-style-type: none"> • Access to markets • Institutional variables – policies • Support Structures • Access to funding | <ul style="list-style-type: none"> • (Sefiani & Bown, 2013) • (Ahwireng-Obeng & Piaray, 1999) (Mathibe & van Zyl, 2011) • (Chetty, 2014) • (Sefiani & Bown, 2013) |

2.4.3 Entrepreneurial development process: Scale-up / Growth

Mao (2009) argued that “enterprise growth should be central in the growth ability of enterprise, and this ability should include practical development ability and growth potential”. Entrepreneurs in the manufacturing sector operate small scale enterprises and very few of those small firms can reach the medium size (Sidik, 2012). The growth of small enterprises mostly depends on the number of internal and external factors. As much as the research has described the development process of entrepreneurs using complex theory (Sefiani & Bown, 2013) many scholars still explained the enterprise growth using the life cycle theory that posit that the enterprise will experience the process from generation, growth, aging and death (Mao, 2009). This enterprise lifecycle is largely influenced by external and internal factors which form part of the enterprise resource base view. The suggestion by literature is that this enterprise resource based view is the ability for an enterprise to have at its disposal not only the material or financial support structure, but also the required skills set by an entrepreneur (Lobos &

Szewczyk, 2014). Entrepreneurs' skills and their ability to identify necessary skills for business growth are regarded as the important factors for the sustainable growth of a business from the start-up phase (Ćorić, Katavić, & Kopecki, 2011). Indeed access to capital or external finance (Stella, Aggrey, & Eseza, 2014) and focus on new market development or diversification opportunities (Akhtar, Azeem, & Mir, 2014) are crucial for sustainable growth of small enterprise.

Small enterprises face tougher challenges as compared to large firms in pursuing growth strategy. Large firms have capabilities and abilities to exploit economies of scale making their operations effective (Stella et al., 2014). Small enterprises can therefore never compete on equal basis with large businesses in certain markets. The survival of the small enterprise depends on the ability for an entrepreneur to identify the markets that are either niche or small enough for large industries to ignore. While small businesses find it difficult to compete in open markets with large businesses it is argued that flexibility appears to be the most distinctive advantage of small enterprises enabling them to respond quickly to market needs and build innovation competency (Akhtar et al., 2014). The positioning in terms of market is therefore an important factor in the growth stage of small enterprises (Lobos & Szewczyk, 2014).

Access to markets for small enterprises is crucial in the growth stage of the entrepreneurial development process. Availability of markets equate to increased demand and more revenue for a business. Because of the fact that market failures are prevalent, government policies that promote localization through ring fencing of local manufacturing and import restrictions (Naudé, 2013), commitments in investment through funding growth and growing enterprise size are believed to be more important than the market variables (Majumdar, 2013) and that the state institutions and large corporations have an important coordinating and regulatory role to play in development process of entrepreneurs through access to markets. However some literature contradict this advantage of localization and argues that this may lead to credit market imperfections and ultimately overinvestment by financial institutions as they cannot accurately judge entrepreneurial ability (De Meza & Webb, 1987).

Accessing other support systems like finance as part of the growth strategy is also important in the business growth stage. In most cases small enterprises face significant constraints when seeking the financing resources they need to grow (Roman & Rusu, 2012) and Stella et al. (2014) argued that "larger firms have an easier access to capital and money market than the

less well known small firms”. The DFI’s then plays a crucial role in ensuring that there is channelling of funds from risk averse financial institutions like banks to the entrepreneurs (Marcelin & Mathur, 2014) as it is known that for any organization to grow it needs funding. This funding can be in the form of debt or equity. Corporate finance studies show that it is always cheaper to fund business growth through debt rather than equity. This requires small firms to have a credible business planning to access funding through lenders. The main challenge has always been the fact that for small businesses, planning is often limited and they do not often generate as much information from which to analyse their prospects and performance (Mudd, 2013) for lenders to consider. This limitation as a result of lack of adequate skills has in many respects restricted the growth prospects of the small enterprises.

In the entrepreneurial development process, the small business growth depends largely on the initial resources of the entrepreneur that combines various external (market, funding, enterprise development, and internal (leadership, skills) variables (Majumdar, 2013). Internal factors like a relevant skill is a key resource that entrepreneurs will need to have if they are to succeed in adopting and implementation growth strategies. The skills level, capability and characteristics of the entrepreneur are critical in ensuring the internal and external resource available for the enterprise are converted into an advantage and indeed translate into growth performance. The growth of small business enterprise first start with survival as a first stage followed by sustainability suggesting that the growth of the enterprise should be considered from multiple angles and layers (Mao, 2009) that involve different stakeholders.

Entrepreneurs face external and internal challenges during growth stage and addressing these challenges fulfils the requirement of entrepreneurs to grow their businesses. Some of the major challenges for growth are listed in the table 4 below with relevant literature.

Table 4: Internal and External factors that affect growth of entrepreneurs

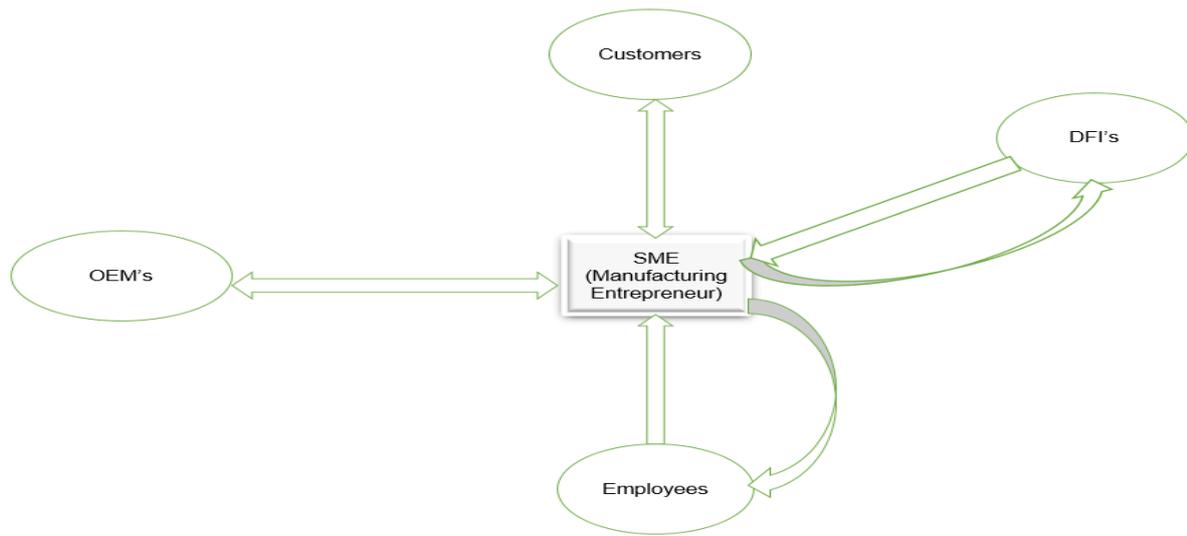
| Challenges | Literature |
|---|--|
| <u>Internal Challenges</u> <ul style="list-style-type: none"> • Resource base view • Entrepreneurial skills | <ul style="list-style-type: none"> • (Lobos & Szewczyk, 2014) • (Ćorić et al., 2011), (Mudd, 2013) |
| <u>External Challenges</u> <ul style="list-style-type: none"> • Access to markets • Support Structures • Access to funding | <ul style="list-style-type: none"> • (Akhtar et al., 2014) • (Mao, 2009) • (Stella et al., 2014), (Roman & Rusu, 2012); (Sefiani & Bown, 2013); (Marcelin & Mathur, 2014) |

2.5 Role of stakeholders in development process of manufacturing entrepreneur

While there is an overwhelming evidence that manufacturing still plays an important role in economic growth as compared to service sector (McCausland & Theodossiou, 2012) in most developing countries, particularly in African countries, research shows that the industry and particularly manufacturing continues have the least share in aggregate output and contribution to GDP growth (Elhiraika, 2008). This fact is largely attributed to the fact that the support structures for small businesses, in developing countries like South Africa, is largely driven by government agencies as compared to developed countries where it is driven by private sector support structures, and that government-driven initiative struggles the most to become operational. Therefore there is a need of a paradigm shift in the support structure that key stakeholders provide in the support of SME's.

The development process of manufacturing entrepreneurs entail the start-up, sustainability and growth of an entrepreneur in the manufacturing sector and is largely dependent on the correlation between various stakeholders like development finance institutions and large companies (usually referred to as OEM's or Original Equipment Manufacturers) who are the source of supply chain for the small enterprises. Figure 5 below shows a modified stakeholder model indicating correlation between stakeholders and SME's.

Figure 5: A modified Stakeholder Model



Source: (Donaldson & Preston, 1995)

This link shows that the start-up, sustainability and scale-up of manufacturing entrepreneurs depends in the support provided by key stakeholders being development finance institutions and large companies/OEM's enterprise development. Research shows that in the stakeholder relationship, the reaction of stakeholders can have a significant impact on one another and for manufacturing SME these stakeholders include large companies or OEMs, customers, employees, and finance institutions (Steadman, Albright, & Dunn, 1996). Stakeholders need to have a common vision for the relationship to be mutually beneficial. And research has shown that absence of a common vision among stakeholders has been highlighted in several studies as a main challenge to participatory approaches in a relationship (Hatipoglu, Alvarez, & Ertuna, 2014). Stakeholders involvement in an organization can range from latent, those that receive little company attention, to expectant, those that are more active in the company and finally to definitive, those holds power and legitimacy in the company (Ribeiro Soriano, Wagner Mainardes, Alves, & Raposo, 2012). In the development process of entrepreneurs the involvement of stakeholders becomes clearly defined by the sort of input an entrepreneur require from that particular stakeholder. While the role of customers and employees are

important, the focus of this research is the role of OEMs or large companies and that of development finance institutes (DFI's) as chosen stakeholders for the development process of the entrepreneurs in the manufacturing sector.

The strategic partnership between different stakeholders is important for economic growth. The correlation and partnership between entrepreneurs and development finance institutions is explained by an endogenous growth model. Endogenous growth theory explains long-run growth as emanating from economic activities that create new entrepreneurial innovation and better financial systems to improve the probability of successful innovation and thereby accelerate economic growth (King & Levine, 1993). Based on resource dependence theory (RDT), the strategic partnership between large companies or OEMs and entrepreneurs can be explained and Liu et al. (2013) explained the importance of synergies where he argued that "Firms that have direct connections with each other are more likely to possess common information and knowledge". The strategic relationship between DFIs, OEMs, and entrepreneurship is important the in the development process of entrepreneurs and the interaction is explained in a model in figure 5 above.

2.5.1 Development process - Role of Development Finance Institutions (DFI's)

The section above has discussed the literature that supports manufacturing entrepreneurship and economic growth. The above section also indicated that there is a correlation between development finance institutions (DFI's) and start-up, sustainability, and scaling up of manufacturing entrepreneurs. DFIs are mainly defined as government promoted institutions with the primary aim of providing development finance to one or more sectors or sub-sectors of the economy (Adesoye & Atanda, 2014). Although there has been debates in literature on the linkage between financial sector development and economic growth (Raphael & Gabriel, 2015), with some literature arguing that financial system plays important role but not primary role (Nyankomo & Stephen, 2015), academic models has shown a direct correlation between finance, entrepreneurship, and economic growth which suggests that improvements in the provision of financial services will promote future economic growth (King & Levine, 1993). Marcelin & Mathur (2014) argued that the "Financial development hinges around the issue of how well a country's institutional arrangement allows for optimal allocation and redeployment of investible resources." Development finance institutions (DFIs) are primarily established to accelerate financial inclusion (Nyankomo & Stephen, 2015) through sustainable socio-

economic development. Their purpose is to ensure that investment happens in areas where the traditional commercial finance institutions fails to invest sufficiently. As a result of financial crisis, accessing of funding by SME's through traditional commercial finance institutions has been difficult (Appleyard, 2013). This has resulted in the importance of government led development finance institutions to accelerate the financial inclusion.

Since the importance of SME's in economic growth (Ćorić et al., 2011) and job creation (Moscarini & Postel-Vinay, 2012), has been well argued in literature the access of funding by SME's is said to be an important catalysts in accelerating financial inclusion. SME's can access funding in various ways that includes, entrepreneurs own equity, private banks and public institutions (Man & Macris, 2013), the public or government led institutions like DFI's have become instrumental in providing financial products and services to excluded yet viable individuals and firms (Appleyard, 2013). Although in most governments, particularly in developing countries, development finance institutions have been established, access to funding by SME's has continued to be a challenge due to information asymmetry, lack of experience, severe market conditions, and insufficient or unsatisfactory collaterals required (Daniel & Nicolae, 2011).

The emphasis on DFIs to ensure that they provide funding based on the viability of the project to be financed against the collateral approach as practiced by commercial banking institutions ensures that the relationship between DFI and entrepreneur take the "partner approach" in the project than that of a mere "financier" (Adesoye & Atanda, 2014). This "partner approach" is important as financial systems provided by DFIs are seen as a catalyst that can lead to productivity improvements by mobilizing resources to finance promising projects, assist entrepreneur to evaluate prospective projects and ensures that the prospective entrepreneur has the required skills set and capability to complete the project (King & Levine, 1993). This is essential since due to the lack of collateral DFIs by entrepreneur the only insurance against default is the integrity, the competence and resourcefulness of the management Therefore there is a need to develop a business model framework that will determine the distinctive stages in the development and growth of a business that is necessary to support the subsequent analysis of the financial needs of that business (Xiao, 2011).

Donaldson & Preston (1995) posited that “[t]he idea that corporations have stakeholders has now become commonplace in the management literature”. This provides basis for DFI’s to move from being only finance provider for the SME’s but to become a key stakeholder that can provide support for the entire development process of the small business enterprise from start-up, to sustainability and growth. This paradigm shift is necessary in the developing countries where entrepreneurs, particularly in the manufacturing sector, possess no skill needed to start-up, sustain and grow. The internal infrastructure and financial muscles that DFI’s have, can be of great advantage towards the SME and this can result in synergies between the internal capabilities of the entrepreneur and the external resource like large company or OEM that provides enterprise development to the SME. The challenge that is facing entrepreneurs is that they cannot evaluate themselves in terms of capability and capacity they possess and financial systems provided by DFIs assist in evaluating entrepreneur internal capability and skills before financing entrepreneurs in their initiation of innovative activity and the bringing of new products to market (King & Levine, 1993). This internal capability and upskilling of the entrepreneur is important , as it is the inability of financial managers to plan and control current assets and liabilities of their companies that lead to inefficient working capital (Arunkumar & Radharamanan, 2011), which ultimately results in the failure of a SME.

The survival of small and medium size enterprises has taken a serious knock due to diminishing supply and demand of loans as a result of recent financial crisis (Roman & Rusu, 2012). This recessionary conditions have seen financial lending institutions tightening the lending criteria making it difficult for small and medium enterprises who wishes to start-up, sustain and grow to survive. While some literature has proposed that viable financing contracts and institutions can facilitate innovation through entrepreneurship and increase intermediation (Marcelin & Mathur, 2014), Roman & Rusu (2012) have argued that the current financial crises has resulted in the deterioration of funding for SME’s development process. The financial development, therefore plays a crucial role in the economic growth (Lee, Jung, Lee, & Lee, 2015), because of the impact it has on the development process of entrepreneurship.

This financial development includes the provision of working capital by the DFIs as it has been established that for any business to sustain and grow it needs to be profitable thus working capital plays an important role in development process of the SME as it has an effect on firm's profitability as well as liquidity (Muhammad, Jan, & Ullah, 2012). As SMEs are subject to important financial constraints and have difficulties in obtaining funding in the long-term capital markets (Baños-Caballero, García-Teruel, & Martínez-Solano, 2012) the intervention by the DFIs to provide the working capital has been found to be important in the entire development process. It is for this reason that Xiao (2011) posited that "The derivation of a model determining the distinctive stages in the development and growth of a business is necessary to support the subsequent empirical research and analysis of the financial needs". The business model framework must show the correlation of all the stakeholders to clearly define what and how development finance institutes can play a role in the development process of the entrepreneur in manufacturing sector.

2.5.2 Development Process - Role of Large Companies (OEMs)

The academic research showing relationship between large companies (OEMs) and the supplier which is usually a SME started in the early 1990's (Wynstra et al., 2012). The research has further shown that the both large firms and SME's benefit through this relationship and that those large firms that have adopted supplier development as a strategy have benefited in the profit-maximising framework for the buying firm compared to those firms that switches suppliers without any supplier development (Friedl & Wagner, 2012). This mutual benefit is evidenced by increased sales, employment, and the sustainability of small and medium-sized suppliers; and also increased in sales of large firms and their ability to create new markets as a result of supplier development programmes (Arráiz et al., 2013).

The survival of the manufacturing SME's largely depends on the behaviour of large firms or OEMs. These firms play a critical role in the development and growth of SME. The primary motivation for SMEs investing in any form of relationship with large firm or OEM is to win new business, strengthen a supply relationship and technology transfer (Jamieson et al., 2012). It is also important for large firms to develop good relationship with SME's as these tend to be their suppliers. Large businesses cultivate this relationship through supplier or enterprise development programs that they adopt. The development of suppliers by large firms ensures that direct connections are formed which contribute to firms competitive advantage as both

the supplier (SME) and the firm are more likely to possess common information and knowledge (Liu et al., 2013).

Enterprise development (ED) has proved to work well in developing countries where it is part of the legislative requirements. For example in South Africa corporates are expected to spend 3% of their annual profits after tax to support black owned enterprises (Chetty, 2014) which assist in promoting financial inclusion through economic development and job creation. However, such legislative enterprise development is reactive in nature as it is not a proactive enterprise development or vision driven enterprise development (Ouriaghli & Nsubuga, 2012) but rather a compliance issue that usually end up with large companies playing 'lip' service and not having any commitment. Proactive or vision driven enterprise development offer SME's with services that goes beyond financial support but includes business management support, skills development (Laha, 2014a), and tailor-made credit and payment terms (Jamieson et al., 2012). Large companies' support offer to assist with cash flow of SMEs further extend to include granting of trade credit to SMEs to stimulates sales (Baños-Caballero et al., 2012) thus improving on SMEs' working capital management.

The adoption of a proactive enterprise development strategy has an advantage for large companies in that those large firms can assist adopt small firms as their suppliers through developing their capabilities thus resulting in a long-term alliance if a firm-supplier relationship (Aslan, Sis, Çinar, & Bektaş, 2011). This firm-supplier relationship is important as delivery of service by the supplier is critical to the profitability if the large firm. Large firms that engage in enterprise development as a strategic focus benefit in ensuring that the supplier has the capability to provide the product that satisfies the buying firm's needs. These capabilities are along attributes such as cost, quality, delivery or service that gives the OEM flexibility to consider the trade-off between cost savings and inventory risk-sharing thus being able to adjust the originally-ordered quantity to actual demand (Friedl & Wagner, 2012).

The set government policies and structures create the environment in which backward linkages between large firms and small businesses is effected (Arráiz et al., 2013). This environment created by the policies as evidenced by the plethora of initiatives aimed at supporting and growing the SME sector in South Africa (Ramukumba, 2014) has had a positive effect on implementation of enterprise development by large companies. Thus enterprise development by large companies plays a crucial role in the business model framework for the development process of manufacturing entrepreneurship.

2.6 Business Model framework

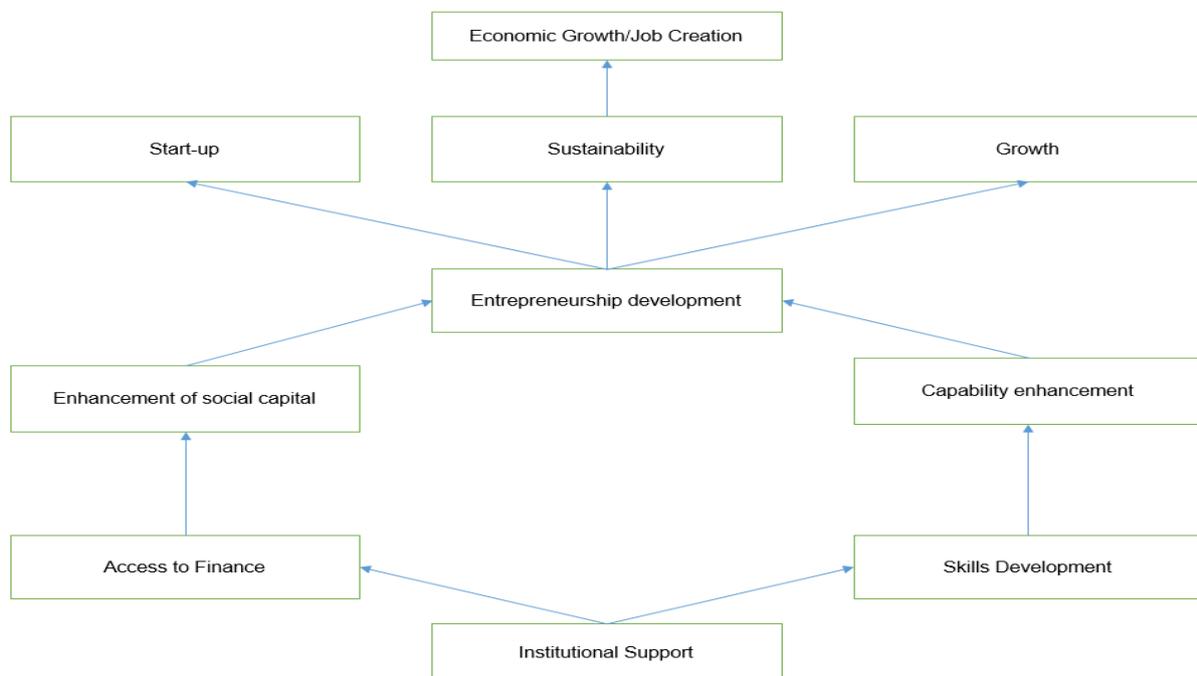
The literature discussed in the above sections has shown the importance of entrepreneurship and manufacturing as a catalyst for the economic development. Therefore it can be argued that the success of the development process of entrepreneurs in the manufacturing sector depends on the strategic business model framework that entrepreneurs adopt in all stages of development. Aho (2013) argued that the fundamental use of business model framework is to address the following five critical business issues: “ (1) how the value proposition of the enterprise is defined, (2) to whom value is created (3) how value is created (i.e. what are the value drivers of different stakeholders of the business, how the company’s offering responds to these drivers and how does it convert to monetary value), (4) what resources and competencies are utilized to create the defined value, and (5) how revenue streams are created from the value that the company provides its customers”. However, there seem to be a lack of understanding of whether and how these frameworks work for Small and Medium size Enterprises (Sloan, Klingenberg, & Rider, 2013). Literature on business model frameworks has shown that there are more than 900 improvement initiatives that can be used to improve an organisation’s performance (Mohammad, Mann, Grigg, & Wagner, 2011; Zott, Amit, & Massa, 2011). This differing of opinions is believed to be due to the fact that the term “business model” is used differently in different situations. In this research business model focusses on small firm’s business growth into various stages which include start-up, sustainability, and growth (Xiao, 2011).

It can be argued however that whatever the definition of business model is, it is a useful tool as a business canvass for measuring business performance and value creation (Pereira & Caetano, 2015). Business models also plays an important role as a strategic communication tool for all stakeholders by providing a holistic perspective of the business, which helps it to understand internal functions and structures, as well as its interconnectivity and interaction dynamics with the external world (Chae & Hedman, 2015) to all relevant stakeholders. Scholars argued that business models are not prescriptive to organizations, however they provide solid foundation to a process of identifying enablers and results (Mohammad et al., 2011) that are essential for start-up, sustainability and growth of the organization. (Zott et al., 2011). For a business to start-up, to sustain and to grow it needs to possess the capability of identifying its value drivers. Business models therefore act as unit of analysis and more importantly a tool of determining how value is created within a business. Furthermore, the

business model framework defines all resources and activities required for business value creation (Dohrmann, Raith, & Siebold, 2015).

Cavalcante (2014) explained the start-up stage as a stage where researching of new challenges and new practices takes place while sustainability as a stage where new ideas are acquired which will ultimately lead to extension of business model. A similar approach is where the first stage is development of a new business where new ideas are generated that cover market gaps, skills requirements, funding requirements and other related factors. The sustainability stage is a level where a business immerses itself in the learnings of the environment which lead to growth and this is where the business model is revised and extended. The business model, therefore, aims to determine the architecture, principles, logic and capabilities that an enterprise applies for creating, delivering and capturing value for growth (Aho, 2013) thus contributing to economic growth and job creation. Laha (2014) argued that there is a causal link between entrepreneurship development through institutional support mechanism and economic growth, as shown in the adapted business model framework below.

Figure 6: Adapted model showing linkages between entrepreneurial development and economic development



Source: (Laha, 2014a)

The linkages between entrepreneurship development and economic growth shown in figure 6 above, together with the TEA model shown in figure 4 as well as a modified stakeholder model in figure 5 can be used as a foundation for the creation of the business model canvass. A business model canvas will therefore outline the flow between key components of the development process of the SME's. Dohrmann et al. (2015) argued that "The graphical arrangement of the components in a "business model canvas" is a convenient didactical tool, which supports the understanding of the interaction of the key components and, thus, the logic of the value creation process" and a business model canvas of Osterwalder and Pigneur (2010) in figure 7 below.

Figure 7: Business Model Canvass

| | | | | |
|---|--|---|---|---|
| PARTNERS Who are the most important partners for value creation? Which Activities are provided? Which resources are provided? | ACTIVITIES Which activities for value creation are required? | VALUE PROPOSITION What value is provided? What problem is solved? Which needs are satisfied? Which goods or services are required? | CUSTOMER RELATIONSHIPS What is the relationship with each customer segment? | CUSTOMER SEGMENT For whom is value created? |
| | RESOURCES Which resources for value creation are required? | | DISTRIBUTION CHANNELS Which are the main distribution channels? | |
| EXPENDITURES Which are the most important expenditures? Which activities / resources creates the highest expenditures? | | REVENUE STREAMS Which values are being paid for? How are payments made? | | |

Source: (Dohrmann et al., 2015)

The business model canvass in figure 7 entails significant practical implications that can be used by manufacturing entrepreneurs as a strategy map to find the right type of business model for the development process of their venture by illustrating the simple changes and impacts of each support structure in the value creation of the entrepreneurial business (Dohrmann et al., 2015). Each of the nine blocks of the frameworks attempt to answer the question(s) in the block in line with the value creation of the business.

2.7 Conclusion

This chapter reviewed the literature that explains the development process of manufacturing entrepreneurs. The literature has shown that although there has been questions on the role of manufacturing in economic growth (Szirmai & Verspagen, 2011b), there is strong evidence that shows that manufacturing still remains the engine of high and sustainable growth (Elhiraika, 2008). Literature has also shown that entrepreneurs are key driving force of economic growth as they create jobs and contribute to economic development (Cini et al., 2014) thus their development is important for most countries.

The entrepreneurial development process is therefore crucial and has been described in details in this section. The development process of the entrepreneurs entails the start-up, sustainability and growth stages. The chaotic environment in which the entrepreneurs start and operate their businesses suggested that development process is best described by the complex theory rather than the usual life-cycle theory (S. D. Tsai & Lan, 2006). This dynamic business environment as described by the complex theory determines the sustainability of the business (Sun et al., 2014). Thus entrepreneurs need to be aware of such a dynamic environment.

The support structures available from other stakeholders are also critical to ensure that entrepreneurs are able to start-up, sustain and grow. The causal link between entrepreneurship development and other stakeholders that ensure economic growth has been modelled in a business model framework (Laha, 2014a). The model informed this study that the role of each stakeholder in the development process of the entrepreneurs needs to be researched with focus on requirements by the entrepreneurs and the service offering by development finance institutions and large companies as external stakeholders.

CHAPTER 3

RESEARCH QUESTIONS

3.1 Introduction to research questions

In the previous chapter literature review that aims to answer the research questions was discussed. The basic theoretical framework that was followed in answering the research questions is shown in the modified model in Figure 6 above. This model showed that there is a close link between each process and activity that the manufacturing entrepreneur requires for start-up, sustainability and growth.

3.2 Main Research Question

The reported study was informed by one main question which reads as follows:

- What challenges are faced by different stakeholders in the development process of manufacturing entrepreneurs – start up, sustainability and growth?

3.3 Sub-questions

In addition to the main question, there were three sub-questions that guided the research process that was undertaken in the study. The aim of these sub-questions was to formulate the proposed business model framework for the development process of the manufacturing entrepreneurs. The sub-questions are:

3.3.1. Sub-Question 1: Needs Analysis

- What are the key *requirements* that manufacturing entrepreneurs need for their development process of i.e. to start-up, sustain and scale-up their business in South Africa?

3.3.2 Sub-Question 2: Development Finance Institutions (DFI's) as a stakeholder

What *role* do DFI's play in the development process of the manufacturing entrepreneurs i.e. to start-up, sustain and scale-up their business in South Africa?

3.3.3 Sub-Question 3: Large companies (OEMs) as a stakeholder

What *role* do large companies (OEMs) play in the development process of the manufacturing entrepreneurs i.e. to start-up, sustain and scale-up their business in South Africa?

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

The previous chapter stated the research questions that this study aimed to answer. The research questions were answered using a two dimensional phase approach. The first dimension focussed on gathering data from manufacturing entrepreneurs and the second dimension focussed on selected stakeholders that play a critical role in the development, sustainability and growth of manufacturing entrepreneurs in South Africa. The data was analysed following a thematic analysis approach. The approach was informed by Fereday & Muir-Cochrane (2008) who posited that “Thematic analysis is a search for themes that emerge as being important to the description of the phenomenon, it is a form of pattern recognition within the data, where emerging themes become the categories for analysis”.

4.2 Research design

The choice of research method influences the way in which the researcher collects data (Myers, 1997). This study followed an exploratory qualitative research method in answering the research questions. The study was exploratory in that it sought to gain new insights into the development of manufacturing entrepreneurship in South Africa by asking relevant questions and assessing that phenomenon in a new light (Saunders, Lewis, & Thornhill, 2012). While the success of entrepreneurship can be quantified by the revenue generated, job creation and impact on economic growth, the factors that contribute to that success include the kind of enabling environment for entrepreneurship. In order to understand that enabling environment a qualitative research study that follows an inductive approach is recommended over a quantitative study. Although the qualitative study has a long history of suffering the criticism that it does not adequately justify its assertions (Gioia, Corley, & Hamilton, 2013), it was still considered relevant in this study.

Qualitative research is associated with descriptive data collected via interview process by the researcher and that data is analysed inductively without having to prove or disprove hypotheses that they have prior to the study (Bogdan & Biklen, 1997). The data was collected using semi-structured interviews. The researcher did not form any preconceived ideas about the participants but appealed to their passion about the subject of reinventing manufacturing through entrepreneurship in South Africa. Thus, using qualitative research which Sorrell et al. (2014) posited that it “strikes at the mind, heart, and soul” of the interviewees, the interviews enabled the researcher to extract valuable information from the passionate participants. The research followed a two dimensional process whereby all relevant role players in the development process of the manufacturing entrepreneurs in South Africa were interviewed for data collection with the aim of proposing a business model framework for successful support of manufacturing entrepreneurs.

4.3 Research process

A total of 15 interviews were conducted in this research broken down in to eight (8) entrepreneurs, three (3) senior executives at the development finance institutions and four (4) senior managers of large companies. A two dimensional approach was followed to answer the research questions. The first dimension focussed on the necessary conditions that manufacturing entrepreneurs requires in order to start-up, sustain and grow. Semi-structured interviews with the entrepreneurs in the manufacturing sector were undertaken. The information obtained from the interviews was contrasted with the current offering and requirements by stakeholders and a golden thread was identified to form a basis for the business model framework.

The second dimension focussed on the role of the stakeholders in the start-up, sustainability and growth of manufacturing entrepreneurship. This dimension was subdivided into two categories: category A – being the development finance institutes and category B– being the role of large manufacturing corporates in South Africa. The same process of semi-structured interviews was conducted for this second dimension with each category having separate interview questions aligned to its role in the start-up, sustainability and growth of manufacturing entrepreneurs. The subdivision into categories ensured that a holistic view was captured for the process of proposing the business model framework that supports start-up, sustainability and growth of manufacturing entrepreneurs.

4.4 Dimension One – Manufacturing entrepreneurs

4.4.1 Purpose

This dimension focussed on gathering data collected from the entrepreneurs that are in the manufacturing sector on what necessary conditions are required for them to start-up, be sustainable and be able to grow. The collected raw data was necessary as the input to the sustainable business model framework that was proposed. The analysis of data collected during interviews followed a thematic analysis with an inductive approach as the identified themes and patterns were used to formulate a business model framework (Saunders et al., 2012) that can act as support structure for the development process of manufacturing entrepreneurship in South Africa.

4.4.2 Population

The population for dimension one was all the entrepreneurs that are classified as small, medium and micro enterprises (SMMEs) in South Africa.

4.4.3 Sample size

Eight semi-structured interviews were conducted with entrepreneurs in the manufacturing sector. The selection criteria was based on the companies that have a minimum of 51% black ownership since this category is the one that has been currently undergoing the complete development process in South Africa. In this sample the likelihood that individual entrepreneurs have received or looking to source some assistance from the development finance institutes through funding, grants, or business supports and also received or looking to access enterprise development assistance from large companies is high.

The research proposed a business model framework for the entire development process of manufacturing entrepreneurs, this process includes start-up, sustainability and growth phase of the small business in the manufacturing sector. The selective and purposeful sampling was followed for this study and this method is usually followed if there may be hypotheses that the

research is exploring that will require coverage of particular subgroups (Ritchie, Lewis, Nicholls, & Ormston, 2013). The sampling method utilized for this sample unit was non-probability purposive sampling. Coyne (1997) argued that this type of sampling in a qualitative study is “shaped by the time the researcher has available to him, by his framework, by his starting and developing interests, and by any restrictions placed upon his observations by his hosts”.

4.4.4 Unit of Analysis

The unit of analysis was the requirements for the entrepreneurs in manufacturing sector to start-up, sustain and be able to scale up.

4.5 Dimension Two: Stakeholders

4.5.1 Purpose

This dimension focussed on two sets of categories. The first, category A, focussed on data gathered from the development finance institutes (DFIs). The second, category B, focussed on data gathered from the large corporations that use services of the small and medium companies in the manufacturing sector (OEMs). The analysis of data collected during interviews followed an inductive approach. Gioia et al. (2013) posited that in seeking qualitative rigor in inductive research “It is clear, though, that we should have approaches or methods that can generate new concepts and grounded theories not only via impressionistic studies, but also via qualitatively rigorous inductive studies”.

4.5.2 Category A- Population

The population for this category was all the finance institutions offering development finance to small and medium enterprises.

4.5.3.1 Sample Size

Three participants from the following government affiliated development finance institutions were interviewed in this research:

- Small Enterprise Finance Agency (Sefa) (1 –participant)
- Industrial Development Corporation (IDC) (1-participant)
- National Empowerment Fund (NEF) (1-participant)

The sample was selected based on the researchers understanding of the role of the development finance institutions (DFI's). The common mandate for the DFI's selected is economic development and job creation through provision of all funding requirements for the development process of entrepreneurs in the manufacturing sector.

4.5.3.2 Unit of Analysis

The unit of analysis for this category was the funding model for the development process of manufacturing entrepreneurship.

4.5.4 Category B – Population

The population for this category was the large industries that utilize the services of small and medium businesses in the manufacturing sector.

4.5.4.1 Sample Size

Four participants from the following large corporations were interviewed during this research study.

- Denel (SOC) LTD (1-participant)
- Thyssen Krupp (2-participant)
- Chrome International South Africa – Lanxess (1-participant)
- Sasol (1-participant)

The sample was selected based on the researchers understanding of the nature of the large corporation's and their dependence on manufacturing entrepreneurs as a supply chain for the success of their businesses. The sample was also chosen based on the role the large industries play in enterprise development.

4.5.4.2 Unit of Analysis

The unit of analysis in this phase was the enterprise development these industries use as a support system for manufacturing entrepreneurs.

4.6 Data gathering

In this reported study the primary data was collected using semi-structured interviews for both Dimension One and Dimension Two. The semi-structured interviews were considered advantageous because data collection required an establishment of personal contact at a specified length of time (Saunders et al., 2012). Using data collected through semi-structured interviews in this study, the themes were generated, explored and explained in order to be able to propose a business model framework. In both dimensions there was a need for the researcher to develop personal contact with the interviewee as the study aimed to explore ways in which a business model framework could be proposed. Since the development of entrepreneurship in manufacturing depends on the requirements that entrepreneurs themselves need and the role of key stakeholders, in this research selected stakeholders were development finance institutions and large corporations, data was gathered from all these role players. As the data was gathered from three different samples of different population interview questions were developed for each population sample. A general topic guide with minimum eight (8) broad questions and probes (ADVANCE, 2000) were utilized for semi-structured interviews. The data collection using semi-structured interviews was chosen due to the fact that it allowed an opportunity to digress from the primary question and probe a response to understand more clearly the meaning of response from interviewee.

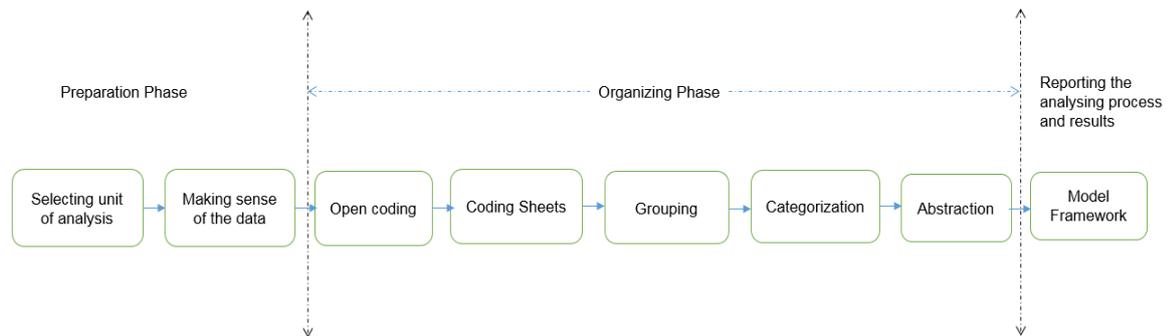
Due to the varying sample population the data was collected using audiotapes and transcripts (ADVICE, 2000) as it was difficult for the researcher to capture the information manually. The audiotape was, however, not utilized for all the interviews as some participants preferred not to be recorded owing to either personal choice or organization's protocol. In the case where no audiotape was used, the researcher manually took down responses during the interview. The critical aspect for data collection was to be able to gain access to the targeted population samples. Saunders et al. (2012) defines access as "[t]he process involved in gaining entry into an organization to undertake research". The first step towards gaining access was to understand the organization and the gatekeepers in the organization. For example, in the case of large industries and development finance institutes, the gatekeepers were the secretaries or personal assistance of managers or executive responsible for enterprise development. Understanding gatekeepers' views is critical for negotiating and maintaining access, and maintaining the integrity and credibility of the research (ADVICE, 2000). As data was gathered at the initial stages of the inductive data analysis commenced with cycling between emergent data, themes, concepts, and dimensions and the relevant literature to see whether the new concepts could be discovered (Gioia et al., 2013) that formed the basis for proposing the business model framework for the development process of the manufacturing entrepreneurs.

4.7 Data analysis and interpretation

The majority of the interviews conducted were recorded and handwritten with the exception of the few that were not recorded due to sensitivity or choice of participants. The texts were transcribed and an electronic tool ATLAS.ti was used analysed for data analysis. Ryan & Bernard (2003) suggested the following four tasks of analysing text:

- Discovering themes and subthemes,
- Winnowing themes to a manageable few (i.e., deciding which themes are important in any project),
- Building hierarchies of themes or code books, and
- Linking themes into theoretical models.

Figure 8: Modified data analysis and interpretation framework



Source: (Elo & Kyngäs, 2008).

The selection of unit of analysis was essential for a researcher as it determined the language the researcher must use to understand what needed to be coded in a transcript and how these coding could help into dividing up the texts into bounded segments (Edwards & Lampert, 2014).

The study followed an inductive approach thus data organizing phase commenced with open coding. Saunders et al. (2012) defined open coding as “the process of disaggregating data into units in grounded theory”. The data from the coding sheets were grouped under higher order headings in order to reduce the number of categories by collapsing those that were similar or dissimilar into broader higher order categories (Elo & Kyngäs, 2008). From the organizing phase the results were processed and analysed in order to propose a business model framework.

4.8 Research Limitations

4.8.1 Researcher Biases

The main question that Gioia et al. (2013) posed for the researchers who assume that they are knowledgeable was “How do we enact these assumptions in a way that enables us to be true to the informants’ experiences while also meeting a scientific criterion of presenting evidence systematically?”. While it is advantageous for the researcher conducting semi-structured interviews to be knowledgeable about the context of the organization or culture of the group within which research interviews will be conducted (Saunders et al., 2012), a certain level of ignorance is necessary since knowledge of the subject or participant in the study may lead to biases as a result of any preconceived notion about the evidence they are likely to

find in their investigation. These biases were mitigated when the data were recorded to ensure accuracy and thoroughness.

4.8.2 Validity and Reliability

The interview questions were open ended to allow for scope to clarify, to probe meanings and explore responses (Saunders et al., 2012). This again was done in an effort to ensure validity of the study. The utilisation of audio recording was intended to ensure correctness and precision of a research reading (Ritchie et al., 2013) which in turn contributed to validity. The decision was also made that all research records would be kept (hard copy, soft copies and audio) this would ensure reliability of the study.

4.9 Conclusion

This chapter identified the research methodology used in this study as qualitative in its approach. The nature of the methodology used in the study took the form of semi-structured interviews. The participants who formed the population of the study were three stakeholders involved in the SME industry, particularly in the manufacturing sector.

In collecting data from the identified participants, the study was divided into two dimensions. The first dimension focussed on the manufacturing entrepreneurs. The second dimension consisted of two categories in the form of development finance institutions (DFIs) and large corporations that are involved on the development process of manufacturing entrepreneurs.

The form of data analysis and interpretation to be used was explored at length. Lastly, the limitations of the study were pointed out.

CHAPTER 5

DOCUMENTATION OF RESULTS

5.1 Introduction

The previous chapter explained the methodology used to test the research questions highlighted in chapter three. This chapter was developed for the purpose of presenting the findings from both dimension one which explored the requirements for the development process of manufacturing entrepreneurs and dimension two which explored the role of selected stakeholders on the development process of the manufacturing process. Dimension two consisted of category A, which explored the role of development finance institutions. On the other hand, category B explored the role of large corporations on the development process of manufacturing entrepreneurs.

The purpose of dimension one was to conduct the needs analysis for the manufacturing entrepreneurs to start-up, sustain and grow. The main objective of this was to explore those necessary conditions as perceived by entrepreneurs themselves and use those as the foundation to propose the business model framework. The aim of dimension two was to explore the service offering by selected stakeholders to manufacturing entrepreneurs. This offering was used as the building blocks to complete the business model framework for the development process of the manufacturing entrepreneurs.

5.2 Results of Dimension One

5.2.1 Introduction

The aim of dimension one was to better understand the requirements for the development process of the manufacturing entrepreneurs. The development process of the entrepreneurs consisted of the start-up, the sustainability and growth processes of the entrepreneurial business. The information gathered from this dimension was used as an input into the proposed business model framework.

5.2.2 Sample Description

The participants for the data collection in the first dimension were the entrepreneurs that were in the manufacturing and engineering sector. These entrepreneurs were mainly those that belonged to previously disadvantaged groups (PDIs) in South Africa (BIP, 2015; Chetty, 2014). Most of these entrepreneurs had no previous business start-up history and none came from entrepreneurial families. The selection of the participants in this dimension was based on the challenges that most owners of SMEs, particularly from PDI group, in South Africa face. All of the selected entrepreneurs from PDIs group belonged to the black African population of South Africa. Out of eight participants, three were black females. Although all entrepreneurs selected for data collection in this study were based in Gauteng province of South Africa, the study looked at the general view that all entrepreneurs are facing in the whole of South Africa. Some of the entrepreneurs chosen for the study already had some form of businesses that were operational outside Gauteng province.

The sample selected for this first dimension comprised of entrepreneurs that had in some form or the other engaged with development finance and/or large corporations for assistance with their development process. Some of these participants had started their businesses in the past ten years of the reported study and had gone through the recession period of 2008.

5.2.3 Coding of participants

Eight entrepreneurs participated in the semi-structured interviews. The participants were coded as shown in Table 5 below:

Table 5 Coding of participants - Entrepreneurs

| Participant | Job Title | Status | Code |
|-------------|-------------------------|------------|-------|
| 1 | Director | Co-owner | EntP1 |
| 2 | Chief Operating Officer | Co-owner | EntP2 |
| 3 | General Manager | Co-owner | EntP3 |
| 4 | Chief Operating Officer | Co-owner | EntP4 |
| 5 | Managing Director | 100% Owner | EntP5 |
| 6 | Chief Operating Officer | 100% Owner | EntP6 |
| 7 | Managing Director | 100% Owner | EntP7 |
| 8 | Chief Operating Officer | 100% Owner | EntP8 |

5.2.4 Identification of themes

As explained in Chapter 4, this research followed a qualitative study and data was collected using semi-structured interviews to answer the research question mentioned in chapter 3 above. The transcripts for each interview participants were summarized separately and key points made by these participants in response to questions asked were outlined. During this process of summarizing data gathered constructs associated with themes were identified. These themes were used as codes to aid the data analysis. The following five themes emerged for the requirements by the manufacturing entrepreneur to start, sustain and grow.

Table 6: Table showing themes and constructs

| Emergед Theme | Construct under the theme | No. participants out of 8 | Ranking |
|---------------|----------------------------|---------------------------|---------|
| Support | • Enterprise Development | • 6 | 2 |
| | • Strategic Partnership | • 4 | 3 |
| Skills | • Skills Development | • 6 | 2 |
| Markets | • Access to markets | • 8 | 1 |
| | • Localization | • 2 | 4 |
| Funding | • Access to funding | • 6 | 2 |
| | • Collateral | • 3 | 3 |
| Awareness | • Knowledge of Initiatives | • 3 | 3 |

The majority of participants mentioned all the above listed themes, except for the ‘awareness’ theme that was only mentioned by three participants (EntP3, EntP6, and EntP7). These themes were coded on Atlas.ti and their constructs ranked according to a number of participants that mentioned that particular construct. The higher the number of ranking, the more important it appeared to be that theme and construct. The ranking ranged from 1 to 4, with 1 being the most mentioned construct.

5.2.5 Summary of Results - Entrepreneurs

The aim of dimension one was to better understand the requirements for the development process of manufacturing entrepreneurs in South Africa. The interviewees were entrepreneurs in the manufacturing sector. They were either sole owners or in partnerships. The selected entities were those with majority shareholders being black in line with the government's drive to promote black industrialists and encourage financial inclusion of the previously disadvantaged people (BIP, 2015). With the information gathered from dimension one interviews a business model framework was proposed. Using the thematic analysis approach, data was coded on ATLAS.ti and can be summarised below.

5.2.6 Discussion of themes

i) Theme 1 – Support

The theme 'support' consisted of two constructs, namely enterprise development and strategic partnership. Enterprise development was mentioned in 6 out of 8 interviews receiving the second highest ranking in the order of importance of thematic constructs. Strategic partnership was mentioned in 4 out of 8 interviews receiving the third ranking in the order of importance of thematic constructs. Enterprise development and strategic partnerships were perceived as the important support structures that OEMs and DFIs can offer SMEs in the development process of entrepreneurs. It was also noted that all participants mentioned the need for support structure in the development process of the entrepreneurs making this theme an important element of the business model framework that was proposed. This statement confirmed that support structures are needed for development process of the entrepreneur as most of these entrepreneurs have no proper networks in which they can solicit some help (BIP, 2015). The different stakeholders then need to provide a platform or an environment for such entrepreneurship to thrive.

Participants agreed to the need of the support structure during business start-up as mentioned by participant 6:

“Entrepreneurs in the manufacturing sector require skills and also support structures as it is a difficult process to start up.” EntP6

EntP7 agreed with EntP6 and stated that:

“Over and above the skill, there needs to be a credible support structure by the government if this drive for promotion of black industrialist is to be achieved.” EntP7

EntP7 further explained that:

“Large businesses have a good support structure through their enterprise development and this can be very helpful to SME.” EntP7

The required support structure from all stakeholders related to such initiatives as enterprise development that large corporations put in place to support the development of small businesses and participant 6 confessed as follows:

“Well I went through the enterprise development programme.” EntP6.

Enterprise development is an initiative that large companies put in place in order to assist entrepreneurs to develop their business through various systems they put in place. As participant 6 explained:

“In terms of large corporates I think they can offer preferential procurement in a form of having close tenders as part of their enterprise development.” EntP6

Support was also viewed as a broad initiative that includes having small businesses partnering up with large ones to gain experience and leverage business support. Participant 6 clearly put the importance of partnership when he said:

“I think to assist SME’s by partnering them with strategic partners like companies that are well established so that they can give us the skills, and do skills transfer, mentor us and assist us in a process of developing our businesses from small enterprises to medium enterprises.” EntP6

Participant 2 concurred that strategic partnering is a form of business support that small businesses needed for their development process:

“They (DFI’s) can also assist with business support, and sometimes refers you to technical partners and stuff like that so there is a lot of business support that can come within the DFI’s.” EntP2

The support system provided by OEMs as a stakeholder in the development process of SMEs was the requirement that most entrepreneurs expressed during the interviews. This support in the form of enterprise development involved the willingness from the OEMs to have a paradigm shift in terms of developing new suppliers and include them in their value chain, as explained by one of the participants:

“They (OEMs) must also show willingness to change and support SMME’s through enterprise development by using them as suppliers instead of continuing using the same tried and tested companies as suppliers they have been working with for years.” EntP1

Participants also expressed that when OEMs enter SMEs into their supplier development it helps them to grow and develop as OEMs ensure that they develop their own suppliers in the value chain. It is for this reason that enterprise development has been seen as a good strategy for the development process of the entrepreneur that is beneficial for both SME and OEM. In this regard, one participant stated:

“Enterprise development policies and strategies are helpful for SMEs as this is one way that forces large companies to start doing something in terms of development process and they (OEMs) have found that it makes more sense to assist a company that is already in the value chain.” EntP2

Entrepreneurs in the manufacturing sector acknowledged that they are in the challenging industry and as part of development strategic partnership, particularly with an entity that is in the same field was an important aspect of their development process. Evidence to this effect emerged from one participant who indicated that:

“You also need to partner up with someone who is already in that space of manufacturing so that you are able to gain skills from someone who is already in the space.” EntP4

ii) Theme 2 – Skills

The theme ‘skills’ consisted of one construct, namely skills development. Skills development was mentioned in 6 out of 8 interviews receiving the second highest ranking in the order of importance of thematic constructs. The participants emphasized the importance of skills in the development process of manufacturing entrepreneurs and also highlighted the lack thereof as one of the major hindrance in the development process. The participants broadly covered the set of skills mentioned below as requirements for the development process of the manufacturing entrepreneurs in South Africa:

- Technical skills;
- Business acumen skills;
- Financial skills; and
- Simple business management skills.

These sets of skills formed part of the final recommendations in the proposed business model framework of the development process of the manufacturing entrepreneurs. As one participant succinctly put it:

“Entrepreneurs in the manufacturing sector require skills to start-up, sustain and grow.” EntP6

The interviewee continued to indicate that:

“I believe the key requirements for the development are mentorship and skills development.” EntP6

Similarly, EntP7 agreed to this statement by saying:

“For me I believe the skills are the basic requirement for any entrepreneur particularly in technical field like manufacturing” EntP7

Entrepreneurs in the field of manufacturing acknowledged that this sector of industry is technical in nature and skills form a basic requirement for any form of success in this field. The entrepreneurs acknowledged that the challenges that most entrepreneurs were facing in South Africa were that of lack of technical skills and skills in general:

“Most of these entrepreneurs are not technical at all.” EntP7

This concern has resulted in a difficulty in terms of sustaining and growing the small businesses in the manufacturing sector.

The observation during interviews was also that the lack of skills has negative effect on the development process of the manufacturing entrepreneurs. This is particularly true during start-up stage where a lot of business management skills are needed to put together crucial documents. The documents would include business plans for funding, application forms and any general documentation that are required to ensure access to funding for start-up. As EntP6 put it:

“There is also a lack of skills on filling in the necessary documents.” EntP6

EntP7 appeared to be in agreement when indicating that:

“Entrepreneurs lack the skill and experience to put together such requirements.” EntP7

EntP8 further emphasized the need to acquire these skills by stating how other stakeholders in the development process of the entrepreneur can play a role:

“They (other stakeholders) can assist by providing training to upskill entrepreneurs who wishes to start-up on how to ensure they comply with all funding requirement, example how to complete business plan, etc.” EntP8

The statement on the need for other stakeholders to provide training was motivated by the fact that most of the target entrepreneurs for this study did not have a history of having their own businesses. They were all starting up from the bottom learning each step as they went about the process, and one participant stated that:

“When you’re starting out you still learning the ropes so you don’t necessarily have the working skills.” EntP6

The other interviewee further emphasized the role of enterprise development by various stakeholders including large companies:

“By engaging entrepreneurs in their supplier chain, large companies can provide skills on how to conduct their business and remain competitive.” EntP7

The interviewee further stated that:

“So, the transfer of skills during enterprise development is critical.” EntP7

The importance of skill was further discussed by EntP7 on the challenges facing the entrepreneurs in pursuit of the development process:

“Besides the problem with collateral which they do not have, there is a skills issue. The skills necessary to come up with bankable business case for funders to buy into is an issue.” EntP7

To mitigate the skill shortage issue, EntP4 proposed that:

“You (entrepreneurs) also need to partner up with someone who is already in the space of manufacturing so that you are able to gain skills from someone who is already in the space.” EntP4

Hence, EntP8 proposed that:

“Large businesses can use their enterprise development to help entrepreneurs.” EntP8

The reason for this proposal came from EntP7:

“Enterprise development provides skills.” EntP7

In addition, the interviewee stated that:

“They (large companies) can use enterprise development to impart much needed skills to entrepreneurs.” EntP7

It is therefore clear that skills development was viewed as the important ingredient in the business model framework for the development process of manufacturing entrepreneurs. This can be attributed to the fact that skills development ensures that the entrepreneurs possess the correct capability to grow the business. As EntP4 stated:

“Perhaps if certain courses can be given to these entities (manufacturing entrepreneurs) to uplift the business skills so that they can understand and have a better understanding of what it means to grow a company.” EntP4.

iii) Theme 3 – Access to markets

The theme ‘access to markets’ consisted of two constructs, namely exposure to markets and localisation. Exposure to markets was mentioned in 8 out of 8 interviews. It received the highest ranking in the order of importance of thematic constructs. In contrast, localisation was mentioned in 2 out of 8 interviews. As a result, localisation received the least order of importance in the thematic constructs. Access to markets was defined as the ability of an entrepreneur to secure markets either through sheer demand of product manufactured or through assistance by either large companies, government institutions or both to secure markets to ensure continues revenue of the business. Ring fencing of orders for small business by large businesses as part of enterprise development was regarded as a form of access to markets. Localisation was defined as the promotion of local SMEs by ensuring that large OEMS procure their goods and services locally. This was understood to be an initiative that could be done through government intervention that could be effected through policy changes. The main point that entrepreneurs raised during interviews was that without access to markets the success of the business start was slim. Access to markets was a theme that was central to other themes and formed an important part of all development process steps.

This importance of access to markets was supported by all entrepreneurs. For instance, one participant pointed out that:

“The first thing on development process is access to markets, because there is no point trying to be a manufacturer if your markets do not appreciate your products or you don’t have markets to sell your products.” EntP2

EntP7 collaborated the above view when stating that:

“Access to markets is also crucial. No point to have all production without you having to sell it. It is like having cash tied up in stock.” Entp7

This served to confirm that access to markets is in the ‘heart beat ‘of the development process of the manufacturing entrepreneurs. One participant elaborated as follows:

“I think the most important thing when you are getting into the manufacturing space is for you to understand the market.” EntP4

EntP1 concurred when demanding that:

“We must also have the markets to manufacture those products so that’s very critical.” EntP1

This further confirms that access to markets is a critical success factor for the development process of the manufacturing entrepreneur. The access to markets is believed to be critical in that if the entrepreneur has access to markets it becomes easy to source crucial resources that are needed for the development process of the enterprise. Among the many crucial resources, funding is the critical one that provides access to markets. EntP2 speculated that:

“So the manufacturing entity might find it easy to access funds as long as they can prove the market demand.” EntP2

The other resource made possible by access to markets is continuous generation of revenue which ensures that the company is sustainable and possibly grows. EntP7 hinted on this speculation:

“When you have access to market and there is demand, even if the economic downturn comes you only suffer on the margins but you still you are able to cover your variable costs.” EntP7

The entrepreneurs raised concerns and observations about other stakeholders that play a role in the development process. These included government institutions and large companies who can assist in ensuring that entrepreneurs succeed. EntP2 made an appeal to the effect that:

“So the government can play vital role in ensuring access to markets through legislating and imposing imports tariffs to discourage large companies from sourcing out of the country in that way it sort of boosts the local manufacturing entities and makes it appetising for manufacturing entrepreneurs locally.” EntP2

The above appeal received favour from EntP4s recommendation that:

“We need to ring fence the market for our local suppliers.” EntP4

EntP5 expressed the view that:

“The markets are not easily opening up, the expectations are just too much for a start-up entrepreneur from the big companies.” EntP5

Thus, large companies can play a role in opening up markets to small start-up companies. As stated by EntP1:

“Large corporates can assist by granting access to markets by removing barrier to entry which is currently very high.” EntP1

iv) Theme 4 – Access to funding

The theme ‘access to funding’ consisted of two constructs, namely difficulty in accessing funding and collateral. Difficulty in accessing funding was mentioned in 6 out of 8 interviews. This shows the issue of funds accessibility received the second highest ranking in the order of importance of thematic constructs. On the other hand, collateral was mentioned in 3 out of 8 interviews which made it the fourth highest ranking in the order of important in the thematic constructs.

Funding was understood as all financial needs of the small business that can be viewed in all three stages of development process. These financial needs were categorized as start-up capital for those entrepreneurs that were starting up, working capital for those that needed to sustain their businesses and financial injection for those that needed capital to fund growth aspirations. Collateral was understood to be some form of asset that an entrepreneur offers a lender to secure funding. The funding theme linked very well with other themes indicating the correlation in between themes. With financial support being the critical aspect of the development process, a correlation model that shows the connectivity between funding theme and other four themes identified (awareness, support, access to market and skills) was developed and shown in model framework depicted in figure 14 below.

The challenge raised by interviewees was the difficulty in raising funding by the entrepreneurs in the manufacturing industry during start-up. For instance, EntP1 indicated that:

“It is not easy to gain access to funding when u start-up.” EntP1

EntP3 concurred when noting that:

“It is difficult for start-ups to access funding, although money is available.” EntP3

This difficulty is attributed to a number of factors, such as the lack of surety or collateral by the entrepreneurs. In this respect, EntP8 pointed out that:

“Most entrepreneurs do not have a healthy balance sheet making it difficult to access funding.” EntP8

This concern led to entrepreneurs raising the need for government backed finance institutions that would provide funding under relaxed criteria. As mentioned by one of the participants:

“Finance institutes like IDC need to make funds available.” EntP7

In the same breath, EntP2 pointed out that:

“There are government programmes that offer guarantees or credit guarantee facility, which is in a way a form of collateral on behalf of entrepreneurs.” EntP2

The correlation between the access to funding and access to markets strongly manifested itself during the interviews. The majority of participants were in agreement on the importance of ensuring access to markets as a means of accessing funding for the development process of the manufacturing entrepreneurs. EntP2 articulated this fact as follows:

“Once entrepreneurs can prove that there is market demand, it becomes much easier to access funds.” EntP2

As mentioned earlier in this report, access to markets also meant confirmed orders or contracts by the large companies to small businesses. EntP1 reiterated this view as follows:

“If we hit some big contract that requires expansion yes we will go and look for funding.” EntP1

EntP1 further mentioned that:

“Once we have confirmed sales we will go and look for funding for growth.” EntP1

The support and the skills were also mentioned as key requirements to accessing funding for the development process. As indicated by EntP1:

“I think it’s more or less the support structure for people to put the right business plans and everything in order to get that funding.” EntP1

EntP8 emphasised the important support that development finance institutes can provide in facilitating access to finance for sustainable and growth stage:

“The finance institutions have a job of ensuring that small companies grow by funding growth plans either through capital investment needed, research and development or pumping working capital.” EntP8

The above emphasis was supported by EntP2:

“DFI’s can assist by providing funding for research and development and working capital.” EntP2

EntP7 further illustrated the importance of development finance institutes in the growth stage of the development process when stating that:

“Finance institutions can assist with providing growth and working capital.” EntP7

EntP8 mentioned the need for skills in accessing funding when appealing that:

“They (other stakeholders) can assist by providing training to upskill entrepreneurs who wish to start-up on how to ensure they comply with all funding requirements, for example, on how to complete a business plan.” EntP8

v) Theme 5 – Awareness

The theme ‘awareness’ consisted of one construct which was knowledge of initiatives. Knowledge of initiatives was mentioned in 3 out of 8 interviews. In this manner, it received the fourth highest ranking in the order of importance of thematic constructs. Awareness refers to the perceived knowledge and understanding of various initiatives that the government of South Africa has put in place for the development of entrepreneurship in the post-Apartheid era. Awareness indicated how well entrepreneurs are either kept abreast or keep themselves abreast of the policies and structures that the government has introduced. The participants primarily indicated their serious lack of awareness of government policies in place on how to access programmes that have been put in place since the dawn of democracy in South Africa. As EntP6 put it:

“There is a lack of knowledge on how to access available funding. People are not aware of services available at these institutions (DFIs), there is also a lack of skills on filling in the necessary documents.” EntP6

EntP7 agreed:

“Not all entrepreneurs understand or are aware of services provided by institutions like Sefa that provide funding to cover the working capital.” EntP7

EntP7 continued to state:

“This is coupled with the lack of knowledge or awareness of what is out there in terms of funding. Entrepreneurs do not have information available to them on what is available.” EntP7

EntP3 equally expressed the view that:

“I don’t think enough has been made in terms of making knowledge available for most of these start-ups” EntP3

In the same vein, EntP2 pointed out that:

“The challenge is that people are not aware of the various services available. The programmes that are available are not well marketed. Very few people know about these programmes, hence, you find some people benefiting from these services.” EntP2

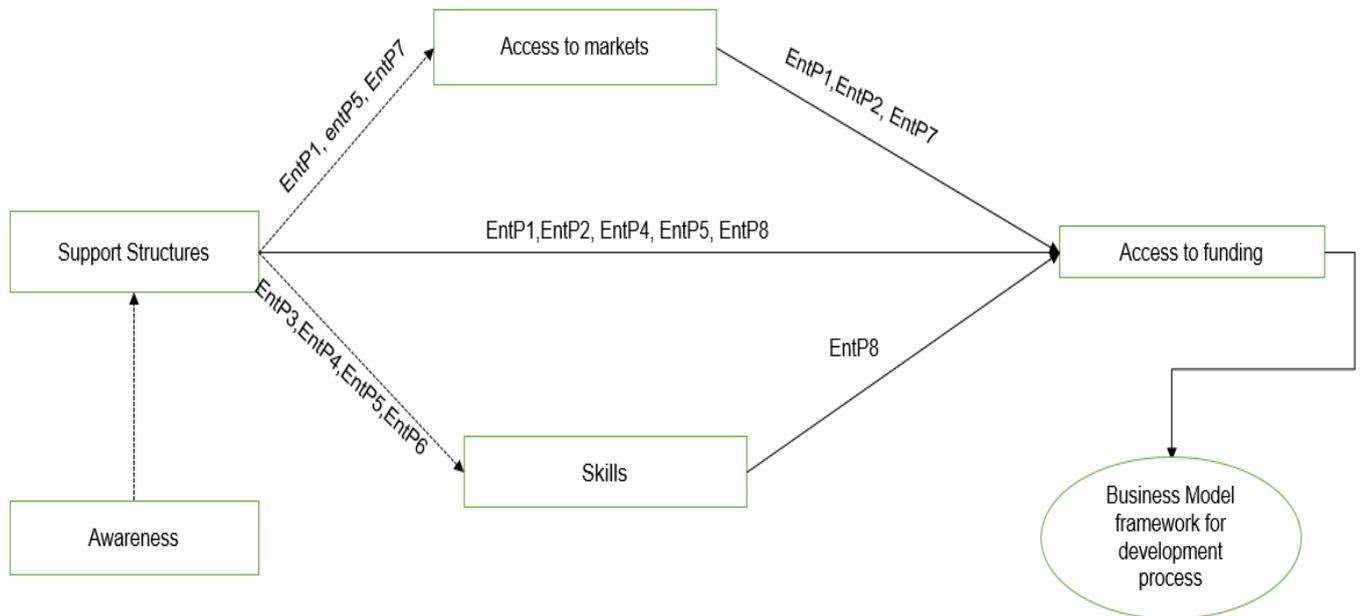
Thus participants suggested that authorities need to run awareness campaigns to make those aspiring entrepreneurs aware of the service offering by the government institutions. The purpose of such initiatives would be to make the process of start-up, sustainability and growth much easier. The recommendation emerged from EntP6 who indicated that:

“The problem is awareness. I think what they need to do is to run roadshows, you know. Inform people of different products that they have, because a lot of people don’t even know that opportunities exist. Basically they act on lack of knowledge. So they need to make the knowledge available, be it in terms of print media and in terms of roadshows whereby they go out and advise SMEs.” EntP6

5.2.7 The correlation model between themes

The model in figure 9 shows the correlation model between themes. This model was formed from the information gathered from the participants from dimension one of the study. The model illustrates the correlation between all themes identified in phase one. The correlation between all themes was represented by arrows. These arrows were labelled from EntP1 to EntP8 (participant 1 to participant 8) depending on the respondent’s view on the interaction of themes. The overall results revealed that for entrepreneurial development process to succeed, funding was seen by participants as the fundamental resource. However, the model indicates that access to funding is triggered by other critical themes that were identified during interviews. Hence, the model was used as a feed to the final proposed business model framework for the start-up, sustainability and growth of the manufacturing entrepreneurs in South Africa.

Figure 9: Correlation model between themes – Needs Analysis



5.2.8 Conclusion

Dimension one formulated the Correlation Model between themes, as shown in figure 9 above. This model was used as the primary feed to the business model framework for the development process of the manufacturing entrepreneurs and as a measure of the service offering by the selected stakeholders. The selected stakeholders were development finance institutions and large corporations, as discussed in phase two as category A and category B.

5.3 Results of Dimension two – Category A

5.3.1 Introduction

The aim of dimension two category A was to better understand the role played by development finance as a stakeholder in the development process of the manufacturing entrepreneurs. The development process of the entrepreneurs consisted of the start-up, the sustainability and growth processes of the entrepreneurial business. The information gathered from this category was used as an input into the proposed business model framework.

5.3.2 Sample Description

The sample included three senior managers from three major development finance institutions in South Africa. The sample was chosen to target the policies and procedures of those development finance institutions towards development of entrepreneurship in South Africa. All the three interviewees were head of departments with a role of promoting entrepreneurship through the Broad Based Black Economic Empowerment (BBBEE). The development finance institutions chosen had a mandate of promoting job creation and economic growth through entrepreneurship. All senior managers from the development finance institutions were people with in-depth knowledge of the requirements for the development process of an entrepreneur and had an authority to speak from their departments' and to some extent from their respective institutions point of view in general. The senior managers had more than 5 years working experience in finance institutions and understood the service offerings by the development finance institutions.

5.3.3 Coding of participants

Three managers from development finance institutions participated in the semi-structured interviews. The participant were coded as shown in Table 7 below:

Table 7 Coding of participants – Development finance institutes (DFIs)

| Participant | Title | Code |
|-------------|---------------------------------|------|
| 1 | Strategic Business Unit Manager | DFP1 |
| 2 | Programme Manager | DFP2 |
| 3 | Senior Manager | DFP3 |

5.3.4 Identification of themes

As explained in Chapter 4, this research followed a qualitative study and data was collected using semi-structured interviews to answer the research questions mentioned in chapter 3 above. The transcripts for each interview participants were summarized separately and key points made by these participants in response to questions asked were outlined. During this process of summarizing gathered data, constructs associated with themes were identified. These themes were used as codes to aid the data analysis process. Three themes emerged on the role played by development finance institutions in development process of the manufacturing entrepreneur. Each theme generated constructs as shown in the table 8 below:

Table 8: Table showing themes and constructs

| Emergед Theme | Construct under the theme | No. participants out of 8 |
|---------------|---|--|
| Skills | <ul style="list-style-type: none"> • Capability • Experience | <ul style="list-style-type: none"> • 3 • 1 |
| Support | <ul style="list-style-type: none"> • Access to markets • Management • Monitoring • Capacity | <ul style="list-style-type: none"> • 2 • 3 • 3 • 1 |
| Funding | <ul style="list-style-type: none"> • Collateral • Contribution • Surety • Access to capital | <ul style="list-style-type: none"> • 1 • 1 • 1 • 2 |

5.3.5 Summary of results – Development Finance Institutes

The aim of dimension two – category A was to better understand the role played by development finance institutes (DFIs) in development process of manufacturing entrepreneurs in South Africa. The interviewees were senior managers and executives at the selected government DFIs. The selected entities were those with the mandate of promoting job creation, economic growth and financial inclusion in South Africa through the government led industrial policy. With the information gathered from category A of dimension two interviews a business model framework was proposed. Using the thematic analysis approach, data was coded on ATLAS.ti and can be summarised below.

5.3.6 Discussion of themes

i) Theme 1 – Skills

The theme ‘skills’ consisted of two constructs, namely capability and experience. Capability was mentioned in 3 out of 3 interviews receiving the highest ranking in the order of importance of thematic constructs. Experience was mentioned in 1 out of 3 interviews receiving the least ranking in the order of importance of thematic constructs. The ‘skills’ theme referred to the capabilities and experience that development finance institutions (DFIs) look for in the entrepreneur in order to be able to access support through funding. Capability referred to set of business skills set (technical, financial, business acumen and business management) that the entrepreneurs possess that development finance institutions look for before offering to manufacturing entrepreneurs the support needed for the development process. And experience referred to the number of working years the entrepreneur and the team either in the manufacturing industry or in business in general.

The importance of having capabilities was emphasized by one of the participants:

“We find that although you may have or show us your letters of intent that the people will support your business model what counts more is how real or in demand your product is in the market, and what are your capabilities on manufacturing and actually selling the product.” DFP1

Furthermore, DFP1 elaborated as follows:

“So the quality of your idea and your ability to sell your idea to have a convincing business case is crucial.” DFP1

The challenge of skill has impacted on entrepreneurial ability to source funding from development finance. This view was expressed as follows:

“The other challenge of course is the skills of ensuring that all requirements are fulfilled, this includes credible business plans showing forecast and the right due diligence exercise.” DFP2

This statement confirmed the fact that entrepreneurs generally do not have the capability of writing convincing business plans; hence, they tend to struggle in their quest for accessing funding which is critical for the development process. This incapability to understand and fill in the necessary paperwork results in most entrepreneurs losing out on available grants that the government agencies have put in place. The majority of participants shared these concerns as follows:

“It is either they (entrepreneurs) are not aware of their (grants) existence or there is a shortage of skill or capability to fulfil the requirements for qualifying for these grants.”

DFP1

The capability of the entrepreneur to possess technical and financial skills was also observed to be a criterion that the development finance institutions use for financing of entrepreneurs:

“Technical skills are important in that the entrepreneur can show that he/she can to cope with manufacturing environment.” DFP1

Other participants concurred with this statement:

“The technical skills are crucial.” DFP2

Financial skills were identified as critical for the development process of the entrepreneur, as pointed out during interviews:

“Financial skills ensure that the business is run as a going concern and there are enough resources to run the business.” DFP1

“If they (entrepreneurs) do not have the necessary business skills that include how to manage finances, marketing and business developing skills the survival of the business is slim.” DFP2

It was further established that the survival of entrepreneurs largely depended on their skills capability and the business acumen that they have, especially, in the current economic conditions in order to survive:

“Entrepreneurs must possess the business acumen skill” DFP2

“The economic conditions are tougher now in South Africa, so entrepreneurs that do

not have adequate business skills to adapt in this challenging environment will find it tough to survive.” DFP3

The experience that an entrepreneur had in managing a business was noted as crucial for development finance institutions to be able to have confidence that the entrepreneur will ensure that the business is a success:

“The other criteria that DFIs look for before funding the entrepreneur is to verify if the entrepreneur has enough experience or qualified team to be able to support the business in terms of management and control.” DFP1

The lack of experience can have dire consequences especially in the manufacturing sector since the success of any company in this field depends on the ability to do sales. Related to sales was the importance of understanding the market conditions. As noted:

“The other factor relates to insufficient marketing and selling skills and insufficient understanding of that opportunity that was there.” DFP1

ii) Theme 2 – Support

The theme ‘support’ consisted of four constructs, namely access to markets, management, monitoring, and capacity. Access to markets was mentioned in 2 out of 3 interviews and thus received the second highest ranking in the order of importance of thematic constructs. Management was mentioned in 3 out of 3 interviews. This response awarded management the highest ranking in the order of importance in thematic constructs. Monitoring was equally mentioned in 3 out of 3 interviews which also provided it with the highest ranking in the order of importance of thematic constructs. In contrast, capacity was mentioned in 1 out of 3 interviews to provide it with the least ranking in the order of importance of thematic constructs.

The ‘support’ theme referred to the kind of support structures the development finance institutions (DFIs) provide to the development process of manufacturing entrepreneurs as part of their service offerings. Access to markets referred to one of the criteria used by development finance institutions to verify if they can offer funding to the manufacturing entrepreneurs. The term Access to markets was in this study used interchangeably to mean the market demand and the offtake agreements in the form of orders or signed agreements. Management referred

to the business support that development finance institutions offer to the manufacturing entrepreneurs during the development process to support their management. Monitoring referred to the business support that development finance institutions offer to the manufacturing entrepreneurs post investment stage. Capacity referred to the kind of support that development finance institutions offer to manufacturing entrepreneurs to capacitate them during their sustainability and growth stage.

The importance of ensuring that manufacturing entrepreneurs understand the markets and are aware of the demand in that market was emphasised during the interviews:

“We find that although you may have or show us your letters of intent that the people will support your business model, what counts more is how real the demand of your product is in the market.” DFP1

However, it emerged that in most cases entrepreneurs do not have a clue about the real market demand:

“The other factor relates to insufficient marketing and selling skills and insufficient understanding of the demand that is out in the market.” DFP1

For survival, participants mentioned that:

“Entrepreneurs must have the ability to scout the markets and find business.” DFP3

This ability could be useful to ensure access to funding as either capital or working capital. As pointed out below:

“For the working capital purposes there must be an offtake contract or purchase order.” DFP3

It was indicated that the inability to ensure confirmed orders in the market had a direct impact in the inability of the business to develop:

“You find that they (entrepreneurs) do not have confirmed orders yet on order to run their businesses they need working capital.” DFP3

Management appeared as one of the most favoured construct under this theme. This construct suggested that for DFI's the management support structure was viewed as the most important

service offering in the development process of the manufacturing entrepreneurs. Different interviewees supported this idea as follows:

“I think that’s one thing that’s the Development Finance Institutes offer and here specifically what we do is we have a business support facilities.” DFP1

“Our offering includes the management support as well” DFP2

It emerged that although the primary reason for the existence of the DFI’s is to provide funding, management support was viewed as a critical offering for the development process of the entrepreneur. An interviewee dwelled on this point as follows:

“We offer both financial and non-financial support. The latter is key because for an entrepreneur to sustain other support must be in place.” DFP2

“The other issue is the kind of support the entrepreneur receive. It is important that we as government institution provide the kind of support necessary for growth and success of the entrepreneur.” DFP2

“The South African government has set a regulatory environment in which DFI’s like us need to adhere to as part of the development plan of black industrialists. This is very much welcomed because it enables us to contribute positively to the growth of the entrepreneurs in this country.” DFP2

The regulatory environment was emphasised as crucial in the promotion of entrepreneurship:

“We therefore now have stringent procedures to ensure that the funded entrepreneur fits the requirement as per regulation and that we have appropriate support structures for these businesses to scale up and grow.” DFP2.

Monitoring ensures that the entrepreneurs are able to measure their performance according to the set objectives in the business plan. This in turn ensures a return on investment by both the manufacturing entrepreneurs and DFI that have provided funding and management support. Thus, the DFIs have a more valuable role than just offering funding:

“The other leg that we (DFIs) specifically offer is post investment evaluation.” DFP1

“We ensure that we receive the bi-weekly or bi-monthly or quarterly or semi -annual

management accounts depending on the complexity of the business and the post-investments department will then review those accounts reports and see how does it looks against our initial budgets prepared by our due diligent team and if they are any difference then we sit around the table speak to the client to try and pick any problems that are developing in the business, try and pick it up a bit earlier.” DFP1

“The question to answer is was the funding applied for used according to the original business plan, and, are the management accounts in order?” DFP1

For DFIs to offer support for development process of manufacturing entrepreneur, their monitoring goes beyond their internal offerings. DFIs take interest at the level of commitment and seriousness by the entrepreneur to ensure that the performance of the business is acceptable. This essential aspect was articulated as follows:

“We therefore require that before funding the entrepreneur, we see that there is a level of commitment by the entrepreneur in terms of day to day engagement in the business.” DFP2

“We (DFIs) also need to ensure that the applicant is the owner who manages the business.” DFP3

Over and above this commitment, entrepreneurs must have the ability to provide day-to-day monitoring of the performance:

“Entrepreneurs must have the ability to scout the markets and find business, at the same time have proper internal controls to ensure that the business remains liquid by cutting down on cost of doing business.” DFP3

Capacity involves the internal support structure that DFIs have that only focus on providing entrepreneurs with any form of capacity they require. This includes internal skills, grants and any consulting services that entrepreneurs may require. The point was emphasised as follows by DFP1:

“We as DFI can assist entrepreneurs with these skills as we have our own Support departments that look at capacitating entrepreneurs.”

“So what we would do is if we see that there is a gap maybe in the financial experience we will offer, as an example, a R50 000 grant for financial support plus we give an additional loan of R50 000.” DFP1

The participant further mentioned the need for capacity building for entrepreneurs and acknowledged that currently the kind of capacity building support that DFIs have is not enough to address various challenges faced by entrepreneurs:

“I think that is the gap in the market in my opinion. The support we provide entrepreneurs is not enough. Entrepreneurs try to grow, and there are few guys that we know of in the industry that are sitting there and just can’t double up or anything, they want to double capacity but do not have necessary support.” DFP1

“One has to always think about how we can capacitate entrepreneurs and try to add value to the whole recipe of development process and we need to streamline grants and supports that are available from the DFIs.” DFP1

iii) Theme 3 – Funding

The theme ‘funding’ consisted of four constructs, namely collateral, contribution, surety, and access to capital. All these constructs, except for access to capital, were mentioned in 1 out of 3 interviews and, as a result, received the least high ranking in the order of importance of thematic constructs. Access to capital was mentioned in 2 out of 3 interviews and, because of this, received the second highest ranking in the order of importance of thematic constructs. The funding theme referred to the ability of entrepreneurs to access start-up, sustainability and growth funding from the development finance institutions (DFIs). It looked at the qualifying criteria and the challenges faced by the entrepreneurs in accessing the required funding for their development process.

Access to capital referred to the funding provided by development finance institutes to manufacturing entrepreneurs for start-up, sustainability and growth stages. This funding included, capital expenditure and working capital that are necessary for the development

process of the entrepreneur. Participants confirmed the need for funding entrepreneurs as follows:

“We offer facilities for small businesses that either require working capital or long term loan for business acquisition.” DFP3

It was noted that during the start-up phase entrepreneurs have just an idea which does not immediately convert to an order or access to market as explained. It was during this period that:

“The business suffers cash-flow wise during start up.” DFP1

Thus if entrepreneurs have confirmed orders they approach development finance institutions for working capital. Access to market then becomes critical since in most cases for DFIs to grant working capital to entrepreneurs they need confirmed orders or contracts:

“For the working capital purposes there must be an offtake contract or purchase order.” DFP3

During data gathering, surety, collateral and contribution were mentioned as equally important. Surety referred to the ability by an entrepreneur to have a person or organization that would assume responsibility of paying debt in case the entrepreneur defaulted. Similarly, collateral referred to the ability by the entrepreneur to have any form of security that they can provide the lender to be able to secure the loan. For the entrepreneurs that were targeted for this study, who predominantly originated from the previously disadvantaged population group in South Africa, it was clear that most of these entrepreneurs struggled to have surety and collateral:

“We deal only with black entrepreneurs and the challenge is always that they don’t have collateral.” DFP2

“The entrepreneur must show the ability to repay the loan, so we have to go through credit checks and ensure that the applicant has a surety in place and the challenge is mostly surety. Most of these entrepreneurs do not have this in place.” DFP3

The other major requirement by the DFIs is the owner’s contribution before they can fund the idea or the business:

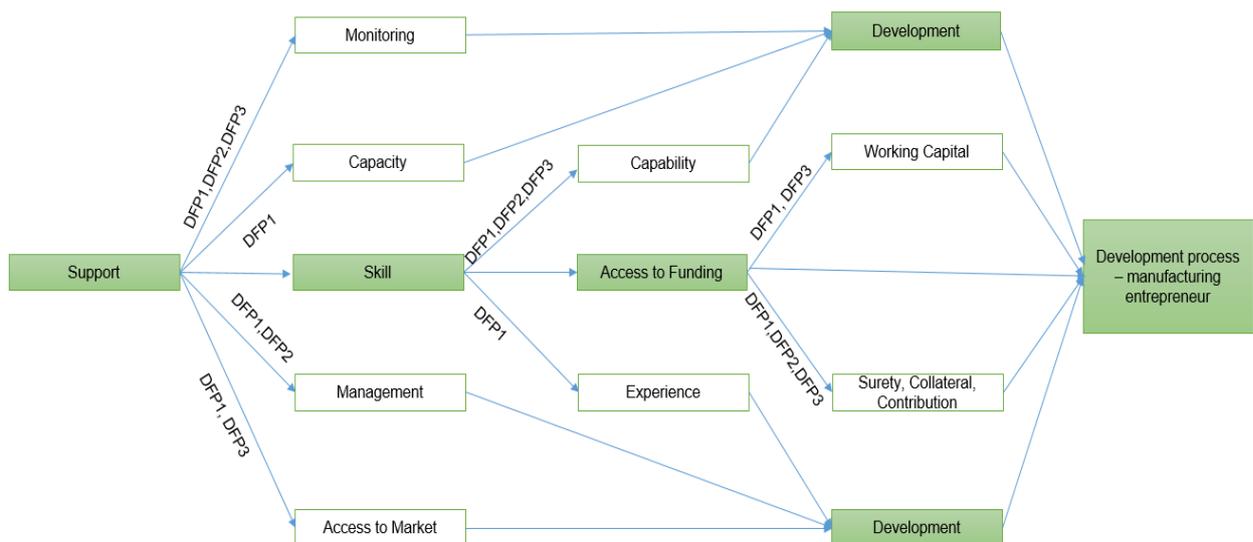
“The other major obstacle is the requirement for contribution from the shareholder, no funder is going to put in 100% of the money and that is in my mind one of the first barriers, even your grants you only get once you’re operational.” DFP1

Surety, collateral and contribution were together therefore identified as major obstacles to accessing funding by entrepreneurs.

5.3.7 The Correlation model between themes – DFI’s

The model in figure 10 below shows the correlation model between themes for the DFI’s. This model was formed from the information gathered from the participants from dimension two – category A. The model illustrates the correlation between all themes identified for this category. The correlation between all themes is represented by arrows. These arrows are labelled DFP1 to DFP3 (participant 1 to participant 3) depending on the respondent’s view on the interaction of themes. The constructs were used as an input to entrepreneurial development process. This model framework was used as a feed to the final proposed business model framework for the start-up, sustainability and growth of the manufacturing entrepreneurs in South Africa.

Figure 10: Correlation model between themes for DFI’s



5.3.8 Conclusion

Dimension two –Category A formulated the Correlation Model between themes as shown in figure 10 above. This model was used as the primary feed to the business model framework for the development process of the manufacturing entrepreneurs and as a measure of the service offering by the selected stakeholders which were development finance institutions and large corporations as discussed in phase two, category A and category B.

5.4 Results of Dimension two – Category B

5.4.1 Introduction

The aim of dimension two category B was to better understand the role played by large companies as stakeholders in the development process of the manufacturing entrepreneurs. The development process of the entrepreneurs consisted of the start-up, the sustainability and growth processes of the entrepreneurial business. The information gathered from this phase was used as an input into the proposed business model framework.

5.4.2 Sample Description

The participants for the data collection were the managers working for large companies who are referred to as Original Equipment Manufacturers (OEMs). These companies generally belong to tier 1 companies and they use small and medium enterprises as their suppliers. The chosen companies are generally in the manufacturing and engineering sector. The chosen managers used for data collection were responsible for supplier development in their organizations and had a clear understanding of the South African legal environment and compliance issues. A combination of private and state owned companies were chosen for data collection. Same questions were asked to participants.

5.4.3 Coding of participants

Four managers from large companies in South Africa participated in the semi-structured interviews. The participants were coded as shown in Table 12 below:

Table 9 Coding of participants – Large companies (OEMs)

| Participant | Title | Code |
|-------------|--------------------------------|-------|
| 1 | Chief Programme Manager | OEMP1 |
| 2 | Supplier Development Manager | OEMP2 |
| 3 | Enterprise Development Manager | OEMP3 |
| 4 | Operations Manager | OEMP4 |

5.4.4 Identification of Themes

Two themes emerged for the role played by large companies (OEMs) in development process of the manufacturing entrepreneur. Each theme generated constructs as shown in the Table 10 below:

Table 10: Table showing themes and constructs

| Emergед Theme | Construct under the theme | No. participants out of 4 |
|---------------|---|--|
| Skills | <ul style="list-style-type: none"> • Capability | <ul style="list-style-type: none"> • 4 |
| Support | <ul style="list-style-type: none"> • Access to market • Cash-flow • Preferential procurement • Enterprise development | <ul style="list-style-type: none"> • 3 • 3 • 3 • 3 |

5.4.5 Summary of results – Large companies (OEMs)

The aim of dimension two – category B was to better understand the role played by large companies (OEMs) in development process of manufacturing entrepreneurs in South Africa. The interviewees were senior managers and executives responsible for supplier development and enterprise development. The selected entities were a combination of state owned companies and private companies. With the information gathered from category B of dimension two interviews a business model framework was proposed. Using the thematic analysis approach, data was coded on ATLAS.ti and can be summarised below.

5.4.6 Discussion of themes

i) Theme 1 – Skills

The theme ‘skills’ consisted of one construct, namely capability. Capacity was mentioned 4 out of 4 times during interviews receiving the highest ranking in the order of importance of thematic constructs. The theme ‘skill’ referred to the skill set and capabilities that large companies (OEMs) either provide or look for during the development process of manufacturing entrepreneurs as part of their service offerings. Capability referred to the skills set that the entrepreneur has and that kind of skills set that large companies look for when engaging the entrepreneur as part of enterprise development.

Manufacturing is a technical field and participants for large companies acknowledged that to engage an entrepreneur in their supplier development programme the technical skills are required.

“As we are in a very specialized area, the required skills set is key as well.” OEMP1

“The entrepreneur must have a drive to succeed and must show business acumen over and above technical skills.” OEMP1

“The entrepreneur must then have proper systems in place already or ability to put these in place.” OEMP1

It was therefore not surprising when participants indicated certain criteria that are based on capabilities that large companies use to select small enterprises for their development programme.

“Basically what we have is a supplier assessment form. What we do is if we find a manufacturer we ask them what is their experience and capability.” OEMP2

Participants mentioned that:

“Some of the smaller companies do not have internal capacity to monitor performance and how well the company is doing. The lack of this skill is a challenge to most small businesses” OEMP1

Thus, large companies become critical in building internal capacity of small businesses. As was mentioned during interviews:

“For me the kind of assistance that we provide is partnering with the entrepreneurs. This ensures that we are able to build them up and provide mentoring to aspiring entrepreneurs.”OEMP1

“The other challenge with small companies is that they are a one man show and you find that one person is the General Manager, he’s an accountant of the company, he’s a QC he basically does everything and so the structure of the company from first go not right. So, small companies fail because of lack of capacity and structure.” OEMP2.

Participants mentioned how they aim to overcome this capacity and capability challenge of entrepreneurs and said:

“We do this by identifying and building the capacity of current and/or potential BEE suppliers to supply us with quality goods and services.” OEMP3.

It was therefore concluded that for large companies to offer enterprise development assistance to entrepreneurs skills are important:

“The skills set the entrepreneur has, the commitment they show and the correct structure they put in place are all critical if they need to survive.” OEMP3

“Some of these businesses are not well managed and that is where we actually come in as a company to help them to be able to manage their finances. We actually send them to courses to equip them with necessary skills, which we pay for.” OEMP4

ii) Theme 2 – Support

The theme ‘support’ consisted of four constructs, namely access to markets, cash-flow, preferential procurement, and enterprise development. All these constructs were mentioned 3 out of 4 interviews receiving the same order of importance of thematic constructs. The ‘support’ theme referred to the kind of support structures large companies (OEMs) provide to the development process of manufacturing entrepreneurs as part of their service offerings. Access to markets referred to the support that large companies or OEMs provide to small businesses in terms of ensuring that they have contracts or orders as a way of selling their product. In this way large companies become a market in which small businesses trade with.

Large companies or OEMs provide access to markets by ensuring that they buy their input material from local manufacturing suppliers as was voiced out during interviews:

“We therefore need to enforce localisation and most big SOC’s like Eskom, Transnet and other mining companies can take a lead on this.” OEMP2

“This is how we sort of open up markets for small businesses to ensure that they sustain.” OEMP4

It became clear during the interviews that large companies valued long term relationships with their suppliers:

“We also offer firm long term contracts for those companies that have synergy with our business.” OEMP3

“This means that if an enterprise is under our supplier development program and offers services that we require, we have an understanding that we can offer long term contract or off take agreements.” OEMP3

“At this stage we are actually looking at forming medium to long term relationships with all the enterprises that we get under our enterprise development. So what we do is, we offer a contract for instance of 2 years and then we actually also help an enterprise to grow.” OEMP4

Cash-flow referred to the support that large companies or OEMs provided to manufacturing

entrepreneurs in terms of ensuring that they have a positive working capital. The need for small businesses to have positive cash-flow was highlighted by all participants and the role played by large companies that are usually the source of cash for small businesses, on their survival or failure was emphasized:

“We as large companies also can contribute to the failure of small businesses by our inability to ensure early payments of invoices. As I mentioned most of the small businesses depend on cash available for them to be able to effectively run and survive.” OEMP3

It emerged during the interviews that the challenge that large companies faced on effectively assisting small businesses with cash flow requirements was the fact that most of these companies did not nimble enough. This was purely due to their size and internal protocols:

“Our challenge for now is that our policy stipulates a certain payment period and with us being a large company sometimes we are not nimble enough to provide flexible and on time payment terms.” OEMP3

However, it was also mentioned that some of the large companies are working to turn this around:

“While we do try to ease credit and invoice payment terms, sometimes the size of the company makes this process rigid. We however try by all means to ensure that our supplies are paid on time.” OEMP1

The commitment by large companies to ensure that small businesses remain afloat and have cash flow was also stated:

“What we do is that we invest money on enterprise development and corporate social investment by allocating the 1% of the profit to on these initiatives, particularly in the area where we are doing a work.” OEMP2

“This process of enterprise development ensures that those companies that we have developed have a continuous business to ensure that they sustain and grow. We also understand that most of these companies’ key survival is on ensuring that their net working capital is healthy.” OEMP3

Preferential procurement referred to the support that large companies or OEMs provide to entrepreneurs in the manufacturing sector in selectively procuring goods and services from them without going out on tender. This system is aimed at ensuring that small businesses under enterprise development have a chance of survival and grow without having to face a tough competition through a tendering system. The benefits of implementing preferential procurement practices were pointed by participants:

“Big companies have to give small companies more jobs for them to grow.

So we sort of have a preferential procurement system where we give these companies repeat business to help them sustain.”OEMP2

“We certainly use preferential procurement for the qualifying small businesses that have been through our supplier development programme.” OEMP3

“So the same companies will be used to fabricate spares for us. That’s the only way we can help them to sustain.” OEMP2

This implied that companies that applied preferential procurement as a practice positively contribute to the development process of the manufacturing process.

Enterprise development referred to a formal support structure that large companies or OEMs have in place to support the development process of the entrepreneurs in the manufacturing sector. Most OEMs have adopted an enterprise development strategy as a way of compliance with the legal requirements in South Africa as well as for developing their own suppliers to ensure the reliability of service. It is for this reason that most companies allocate budgets and spend money on enterprise development. One participant attested of his company as follows:

“We have a budget that is allocated for enterprise development so we do invest money to this process.” OEMP1

Large companies equally invest a lot of time on supplier development, as confirmed during interviews:

“We currently invest a lot of time for supplier development. We have a department specifically dealing with supplier development.” OEMP3

Enterprise development requires commitment by the company management. It was however

evident that most companies adopt enterprise development as a compliance issue.

“We do not just do enterprise development as a compliance issue, but a conscious action that can directly influence the lives of the ordinary man in the streets.” OEMP1

Enterprise development strategy is critical in the development process of manufacturing entrepreneurs. The enterprise development strategy is implemented in many forms in different companies, as was pointed out by participants:

“We also support enterprises through providing suppliers with equipment to operate their business.” OEMP1

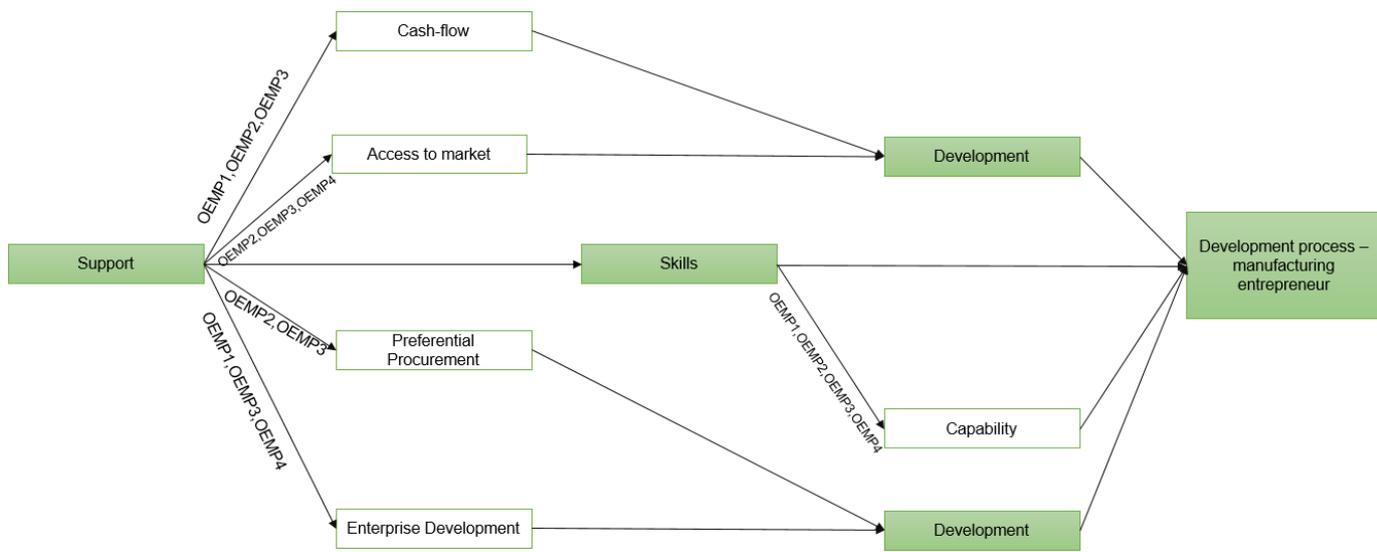
“If a person has got an idea for the organization and he comes to us, we are actually willing to work with him start you from scratch, we help register the company, get all the necessary documents everything that the company needs to be sort of in business.” OEMP4

It was also noted that all participants described different activities that their individual companies were doing to support entrepreneurial development through enterprise development. However, the consensus among all of the participants was the need for large companies or OEMs to stimulate entrepreneurship in manufacturing industry.

5.4.7 The Correlation model between themes – Large Companies (OEMs)

The model in figure 11 shows the correlation model between themes for the OEMs. This model was formed from the information gathered from the participants from dimension two – category B. The model illustrates the correlation between all themes identified for this category. The correlation between all themes is represented by arrows. These arrows were labelled OEMP1 to OEMP4 (participant 1 to participant 4) depending on the respondent's view on the interaction of themes. The constructs were used as an input to entrepreneurial development process. This model framework was used as a feed to the final proposed business model framework for the start-up, sustainability and growth of the manufacturing entrepreneurs in South Africa.

Figure 11: Correlation model between themes for OEMs



5.4.8 Conclusion

Dimension two –Category B formulated the Correlation Model between themes as shown in figure 11 above. This model was used as the primary feed to the business model framework for the development process of the manufacturing entrepreneurs and as a measure of the service offering by the selected stakeholders which were development finance institutions and large corporations as discussed in phase two, category A and category B.

CHAPTER 6

DISCUSSION OF RESULTS

6.1 Introduction

The previous chapter presented the results that answered the research questions stated in chapter three. The main guiding question that the study sought to answer was:

What challenges are faced by different stakeholders in the development process of manufacturing entrepreneurs – start up, sustainability and growth?

In order to answer this question fully and clearly, three sub-questions were developed. The sub-questions allowed the study to focus on three stakeholders involved in the manufacturing industry of small businesses. The stakeholders were identified as entrepreneurs, development finance institutions and large companies. The challenges addressed that centred on the development process of entrepreneurs were on start-up, sustainability and growth.

The study conducted a two part approach. Part I developed Correlation Models between Themes for all stakeholders based on the findings from the interviews conducted with entrepreneurs, development finance institutions, and large companies. The Correlation Models between Themes were used to show the link between various themes from each interviewees which then helped to formulate Part II which was the business canvass. In turn, the business canvass from Part II was used as a proposed business model framework for the development process of the manufacturing entrepreneurs.

The major themes were identified and compared with the relevant literature for each of the three research sub-questions and discussed in this chapter in relation to previous research and literature which was highlighted in chapter two. A conclusion was presented after each research question. The proposed business model framework was then refined, according to the literature, to form a comprehensive business model and presented in Chapter 7 as Conclusions and Recommendations.

6.2 Research question 1 – Entrepreneurs Need Analysis

The first sub-question that was answered in the previous chapter reads as follows:

What are the key requirements that manufacturing entrepreneurs need for their development process i.e. start-up, sustainability and growth of their businesses in South Africa?

This question related to the requirements for the development process of the manufacturing entrepreneurs. The question was answered by using a thematic analysis that emerged during interviews for all three stages of development process. In all three stages (start-up, sustainability and growth), similar themes emerged with different constructs. These themes were then summarised in a form of a Correlation model, as shown in Figure 9 above.

6.2.1 Findings from the research

The most important five themes to emerge from the research data relating to development process of manufacturing entrepreneurs were (1) support, (ii) skills, (iii) access to markets, (iv) access to funding and (v) awareness. These themes are discussed below together with their related constructs:

i) Support

Support theme was related to the following constructs that emerged:

- Enterprise development

The findings indicated that enterprise development, particularly from large companies, is a critical support structure that is needed for all stages of development process of the entrepreneur. The enterprise development strategy has been identified as an innovative tool which has helped stimulate development process of entrepreneurs and such a strategy can take the form of monetary form like improving revenue through preferential procurement and non-monetary form through skills transfer and mentorship (Chetty, 2014). Enterprise development was found to be useful in increasing integration between large companies and SMEs. Large companies which are referred to as Original Equipment Manufacturers (OEMs), use enterprise development to develop their suppliers as part of their value chain and these

have led to increasing supplier development which has had a positive outcome to development process of an enterprise (Wynstra et al., 2012). However, some studies found that increased supplier development does not necessarily lead to positive results (Eisenhardt & Tabrizi, 1995). These contrasting findings have called for attention to the enterprise development as a support structure for the development process of manufacturing entrepreneurs and its impact on the overall business model framework.

- Strategic partnership

The findings from interviewees indicated that strategic partnerships were crucial in the start-up stage of the development process as they provide entrepreneurs with the much needed support in terms of mentorship and skills. This was in agreement with Paradkar et al. (2015) who argued that “Successful start-ups leverage their available resources to attract alliance partners in order to access necessary complementary resources”. However, Velu (2015) contradicted this by alluding to the fact that although such strategic partnership is associated with improving start up chances, there is no guarantee that this would be the case. This contradiction implies that strategic partnership cannot be taken in isolation in the business model framework but need to be part of the other contribution factors that are required for the development process of the manufacturing entrepreneurs.

ii) Skills

Skills theme was related to the following construct that emerged

- Skills development

The findings from participants indicated that skills development was a critical aspect of all stages of development process of the manufacturing entrepreneurs. The skill development requirements were highlighted in the areas of business management where entrepreneurs need basic skills to fill in the required documentation to be able to access funding and technical skills that would ensure they remain competitive in the manufacturing sector. Although there are various programmes that support skills development, these have been found to be focussing on generic skills and such programmes are not necessarily beneficial to development process of manufacturing entrepreneur as “one size does not fit all”

(Papagiannidis & Li, 2005). Thus, the success of manufacturing entrepreneur depends on the identification of crucial entrepreneurial skills for start-up businesses, as well as for helping the business to survive and grow in the early years (Ćorić et al., 2011).

iii) Access to markets

Access to markets theme was related to the following constructs that emerged:

- Exposure to markets

The findings from participants indicated that market exposure was important for the development process of entrepreneurs in the manufacturing sector. Participants indicated that for entrepreneurs to start-up, sustain and grow they need access to funding and that this access to funding is depended on confirmed orders or markets through which their manufactured products will be sold. The understanding of the competitive market environment was found to be critical for the development process. Although the participants agreed with literature by alluding to the fact that their success as SMEs was depended on the ability of an entrepreneur to understand the customer's needs, their preferences and characteristics (Oprea, 2015), Akhtar et al. (2014) contradicted this view by stating that "their success is more determined by flexibility which enabling them to respond quickly to market needs and build innovation competency".

- Localization

Participants classified the localization of manufacturing activities as ring fencing of orders by large organizations to ensure that they provide markets to manufacturing entrepreneurs by procuring goods locally and implementation of government policies that will ensure local manufacturing and consumption is promoted. This observation by the entrepreneurs concurred very well with enterprise development and preferential procurement provided strategies as indicated by large companies or OEMs, as see in section 6.4.1 (ii) below.

The issue of localization speaks to the policy implications of the country. The enterprise development and preferential procurement have been seen as part of the policies implemented by the government that serve as an enabler of development process for the manufacturing entrepreneurs. The government plays an important role in addressing market failures in the entrepreneurial development process by imposing import protection to ensure local procuring of manufactured goods (Naudé, 2013). However some literature show that there is a contrast in opinions on the advantages of these policy implementation as it is believed that this regulatory environment results in credit market imperfections which may lead to 'overinvestment' when financial institutions cannot accurately judge entrepreneurial ability (De Meza & Webb, 1987).

iv) Access to funding

Funding theme was related to the following constructs that emerged:

- Difficulty in accessing funding

The findings from participants indicated that funding was critical in the development process of entrepreneurs in the manufacturing sector. The indication was that although money was available in South Africa to fund SMEs, accessing that funding was a difficult process. This concurred with literature that posited that SMEs tend to be more financially constrained than large firms which negatively affects their growth (Roman & Rusu, 2012). The participants further alluded that due to the fact that they are small in size and only starting up, it is not easy to access funding suggesting that large firms have a better chance of accessing funding than smaller firms, as confirmed in literature (Stella et al., 2014).

The difficulty in accessing funding was also found to be due to internal factors. These factors included lack of skills by entrepreneurs to put together necessary documentation, such as compiling business plans, which are required when applying for funding. This was found to be in line with literature that suggested that development of a business plan is a crucial aspect of the organizational success and that the entrepreneur's success therefore depends on the ability by the entrepreneur to either possess or identify crucial skills for business start-up that will ensure such skills are available internally that can help the business to survive and grow (Ćorić et al., 2011).

- Collateral

Access to funding is dependent on collateral and the findings indicated that one of the major challenges faced by SMEs was that they do not always have healthy balance sheets making it difficult for them to have the required collateral. This declaration by the entrepreneurs agreed very well with research question 2 findings on DFIs, as discussed in section 6.3.1 (iii) below. Moreover, the finding is in line with Daniel & Nicolae (2011) who argued that “when searching for funding SMEs face various obstacles which includes unsatisfactory collaterals for banks.” Such collaterals are described by Nyankomo & Stephen (2015) as “the financial systems that are required to be put in place as a screening mechanism to select the good borrowers from not so good borrowers.” This prevalent lack of collateral raises the need for government backed DFI’s to device new means and strategies to provide funding to developing entrepreneurs. Literature state that one of the primary function of FDI’s is to channel funds from risk averse financial agents like banks to the entrepreneurs (Marcelin & Mathur, 2014).

v) Awareness

Awareness theme was related to the following constructs that emerged:

- Knowledge of initiatives

The findings indicated that the South African government has put together a myriad of initiatives that are aimed at promoting entrepreneurship and supporting manufacturing by SMEs. Particular interest by the government in the manufacturing SMEs is borne out of the realisation that these entrepreneurs have the potential to contribute immensely towards a developing country’s new jobs generation (Charoenrat & Harvie, 2014) and it is the largest contributor to South Africa’s GDP (SAnews, 2015). The concerning factor though is that South Africa has been unable to significantly benefit from its manufacturing industry despite having put in place sound policies that support development of SMMEs (Mathibe & van Zyl, 2011). Part of the reason for this failure was found to be that not all entrepreneurs are aware or have knowledge of the government driven initiatives.

The literature agrees with this observation and suggest that not many of the SMEs in South Africa are aware of business support programs and are even less informed as to where to access finances (Mathibe & van Zyl, 2011). The lack of awareness by many entrepreneurs has hampered the development process of the manufacturing entrepreneurs and the result is that only a few are benefiting from the initiatives. This lack of awareness or knowledge is partly attributed to the general lack of confidence and uncertainties on government laws and policies (Ahwireng-Obeng & Piaray, 1999). The lack of awareness was also viewed by interview participants as two-fold. The first being entrepreneurs own lack of skills and ability to access information. The second fold was viewed as failure of the government-driven initiatives to become effectively operational as a result of the fact that staff responsible for business support programmes appeared to be incompetent, and therefore, deliver poor quality services (Mathibe & van Zyl, 2011).

6.3 Research Question 2 – DFI's

The second sub-question focussed on one of the structures that are supposed to provide support to manufacturing entrepreneurs in order to ensure their positive development process. The question to this effect, as listed in chapter three, reads as follows:

What roles do DFIs play in the development process of the manufacturing entrepreneurs i.e. to start-up, sustain and scale-up their business in South Africa?

Research question 2 related to the role of the development finance institutions (DFIs) for the development process of the manufacturing entrepreneurs. This research question was answered using thematic analysis that emerged during interviews for all three stages of the development process. In all three stages (start-up, sustainability and growth), similar themes emerged with different constructs, as summarised in Figure 10 above.

6.3.1 Findings from the research

The most important themes to emerge from the research data relating to development process of manufacturing entrepreneurs were (i) support, (ii) skills and (iii) access to funding. The three themes are discussed below together with their related constructs.

i) Support

Support theme was related to the following constructs that emerged:

- Management and Monitoring

The findings indicated that DFIs offer business management support to the entrepreneurs during development process. The interview participants from DFIs indicated the importance of providing management support to entrepreneurs for the development process. This confirmed the paradigm shift where DFIs are seen as partners rather than just financial providers. As Desoye & Atanda (2014) recommended, the relationship between DFIs and entrepreneurs should be that of a "partner" in the project than that of a mere "financier". The findings therefore illustrated this paradigm shift where DFIs are stakeholders that provide management support to the entrepreneurs.

The findings also indicated that DFIs offer post investment support to entrepreneurs. This ensures that DFIs have adequate performance monitoring tools that are required for the start-up SMEs and development process of the entrepreneur. From the interaction with the DFIs during data collection, there was evidence that the management and monitoring systems that DFIs provide post investment assist entrepreneurs during the development process by ensuring that the correct resources are mobilised for each project and that the rate of entrepreneurial productivity is enhanced (King & Levine, 1993).

- Access to markets

Access to markets was interpreted to mean different aspect of revenue generating activities that relate to supporting the SME. The following activities were describe as access to markets:

- Confirmed orders
- Repeat orders
- Offtake agreements
- Market demand

The findings indicated that there is a strong correlation between access to markets and the DFIs financial offering to the manufacturing entrepreneurs. In this regard, King & Levine (1993) argued that “financial institutions are important because they evaluate and finance entrepreneurs in their initiation of innovative activity and the bringing of new products to market”. This argument supports the findings of importance of DFIs in ensuring that SMEs have access to markets. The indication was that for entrepreneurs to qualify for funding or working capital they must have access to markets in any form as indicated above.

The DFIs as the government institutions play a role in promoting this access to markets. This is done by implementing policies or regulations that ensure that SMEs obtain the required skills in order to access markets (Mathibe & van Zyl, 2011). Access to markets was found to be the pre-requisite to accessing funding from DFIs by the enterprise confirming the argument from literature that posited that the financial system plays an important role but not a primary role. As such, the existence of enterprises leads to finance (Nyankomo & Stephen, 2015).

- Capacity

The findings indicated that DFIs play a role in capacitating the SMEs through various support programmes. Capacity referred to the type of support that DFIs offer to manufacturing entrepreneurs to capacitate them during sustainability and growth stages of the development process. This support was found to include the provision of consultants by DFIs to entrepreneurs to assist with business systems implementation and providing funding in the

form of grants for internal capacity building. This support was essential to ensure that entrepreneurs had capacity to pursue projects. The financial systems provided by the DFIs assist in determining the actual capacity that the individual entrepreneur has to manage a project (King & Levine, 1993). This is also in agreement with other literature that suggests that apart from provision of funding, DFIs are also expected to upgrade the managerial and the other operational pre-requisites of the assisted entrepreneur in a project (Adesoye & Atanda, 2014).

The findings further revealed that the internal capacity that enterprises have present a good opportunity for accessing funding for start-up, sustainability and growth stages as entrepreneurs are able to present a strong dossier that includes all of the information required to request funding (Sefiani & Bown, 2013).

ii) Skills

Skills theme was related to the following constructs that emerged:

- Capability and Experience

Capability and experience referred to a set of business skills that entrepreneurs possess and the knowledge or mastery that an entrepreneur has gained over the period in the industry. These set of skills act as a pre-requisite for DFIs to grant support to entrepreneurs in the form of funding. These set of skills that are referred to as capabilities included the following:

- Technical skills
- Financial Skills
- Business management skills, and
- Business acumen skills

The findings indicated that the capabilities and the experience of an entrepreneur were some of the significant requirements that DFIs looked for in granting support for the start-up stage of the development process. Although it was found that access to markets has a significant bearing on accessing funding through the DFIs, it was found that most DFIs looked at the capability and experience of the entrepreneur before granting the financial support. This

confirmed that, like commercial banking institutions, DFIs are also risk averse to a certain degree.

The requirement by the DFIs for funding SME is that entrepreneurs have intrinsic skills to be potentially capable and experienced entrepreneurs to be able to manage the project (King & Levine, 1993) as it emerged during the interviews. The qualitative results showed that the capability of the entrepreneur assists in ensuring success of SMEs which is sometimes constrained by the inability to produce the required dossier (which includes business plans) when applying for funding the development process of the enterprise (Sefiani & Bown, 2013).

iii) Access to funding

Access to funding theme was related to the following constructs that emerged:

- Working Capital

Working capital referred to funding provided by DFIs during development stages of an entrepreneur. The provision of this funding was strongly linked to access to markets in the form of confirmed orders or offtake agreement. DFIs offer working capital facilities as a form of supporting SMEs to sustain and grow their businesses. For any business to sustain and grow it needs to be profitable. Thus, the working capital plays an important role in the development process of the SME as it impacts on firm's profitability as well as liquidity (Muhammad et al., 2012). As it has been observed that SMEs are subject to important financial constraints and have difficulties in obtaining funding in the long-term capital markets (Baños-Caballero et al., 2012) the intervention by the DFIs to provide the working capital has been found to be important in the entire development process.

The support structure of building capabilities and upskilling entrepreneurs assists in ensuring that SMEs have properly trained managers to be able to plan and control. This important support structure enables them to manage working capital. It has been observed that DFIs also provide support in terms of upskilling the entrepreneur, as it is the inability of financial managers to plan and control current assets and liabilities of their companies that lead to inefficient working capital (Arunkumar & Radharamanan, 2011), which ultimately results in the failure of a SME. The findings, therefore, illustrated the importance of DFIs as a support system in providing working capital that SMEs need for their development process.

- Surety, Collateral and Contribution

The findings indicated that for DFIs to grant funding support, there are pre-requisites that the entrepreneur needs to have in order to qualify. These pre-requisites are as listed and defined below as constructs of access to funding theme:

- Surety – “is the organization or person that assumes the responsibility of paying the debt in case the debtor policy defaults or is unable to make the payments” (Investopedia,)
- Collateral – “Property or other assets that a borrower offers a lender to secure a loan” (Investopedia,)
- Contribution – “Something given to a common stock or fund; a sum of money or item voluntarily contributed”(The Free Dictionary,)

These constructs were prominent under the access to funding theme, in the minds of the participants, and was consistently regarded within the data as being a significant factor influencing the development process of the entrepreneur in the manufacturing sector. As most of the SMEs in the study are those from previously disadvantaged groups and have no healthy balance sheet the importance of these constructs stemmed from the substantial challenges faced by black owned SMEs in South Africa (BIP, 2015).

The issue of surety, contribution and collateral and its inherent difficulties was strongly reinforced by participants during the interviews. Indeed, the constraints of surety, contribution and collaterals are very often mentioned in the literature as the determining factor to the success or failure of SMEs to access necessary funding for start-up, sustainability and growth stages (Sefiani & Bown, 2013).

6.4 Research Question 3 – OEMs

The last question inquired on the role of large corporates to support the development process of the manufacturing entrepreneurs. Hence, sub-question three read as follows:

What *role* do large companies (OEMs) play in the development process of the manufacturing entrepreneurs i.e. to start-up, sustain and scale-up their business in South Africa?

The findings from this question are discussed below together with relevant literature.

6.4.1 Findings from the research

The two most important themes to emerge from the research data relating to development process of manufacturing entrepreneurs were (i) support and (ii) skills. These are discussed below together with their constructs.

i) Support

Support theme was related to the following constructs that emerged:

- Enterprise development

The findings indicated that most large companies or OEMs have implemented enterprise development as a policy and using this as a support programme for the manufacturing entrepreneurs who are part of their value chain as suppliers. The participants from the OEMs indicated that they tend to invest a lot of time and money on the supplier development as part of regulatory compliance and also as part of their own initiatives of giving back to the society by promoting job creation. This agreed well with literature that suggested that the South African regulation requires that companies spend a certain amount of their annual profits to support SMEs has proved to be very beneficial in the development process entrepreneurs (Chetty, 2014). This contradicts other literature that suggested that such legislative enterprise development is reactive in nature and not proactive or vision driven thus it does not yield positive results (Ouriaghli & Nsubuga, 2012).

There was an agreement from participants that enterprise development improves their own company's efficiencies by ensuring that the supplier is developed and provided with the right kind of equipment to perform the given tasks. This also agrees with literature that suggest that both small and medium enterprises and large firms benefit from supplier development programmes as evidenced by increased sales, employment, and the sustainability of small and medium-sized suppliers; as well as increased the sales of large firms and opened new markets for large firms (Arráiz et al., 2013).

- Cash-flow

The findings indicated that large companies (OEMs) played an important role in ensuring that SMEs have working capital and cash flow to run their businesses. OEMs offer tailor made credit and payment terms to SMEs to ensure that they have a positive cash flow and working capital (Jamieson et al., 2012). However, the findings also indicated that there was still a challenge on large companies in ensuring that SMEs have a positive cash-flow or working capital. This is a result of large companies being prone to inertia and inflexibility due to 'red tape' and bureaucratic processes that normally exists in these companies (Stella, Aggrey, & Eseza, 2014). Despite this challenge it was noted that most OEMs have implemented various initiatives to alleviate the problem of cash flow to SMEs. Such initiatives include granting of trade credit to SMEs to stimulate sales (Baños-Caballero et al., 2012) thus improving on SMEs' working capital management.

- Access to markets and Preferential Procurement

It was found that one of the major roles of OEMs was to provide access to markets for the SMEs. This access to markets included ring-fencing of orders to SMEs by large companies to ensure continuous work. Using the strategy of preferential procurement, the results showed that OEMs provide access to markets for SMEs by ensuring that certain goods and services are only reserved for the local small businesses. The findings from the OEM participants was that there was preference from the OEM in manufacturing to source goods and services from multiple suppliers, with one supplier being preferred for specialists goods. The OEMs then enter into long term contracts and offer SMEs repeat orders as access to that specific product market. At this stage the OEM as the buyer has to consider the trade-off between cost savings and inventory risk-sharing with the SME as the supplier offering a quantity flexibility contract, where the buyer is allowed to adjust the originally-ordered quantity to his actual demand (Friedl & Wagner, 2012).

ii) Skills

Skills theme was related to the following construct that emerged:

- Capability

The findings in this theme were that the OEMs require a certain level of capabilities when engaging with SMEs as part of enterprise development. As a result, the OEMs that engage in proactive or vision driven enterprise development provide support to SMEs by offering skills development and internal capacity building (Laha, 2014b).

The findings further indicated that OEMs tend to adopt those SMEs in their supplier development programmes and identify and build capacity of current or potential suppliers to supply quality goods and services. This results in the long-term firm's alliance of a firms-supplier relationship (Aslan et al., 2011). In this manner, large firms engage in enterprise development as a strategic focus that ensures that the SMEs have the capability to provide the product that satisfies the firm's needs along attributes such as cost, quality and delivery (Friedl & Wagner, 2012).

6.5 Conclusion

This research attempted to answer the following main research question:

- What challenges are faced by different stakeholders in the development process of manufacturing entrepreneurs – start up, sustainability and growth?

Using a two dimensional approach this main research question was subdivided into two research dimensions as follows:

- Dimension one – addressed the requirements of the entrepreneurs in the manufacturing sector to start up, sustain and grow.
- Dimension two – addressed the role played by two categories of stakeholders, category A being the development finance institutes (DFIs), and category B being the large companies or Original Equipment Manufacturers (OEMs).

In a nutshell, the findings of the reported study revealed that the success of the development process of the manufacturing entrepreneurs depended largely on the connection it had with other essential stakeholders in the industry. The essential stakeholders that the study sought to investigate their role in this regard were the development finance institutions (DFIs) that are expected to provide the necessary funding. The second stakeholders were large firms that provide markets.

Using a thematic analysis the correlation models that showed the linkages between three structures was used as a basis to propose a business model framework for the development process of the manufacturing entrepreneurs in South Africa as a possible solution to the identified challenges in the SME sector.

CHAPTER 7

CONCLUSION

7.1 Introduction

The previous chapter discussed findings of the research study in relation to research questions and literature review. This last chapter will discuss the background to this study as well as the objectives of the study. A summary of the main findings will be discussed together with the proposed business model framework for the development process of the manufacturing entrepreneurs. This will be followed by the recommendations for the effective development process of the manufacturing entrepreneurs. The limitations of the study will be identified, and therefore acknowledgment of implications for future research will be highlighted. Finally, a conclusion to the study will be presented.

7.2 Research Background and Objectives

7.2.1 Research Background

The South African government faces serious challenges of ensuring the participation of the majority of population in the value chain of the key economic sectors (BIP, 2015: 10) and reducing the high unemployment rate that contributes to numerous social challenges that threaten to cripple political stability and economic development (Kumo et al., 2014). Entrepreneurship has long been identified as the driver of job creation across the globe in advanced markets and in particular among developing nations (Acs, 2006; Business Environment Specialists, 2013; Fanta, 2015; Esterhuizen, 2012; Schussler, 2012; Tsai, 2014), and has been said to be the solution to the high rate of unemployment, reported to be at 25.5 percent in the third quarter of 2015 (Statistics South Africa 2015).

The association between SMMEs and entrepreneurship is to be found in that they both entail an element of innovation and it has been argued that SMMEs are vehicles for entrepreneurship (Ngcobo & Sukdeo 2015), contributing significantly to economic growth (Tsai, 2014). However, South Africa has continued to rank worse in early-stage entrepreneurial activity especially when compared to other developing countries (Singer et al., 2015). This happens despite the South African government's effort to adopt policies and

practices aimed at the promotion and support of SMMEs by implementing various business support programmes (Mathibe & van Zyl, 2011).

Manufacturing entrepreneurship is an important factor from an economic development point of view and the success of the manufacturing sector has been found to have a positive link with economic development (Dewangan et al., 2015). However, South African industrial production growth rate and manufacturing has continued to decline in recent years (CIA World Factbook, 2014). This has resulted in the Government's broad industrialisation initiatives to expand the industrial base and inject new entrepreneurial dynamism into the economy through the adoption of new policies that support industrialisation as an addition to the existing Industrial Policy Action Plan (BIP, 2015).

7.2.2 Research Objectives

On the backdrop of the Research Background and the challenges stated therein, the objectives of this research study were:

- To uncover the challenges faced by the manufacturing entrepreneurs to start-up sustain and grow in South Africa;
- To understand the role of different stakeholders in the development process of manufacturing entrepreneurs; and
- To identify and propose a business model framework that can contribute to the success of the manufacturing entrepreneur's development process.

7.3 Main research findings

The findings of the research indicated that the requirements for entrepreneurs in the manufacturing sector to start-up, sustain and grow include the support structures that various institutions need to provide. The support structures identified included the enterprise development by large companies and strategic partnership that SMEs and large companies can form. This agreed well with the role played by the large companies in the development process of the entrepreneurs in the manufacturing sector. Enterprise development and strategic partnership was seen as crucial in that they provide skills development to the SMEs

while ensuring that SMEs access the markets through preferential procurement and localization of manufactured parts for the use by large companies.

The confirmed orders or access to markets was found to be crucial in the SMEs in that it affords the entrepreneur an opportunity to access funding against the confirmed access to markets or confirmed orders. With most SMEs found to have no means of providing the financiers with collateral, surety or contribution the use of confirmed orders to access funding was found to be more acceptable to the Development Finance Institutions (DFIs) as these stakeholders have a mandate of ensuring that there is job creation and economic growth in the country. It was also found that there are various Government promoted initiatives for the development process of the SMEs, however, the lack of awareness of these initiatives by the SME's hindered the development process.

The development of the manufacturing entrepreneurs was, therefore, found to be strongly dependent on the role played by Development Finance Institutes (DFIs) and Large companies (OEMs) in the start-up, sustainability and growth stages of the entrepreneurs. The challenge of access to finance was found to be the main constraint confronting entrepreneurs in the manufacturing sector. The findings indicated that with the stringent requirements to access funding from financiers that include the need for collateral, surety and contribution; the Government promoted DFIs are essential in ensuring that entrepreneurs' access the much needed funding. While DFIs are geared-up to fund entrepreneurs, the findings on this study indicated that having confirmed access to markets and contracts assists entrepreneurs in accessing funding easily from the DFIs. The role played by large companies (OEMs) in providing SMEs with orders and contracts through preferential procurement and enterprise development is critical in assisting entrepreneurs to access funding.

In summary, the findings of the research study indicated that for entrepreneurs in the manufacturing sector to successfully develop, the following key challenges needed to be addressed by relevant stakeholders that include entrepreneurs, DFIs, and OEMs:

- Entrepreneurial skills – this includes technical, business, and financial skills which enhance capabilities of the entrepreneurs.
- Support structure – this includes the various initiatives by both government affiliated DFIs and large companies. These initiatives are enterprise development, strategic partnerships and access to markets.

- Access to funding – this relates to the ease in which entrepreneurs can access both capital for start-up and working capital for sustaining and growth while acknowledging the lack of qualification criteria like collateral, surety and contribution needed to access such funding.

7.3.1 Proposed Business Model Framework

Figure 4 in the literature review shows a modified business model framework for the Total Early –Stage Entrepreneurial Activity (Singer et al., 2015). This model shows the stages of entrepreneurial development process and modified to show the necessary requirements for each of the stages of development process. This model is used in the proposed business model framework as a value proposition for the development process of manufacturing entrepreneur in South Africa.

Figure 5 explains the linkages between stakeholders in the development process of an entrepreneur (Donaldson & Preston, 1995). In the business model framework this relationship indicates that for any SME to be developed there must be an interaction in both service offerings and requirements amongst all relevant stakeholders, and this relationship needs to be natured and stimulated at all times.

Figure 6 shows that there is a causality linkage between entrepreneurial development and institutional supports (Laha, 2014a) provided by stakeholders shown in figure 5. This causality linkage is expanded to reflect the findings in the research study using thematic analysis and constructs that emerged during the study.

Figure 9 shows the correlations between themes for the entrepreneurial requirements to start-up, sustain and grow. Figure 10 and figure 11 show the correlation between themes for the development finance institutes (DFIs) and large companies (OEMs) respectively for the role played and service offering by them as stakeholders in the development process of an entrepreneur in the manufacturing industry.

Using all the model frameworks as described above and the findings from the study, a business model framework for the development process of the manufacturing entrepreneur

can be summarized in the modified Osterwalder and Pigneur (2010) business model canvas as shown in Figure 12 below.

Figure 12: A proposed business model framework for the development process of manufacturing entrepreneur

| | | | | |
|---|--|--|---|---|
| PARTNERS <u>Most important partners?</u> - Manufacturing Entrepreneurs - Large Companies (OEMs) - Development Finance Institutions (DFIs) <u>Activities provided?</u> - DFIs - All support services in Fig. 11 - OEMs - All support activities in Fig 12 <u>Resources provided?</u> - DFIs - Funding - OEMs – Enterprise development | ACTIVITIES <u>Activities for value creation?</u> - Start-up stage - Sustaining stage - Growth Stage Fig. 4 RESOURCES <u>Required resources?</u> - Access to funding - Access to markets - Skills development (Institutional Support – Fig. 7) | VALUE PROPOSITION <u>What Value is provided?</u> - Development of manufacturing entrepreneurs <u>What problems are solved?</u> - Improve Total Early Stage Entrepreneurial Activity in South Africa (Singer et al., 2015) - Improve contribution of manufacturing in SA GDP (IDC (2013)). <u>Which need is satisfied?</u> - Job Creation (Kumo et al. 2014) - Economic Growth ((Acs, 2006) <u>Which services offered?</u> - Support systems for Development process | CUSTOMER RELATIONSHIPS - Stakeholder Model – Fig 5 DISTRIBUTION CHANNELS - Awareness campaigns for stakeholder initiatives (Mathibe & van Zyl, 2011) | CUSTOMER SEGMENT - Manufacturing SMEs in South Africa |
| EXPENDITURES <u>Important Expenditures?</u> - Funding - Working Capital | <u>Activities with highest Expenditures?</u> - Funding of start-ups - Skills Development | REVENUE STREAMS - Access to markets - Preferential Procurement - Localization | | |

Source: Adapted from (Dohrmann et al., 2015)

A proposed business model framework in Figure 12 can be used by the entrepreneurs as a strategic tool for their developing process. The ultimate objective of the framework is to offer entrepreneurs a value proposition that will support the development process thus improving the chances of survival of entrepreneurs in the manufacturing sector. The framework indicate that for entrepreneurs to realize this value proposition various activities and partnerships needs to be taken into account and managed.

The framework is thus divided into nine (9) strategic blocks that complete the business model framework for the development process of the entrepreneurs in the manufacturing sector in South Africa. These strategic blocks are discussed below:

(i) Partners

The partners indicates that for manufacturing entrepreneurs to develop, the most important role players that needs to be managed are the entrepreneurs themselves, the large companies (OEMs) and the development finance institutes (DFIs). The DFIs and OEMs offers the entrepreneurs with support services as depicted in the correlation models figure 10, and 11 in Chapter 5. The primary activities offered by DFIs and OEMs in the development process of entrepreneurs are funding and enterprise development respectively.

(ii) Activities

The activities in the business model framework includes all necessary activities for the development process of the manufacturing entrepreneurs. As expressed in Figure 4 of Chapter 2, the activities include all those requirements for the start-up stage, the sustaining stage, and growth stage of the development process. The business model framework depicted in Figure 12 above therefore offers an entrepreneur a strategic tool to define and measure these activities.

(iii) Resources

The basic resources for the development process of the entrepreneurs are access to funding, access to markets and skills development. The framework in figure 12 can be used to strategically plan for such resource requirements in line with the institutional support model as shown in figure 6 of chapter 2 and the figure 9 in chapter 5.

(iv) Expenditures

For entrepreneurs to develop access to funding and working capital was found to be crucial in various stages of development. The business model framework depicted in figure 12 will help entrepreneurs to understand what funding they require and what activities require the highest expenditure. The research findings has indicated that skills development cuts across all dimensions of the strategic partners for the development process of the entrepreneur and using the business model framework expenditure requirements can be clearly defined and monitored.

(v) Revenues

The kind of support system that entrepreneurs need for the development process results in the sustainability and growth of the entrepreneur through constant and growing revenues achieved. The ability of stakeholders like DFIs and OEMs to offer access to markets, preferential procurement and localizing manufacturing are seen as a source of revenue generation that entrepreneur require and thus forms an important element of the business model framework.

(vi) Customer relationships

Figure 5 in chapter 2 shows how entrepreneurs and other stakeholders (OEMs, DFIs) relate to each other. This relationship is shown in the business model framework in chapter 12 as an important element of final value proposition.

(vii) Distribution Channels

The customer relationship as shown in figure 5 requires that there is a form of awareness of the activities and initiatives that each stakeholder offers to the entrepreneur for their development. This is shown as a distribution channel in the business model framework in Figure 12. Entrepreneurs therefore need to regard distribution channels as a strategic communication tools in which they can keep themselves abreast of the various support structures and initiatives provided by key stakeholders.

(viii) Customer segment

The ultimate customer in the model are the manufacturing entrepreneurs in the manufacturing sector. These entrepreneurs requires various support structures to start-up, sustain and grow. The business model framework therefore provides a strategic point of departure in the fulfilment of the development process of the entrepreneurs.

(ix) Value Proposition

As explained the ultimate value proposition for this business model framework is to enable the entrepreneurs to adopt a strategic objectives to start-up, sustain and grow with the aim of ensuring improved survival of entrepreneurs in the manufacturing sector which ultimately creates jobs and contributes to the country's GDP.

7.4 Recommendations

The development process of manufacturing entrepreneurs is dependent on the role played by different actors. These actors are stakeholders that have a mandate of economic development in South Africa through job creation. Different roles played by these actors have been researched and the results discussed in this report. The results indicate that for development process of the manufacturing entrepreneurs to succeed, all relevant stakeholders (Entrepreneurs, Development Finance Institutions (DFIs), and Large Companies (OEMs)) need to take actions that emanated from this research as a form of recommendations.

It is therefore recommended that entrepreneurs wishing to adopt a business model framework as shown in figure 12 should ensure that there is strategic alignment between their requirements and the services offered by DFIs and OEMs in the development process.

7.5 Limitations of the research

In conducting the reported study every possible effort was made to ensure that the gathered data and the subsequent findings were valid and reliable. However, it is acknowledged that this is not always possible to achieve. Hence, this sub-section discusses the areas that were identified as short-comings in the study.

Firstly, the researcher could have been biased in the manner in which he phrased the questions used during interviews. This bias was inevitable in the light of the researcher's background in the area under investigation. While the background was useful in that it provided the researcher with some knowledge about the context and culture of the groups investigated this might have unconsciously influenced the interpretation made about the collected data.

Secondly, the collection of data during interviews relied mostly on the utilisation of audio recording. While this was done with good intentions that were directed at ensuring accuracy of information, there could have been unintended consequences. The presence of recording equipment could have influenced the respondents in a negative manner. On the one hand, they could have given more information than it was desirable. On the other hand, they could have provided less information because of being intimidated by the presence of the audio equipment.

Thirdly, by their nature, interviews rely on self-reports. All the three groups of participants might have been defensive in their responses. This would have resulted in them not providing truthful information in the process. A blame game would have ended up taking place. In other instances, claims that could not be substantiated or verified might have been made.

Lastly, it would have been beneficial for the reported study to adopt a research methodology approach that entailed the means of verifying self-reports that emerged during interviews. This could have entailed the analysis of available records that would serve to substantiate the claims made, particularly by the DFIs and OMEs.

7.6 Implications for future research

A study of this nature that was conducted within a limited period and limited size cannot be exhaustive. Hence, there is room for further research on the subject of the reported study. The following areas are proposed for further inquiry by other researchers:

- Adopting a longitudinal approach on the investigation of various stakeholders in the manufacturing enterprise to assess if they improve on areas where they were made aware that they had shortcomings.
- Pursuing a broad study that would interview entrepreneurs who are at various stages of development (start-up, sustainability and growth stages) to inquire on challenges experienced at these stages as a way of making entrepreneurs aware of what to expect.
- Investigating and reporting on success stories, despite challenges, appears to be an ignored area on the subject of entrepreneurship. This research gap could prove to be a rather more useful than studies that look on the negative side of the industry.
- Analysing available documents on the claims made by DFIs and OMEs should be undertaken to establish if there is correlation between what is stated and available on paper.
- Comparing black entrepreneurs with those of other racial groups could shed some light on the way forward to empower the previously marginalised members of South African society.
- Evaluating the impact of the BIP (2015) that aims to address most of the challenges that were the findings of the reported study could be useful. The aim would be to ascertain if the BIP contributes to noticeable change or it adds to the list of already available policies that are good on paper but lack implementation by the South African government.

7.7 Conclusions

In conclusion, the dwindling economic situation in South Africa that is evident in the form of high unemployment requires the intervention of all citizens working together with government and its support structures. Citizens need to contribute in the form of entrepreneurship by creating sustainable jobs. However, the process of doing so should be guided by taking heed of the pitfalls that emerged from the reported study as contributory factors to the failure of many SMEs. In this regard, the proposed business model framework has the potential to contribute to success of many entrepreneurs and should therefore be consulted.

REFERENCES

- Acs, Z. (2006). How is entrepreneurship good for economic growth?
Innovations, 1(1), 97-107.
- Adesoye, A. B., & Atanda, A. A. (2014). Development finance institutions in Nigeria:
Structure, roles and assessment. *Research Journal of Finance and Accounting*, 5(13),
26-31.
- ADVICE, P. (2000). Study design in qualitative research—2:
Sampling and data collection strategies. *Education for Health*, 13(2), 263-271.
- Aho, I. (2013). Value-added business models:
Linking professionalism and delivery of sustainability. *Building Research & Information*,
41(1), 110-114.
- Ahwireng-Obeng, F., & Piaray, D. (1999). Institutional obstacles to
South African entrepreneurship. *South African Journal of Business Management*,
30(3)
- Akhtar, N., Azeem, S. M., & Mir, G. M. (2014). Strategic role of internet in SMEs
growth strategies. *International Journal of Business Management & Economic
Research*, 5(2)
- Appleyard, L. (2013). The geographies of access to enterprise finance:
The case of the West Midlands, UK. *Regional Studies*, 47(6), 868-879.
- Arráiz, I., Henríquez, F., & Stucchi, R. (2013). Supplier development programs and
firm performance: Evidence from Chile. *Small Business Economics*, 41(1), 277-293.
- Arunkumar, O., & Radharamanan, T. (2011). Analysis of effects of working
capital management on corporate profitability of Indian manufacturing firms.
International Journal of Business Insights & Transformation, 5(1)
- Aslan, I., Sis, E., Çınar, O., & Bektaş, Ç. (2011). Improving a short term and
long-term suppliers' development plan. *Economics & Management*, 16, 647-653.

- Baños-Caballero, S., García-Teruel, P. J., & Martínez-Solano, P. (2012). How does working capital management affect the profitability of Spanish SMEs? *Small Business Economics*, 39(2), 517-529.
- Blaga, S. (2013). Rethinking business sustainability. *Review of Economic Studies and Research Virgil Madgearu*, (01), 5-21.
- Bogdan, R., & Biklen, S. K. (1997). *Qualitative research for education*. Allyn & Bacon.
- Cavalcante, S. A. (2014). Preparing for business model change: The “pre-stage” finding. *Journal of Management & Governance*, 18(2), 449-469.
- Chae, J. S. U., & Hedman, J. (2015). Business models for NFC based mobile payments. *Journal of Business Models*, 3(1)
- Charoenrat, T., & Harvie, C. (2014). The efficiency of SMEs in Thai manufacturing: A stochastic frontier analysis. *Economic Modelling*, 43, 372-393.
- Chetty, A. (2014). Innovation and enterprise development: The case of the Ethekwini municipality. *Proceedings of the 2nd International Conference on Innovation and Entrepreneurship: ICIE 2014*, 29.
- Chiloane-Tsoka, E., & Rasivhetshela, A. Effects of cost and benefit in regularising business procedures in Gauteng: The SMEs paradox-South Africa.
- Chinomona, E. (2015). Women in action: Challenges facing women entrepreneurs in the Gauteng province of South Africa. *International Business & Economics Research Journal (IBER)*, 14(6), 835-850.
- CIA World Factbook. (2014). World Economy Report. Retrieved from <http://www.ereport.ru/en/stat.php?razdel=country&count=safrika&table=ipecia>
- Cini, M., Cuclari, F., & Gushi, L. (2014). Problems and Challenges facing Albanian Women Entrepreneurs. *Economic and Social Development: Book of Proceedings*, 619.

- Ćorić, G., Katavić, I., & Kopecki, D. (2011). Sustainable growth of SMEs in Croatia through development of entrepreneurial skills. *9th International Conference: "Challenges of Europe: Growth and Competitiveness-Reversing the Trends", University of Split, Faculty of Economics,*
- Costantino, N., Dotoli, M., Falagario, M., Fanti, M. P., & Mangini, A. M. (2012). A model for supply management of agile manufacturing supply chains. *International Journal of Production Economics, 135*(1), 451-457.
- Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing, 26*(3), 623-630.
- Dallas, M. P. (2014). Manufacturing paradoxes: Foreign ownership, governance, and value chains in china's light industries. *World Development, 57*, 47-62.
- Danciu, V. (2013). The sustainable company: New challenges and strategies for more sustainability. *Theoretical and Applied Economics, 18*(9 (586)), 7-26.
- Daniel, B., & Nicolae, P. (2011). Collateral's Importance in SMEs financing: What is the bank's response? Some evidence from Romania. *Annals of Faculty of Economics, 1*(1), 256-260.
- de Lange, D. E. (2013). How do universities make progress? Stakeholder-related mechanisms affecting adoption of sustainability in university curricula. *Journal of Business Ethics, 118*(1), 103-116.
- De Meza, D., & Webb, D. C. (1987). Too much investment: A problem of asymmetric information. *The Quarterly Journal of Economics, 281*-292.
- Delbridge, R., & Edwards, T. (2013). Inhabiting institutions: Critical realist refinements to understanding institutional complexity and change. *Organization Studies*
- Dewangan, D. K., Agrawal, R., & Sharma, V. (2015). Enablers for competitiveness of Indian manufacturing sector: An ISM-fuzzy MICMAC analysis. *Procedia-Social and Behavioral Sciences, 189*, 416-432.

- Dohrmann, S., Raith, M., & Siebold, N. (2015). Monetizing social Value Creation—
A business model approach. *Entrepreneurship Research Journal*, 5(2), 127-154.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation:
Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65-91.
- Edwards, J. A., & Lampert, M. D. (2014). Talking data: Transcription and coding in
discourse research Psychology Press.
- Eisenhardt, K. M., & Tabrizi, B. N. (1995). Accelerating adaptive processes:
Product innovation in the global computer industry. *Administrative Science Quarterly*, 84-110.
- Elhiraika, A. B. (2008). Promoting manufacturing to accelerate economic growth
and reduce volatility in Africa. *Retrieved January, 10, 2013*.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process.
Journal of Advanced Nursing, 62(1), 107-115.
- Fereday, J., & Muir-Cochrane, E. (2008). Demonstrating rigor using thematic analysis:
A hybrid approach of inductive and deductive coding and theme development.
International Journal of Qualitative Methods, 5(1), 80-92.
- Franca Barros, D., Felipe Rammelt Sauerbronn, J., & Mello da Costa, A. (2014).
Corporate sustainability discourses in a Brazilian business magazine. *Social
Responsibility Journal*, 10(1), 4-20.
- Friedl, G., & Wagner, S. M. (2012). Supplier development or supplier switching?
International Journal of Production Research, 50(11), 3066-3079.
- Giambona, G., & Birchall, D. (2011). An evaluation-led virtual action learning programme—
Was the theory put into practice? *Educational Media International*, 48(1), 55-65.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in
inductive research notes on the gioia methodology. *Organizational Research Methods*, 16(1), 15-31.

- Guthrie, K., Griffiths, R., & Maron, N. (2008). Sustainability and revenue models for online academic resources. *An Ithaka Report*,
- Hatipoglu, B., Alvarez, M. D., & Ertuna, B. (2014). Barriers to stakeholder involvement in the planning of sustainable tourism: The case of the Thrace region in Turkey. *Journal of Cleaner Production*,
- Lashmi, P., & Kumar, S. (2012). Economic growth and impact of service's sector in India. *International Journal of Business Management & Economic Research*, 3(5)
- Industrial Development Corporation (IDC). (2013). Economic overview recent developments in the global and South African economies. Sandton
- Investopedia. Retrieved from www.investopedia.com/terms/s/surety.asp
- Jamieson, D., Fettiplace, S., York, C., Lambourne, E., Braidform, P., & Stone, I. (2012). Large businesses and SMEs: Exploring how SMEs interact with large businesses. London: *ORC International*.
- King, R. G., & Levine, R. (1993). Finance, entrepreneurship and growth. *Journal of Monetary Economics*, 32(3), 513-542.
- Kumo, W. L., Rielander, J., & Omilola, B. (2014). African economic outlook. Paris: *OECD Publishing*.
- Laha, A. (2014). Measurement of enterprise development and its determinants in India: An inter-state analysis. *Table of Content Volume X, Issue 1, May 2014*,
- Lamine, W., Mian, S., & Fayolle, A. (2014). How do social skills enable Nascent Entrepreneurs to enact perseverance strategies in the face of challenges? A comparative case study of success and failure. *International Journal of Entrepreneurial Behavior & Research*, 20(6), 517-541.
- Lee, S., Jung, Y., Lee, J., & Lee, S. (2015). Industrial development, financial development and regional economic growth in China. *Journal of Economics and Economic Education Research*, 16(1), 227.

- Liu, F., Tsou, H., & Chen, L. (2013). The impact of OEM supplier initiatives on buyer competence development: The moderating roles of collaborative relationship and competitive environment. *Asia Pacific Journal of Management*, 30(4), 1285-1303.
- Lobos, K., & Szewczyk, M. (2014). Factors influencing the development and growth of micro and small firms run by students of managerial and economic majors in Poland. *Journal of Business Management*, (8)
- Majumdar, S. (2013). Growth strategy in entrepreneur managed small organizations: A study in auto component manufacturing organizations in central India. *South Asian Journal of Management*, 20(4), 31.
- Man, M., & Macris, M. (2013). Relevant funding of the SMEs business development in Romania in the current European context influenced by the economic crisis. *Internal Auditing and Risk Management*, 2(30), 310-319.
- Mao, H. (2009). Review on enterprise growth theories. *International Journal of Business and Management*, 4(8), p20.
- Marcelin, I., & Mathur, I. (2014). Financial development, institutions and banks. *International Review of Financial Analysis*, 31, 25-33.
- Mathibe, M. S., & van Zyl, J. H. (2011). The impact of business support services to SMMEs in South Africa. *International Business & Economics Research Journal (IBER)*, 10(11), 101-108.
- Mavuso, Z. Can South Africa's manufacturing sector rise again?
Retrieved from ww.engineeringnews.co.za/article/can-south-africas-manufacturing-sector-rise-again-2014-10-31-1
- McCausland, W. D., & Theodossiou, I. (2012). Is manufacturing still the engine of growth? *Journal of Post Keynesian Economics*, 35(1), 79-92.
- Mohammad, M., Mann, R., Grigg, N., & Wagner, J. P. (2011). Business excellence model: An overarching framework for managing and aligning multiple organisational improvement initiatives. *Total Quality Management & Business Excellence*, 22(11), 1213-1236.

- Moscarini, G., & Postel-Vinay, F. (2012). The contribution of large and small employers to job creation in times of high and low unemployment. *The American Economic Review*, 102(6), 2509-2539.
- Mudd, S. (2013). Bank structure, relationship lending and small firm access to finance: A cross-country investigation. *Journal of Financial Services Research*, 44(2), 149-174.
- Muhammad, M., Jan, W. U., & Ullah, K. (2012). Working capital management and profitability an analysis of firms of textile industry of Pakistan. *Journal of Managerial Sciences*, 6(2), 156-171.
- Myers, M. D. (1997). Qualitative research in information systems. *Management Information Systems Quarterly*, 21, 241-242.
- Nabi, G., & Liñán, F. (2013). Considering business start-up in recession time: The role of risk perception and economic context in shaping the entrepreneurial intent. *International Journal of Entrepreneurial Behavior & Research*, 19(6), 633-655.
- National Treasury. (2015). Economic outlook.
Retrieved from www.treasury.gov.za/documents
- Naudé, W. (2013). Entrepreneurship and economic development: Theory, evidence and policy. *Evidence and Policy. IZA Discussion Paper*, (7507)
- Ndabeni, L. L. (2008). The contribution of business incubators and technology stations to small enterprise development in South Africa. *Development Southern Africa*, 25(3), 259-268.
- Nyankomo, M., & Stephen, Z. (2015). A review of Finance–Growth nexus theories: How does development finance fits in? *Studies in Business and Economics*, 10(1), 83-91.
- Oprea, G. (2015). Start up Enterprise–Preparation for putting into practice a business idea through its simulation. *Economic Insights-Trends & Challenges*, 67(3), 321-338.

- Ouriaghli, A., & Nsubuga, W. M. (2012). Enterprise architect's roles in a proactive enterprise development context-PED model for understanding the role of an enterprise architect in a proactive enterprise development context.
- Papagiannidis, S., & Li, F. (2005). Skills brokerage: A new model for business start-ups in the networked economy. *European Management Journal*, 23(4), 471-482.
- Paradkar, A., Knight, J., & Hansen, P. (2015). Innovation in start-ups: Ideas filling the void or ideas devoid of resources and capabilities? *Technovation*, 41, 1-10.
- Pereira, B. A., & Caetano, M. (2015). A conceptual business model framework applied to air transport. *Journal of Air Transport Management*, 44, 70-76.
- Pisano, P., Pironti, M., & Rieple, A. (2015). Identify innovative business models: Can innovative business models enable players to react to ongoing or unpredictable trends? *Entrepreneurship Research Journal*, 5(3), 181-199.
- Preisendörfer, P., Bitz, A., & Bezuidenhout, F. J. (2012). Business start-ups and their prospects of success in South African townships. *South African Review of Sociology*, 43(3), 3-23.
- Ramukumba, T. (2014). Overcoming SMEs challenges through critical success factors: A case of SMEs in the Western Cape Province, South Africa. *Economic and Business Review*, 16(1), 19-38.
- Raphael, A. I., & Gabriel, A. A. (2015). Effect of financial sector development on manufacturing output growth in Nigeria (1986-2012): A vector auto regression approach. *Journal of Applied Economics & Business Research*, 5(1), 38-53.
- Rauth Bhardwaj, D. B., & Wahi, S. (2013). Determinants of Institutional parameters for enhancing entrepreneurial environment in Indian context: A model for sustainable growth. *International Journal of Entrepreneurship & Business Environment Perspectives*, 2(3), 520-523.

- Reeves, M., Haanaes, K., Love, C., & Levin, S. (2012). Sustainability as adaptability. *Journal of Applied Corporate Finance*, 24(2), 14-22.
- Reynolds, P. D., Carter, N. M., Gartner, W. B., & Greene, P. G. (2004). The prevalence of nascent entrepreneurs in the United States: Evidence from the panel study of entrepreneurial dynamics. *Small Business Economics*, 23(4), 263-284.
- Ribeiro Soriano, D., Wagner Mainardes, E., Alves, H., & Raposo, M. (2012). A model for stakeholder classification and stakeholder relationships. *Management Decision*, 50(10), 1861-1879.
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). Qualitative research practice: A guide for social science students and researchers. Sage.
- Roman, A., & Rusu, V. D. (2012). The access of small and medium size enterprises to banking financing and current challenges: The case of EU countries. *Annales Universitatis Apulensis Series Oeconomica*, 2(14), 346-353.
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods*, 15(1), 85-109.
- Saunders, M., Lewis, P. & Thornhill, A. (2012). Formulating the research design. *Research methods for business students* (6th ed., pp. 158-190). England: Pearson.
- Schwab, K. (2014). The global competitiveness report 2014-2015. Geneva: *World Economic Forum*.
- Sefiani, Y., & Bown, R. (2013). What influences the success of manufacturing SMEs? A perspective from tangier. *International Journal of Business and Social Science*, 4(7), 297-309.
- Sibila Lebe and Matjaž Mulej, Sonja, Crnogaj, K., Rebernik, M., Bradac Hojnik, B., & Omerzel Gomezelj, D. (2014). Building a model of researching the sustainable entrepreneurship in the tourism sector. *Kybernetes*, 43(3/4), 377-393.
- Sidik, I. G. (2012). Conceptual framework of factors affecting SME development: Mediating factors on the relationship of entrepreneur traits and SME performance. *Procedia Economics and Finance*, 4, 373-383.

- Singer, S., Amoros, J. E., & Mosak, D. (2015). Global Entrepreneurship Monitor 2014: Global report. *London: Global Entrepreneurship Research Association.*
- Sloan, K., Klingenberg, B., & Rider, C. (2013). Towards sustainability: Examining the drivers and change process within SMEs. *Journal of Management and Sustainability, 3(2)*, 19-32.
- Sorrell, J. M., Cangelosi, P. R., & Dinkins, C. S. (2014). Dialog on a country path: The qualitative research journey. *Nurse Education Today, 34(3)*, 295-298.
- Steadman, M., Albright, T., & Dunn, K. (1996). Stakeholder group interest in the new manufacturing environment. *Managerial Auditing Journal, 11(2)*, 4-9.
- Stella, B., Aggrey, N., & Eseza, K. (2014). Firm size and rate of growth of Ugandan manufacturing firms. *Journal of Applied Economics & Business Research, 4(3)*, 222-243
- Sun, D., Hyland, P., & Cui, H. (2014). A designed framework for delivering systems thinking skills to small business managers. *Systems, 2(3)*, 297-312.
- Szirmai, A., & Verspagen, B. (2011). Manufacturing and economic growth in developing countries, 1950-2005.
- The Free Dictionary. Retrieved from <http://www.thefreedictionary.com/contribution>
- Tsai, S. D., & Lan, T. (2006). Development of a startup Business—A complexity theory perspective.
- Tsai, W. (2014). An exploratory study of entrepreneurship in Taiwan's small & medium Enterprises—Case studies of six manufacturing companies. *Information Management and Business Review, 6(2)*, 109-132.
- Velu, C. (2015). Business model innovation and third-party alliance on the survival of new firms. *Technovation, 35*, 1-11.

Wakkee, I., Barua, R., & Van Beukering, P. (2014). What about the entrepreneur?

How static business models drive and hinder the development of self-sustaining local energy access ventures. *Journal of Developmental Entrepreneurship*, 19(03), 145-154.

Wu, L. (2007). Entrepreneurial resources, dynamic capabilities and start-up performance of Taiwan's high-tech firms. *Journal of Business Research*, 60(5), 549-555.

Wynstra, F., Anderson, J. C., Narus, J. A., & Wouters, M. (2012). Supplier development responsibility and NPD project outcomes: The roles of monetary quantification of differences and Supporting-Detail gathering. *Journal of Product Innovation Management*, 29(S1), 103-123.

Xiao, L. (2011). Financing high-tech SMEs in China: A three-stage model of business development. *Entrepreneurship and Regional Development*, 23(3-4), 217-234.

Zott, C., Amit, R., & Massa, L. (2011). The business model:

Recent developments and future research. *Journal of Management*, 37(4), 1019-1042.

Appendix 1: Coding of participants - Entrepreneurs

| Participant | Job Title | Status | Code |
|-------------|-------------------------|------------|-------|
| 1 | Director | Co-owner | EntP1 |
| 2 | Chief Operating Officer | Co-owner | EntP2 |
| 3 | General Manager | Co-owner | EntP3 |
| 4 | Chief Operating Officer | Co-owner | EntP4 |
| 5 | Managing Director | 100% Owner | EntP5 |
| 6 | Chief Operating Officer | 100% Owner | EntP6 |
| 7 | Managing Director | 100% Owner | EntP7 |
| 8 | Chief Operating Officer | 100% Owner | EntP8 |

The interviewee numbers that are used in the table above relates to the order in which interviewees were conducted for the study, however it does not indicate the order of importance.

Appendix 2: Interview Guide for Dimension One – Entrepreneurs

1. Development

- 1.1 What are the key requirements for the development of manufacturing entrepreneurs in SA?
- 1.2 Which government agency did you approach for assistance during start-up of your business?
- 1.3 Which DFI funded the start-up of your business?
- 1.4 What assistance did you receive from an agency during start-up?
- 1.5 Besides the financial assistance what other help did you receive from DFI during start-up?
- 1.6 Did you receive any assistance from any of the large companies/OEM that you supply with your products during start-up?

2. Sustainability

2.1 How sustainable do you think your business is, particularly in these economic conditions?

2.2 Have you requested any further assistance from agencies and/or DFI's to ensure suitability of your business?

2.3 What kind of assistance do you think the following stakeholders can provide to you to ensure business sustainability?

- Government agencies
- DFI's
- Your customers (Large companies/OEM's)

3. Scaling Up

3.1 Does your business have a growth strategy?

3.2 Have you receive any further engagement with agencies and / DFI's in terms of your growth plans?

3.3 What assistance would you require from the following stakeholders in your quest to grow and scale-up your business?

- Government agencies?
- DFI's
- Your customers (Large companies/OEM's).

Appendix 3: Coding of participants – Development Finance Institutes (DFIs)

| Participant | Title | Code |
|-------------|---------------------------------|------|
| 1 | Strategic Business Unit Manager | DFP1 |
| 2 | Programme Manager | DFP2 |
| 3 | Senior Manager | DFP3 |

Appendix 4: Interview Guide for Dimension Two – Category A – DFIs

1. Development

1.1 What are the key requirements in your funding model for developing manufacturing entrepreneurs?

1.2 What are the key barriers to funding access for developing entrepreneurs in manufacturing sector?

1.3 Over and above the credit worthiness, what do you consider important for the entrepreneur in the manufacturing sector to have before being granted funding:

- Technical skills
- Financial skills
- Business acumen
- Other? Explain

2. Sustainability

2.1 What role does your institution play in ensuring that funded manufacturing entrepreneurs remain sustainable?

2.2 In your experience what are critical factors that contribute to failure of the manufacturing entrepreneurs?

3. Scale-up

3.1 What support does your institutions provide to entrepreneurs in manufacturing that wishes to scale-up their business?

3.2 What other factors do you think from financial point of view entrepreneurs need to consider when they scale-up?

Appendix 5: Coding of participants – Large Companies (OEMs)

| Participant | Title | Code |
|-------------|--------------------------------|-------|
| 1 | Chief Programme Manager | OEMP1 |
| 2 | Supplier Development Manager | OEMP2 |
| 3 | Enterprise Development Manager | OEMP3 |
| 4 | Operations Manager | OEMP4 |

Appendix 6: Interview Guide for Dimension Two – Category B – OEMs

1. Development

- 1.1 Does your organization has structures and procedures that support enterprise development?
- 1.2 What is your organization's criteria in selecting manufacturing entrepreneurs to be part of your enterprise development program?
- 1.3 What does your organization's enterprise development entails:
 - Investing time for the development of an enterprise?
 - Investing knowledge (i.e. skills) for development of enterprise?
 - Investing money to the enterprise development?
 - All of the above?

2. Sustainability

- 2.1 What role does your organization play in ensuring sustainability of enterprise in manufacturing sector?
 - Preferential procurement?
 - Preferential credit terms?
 - Early invoice payments?
- 2.2 In your view what do you think are the factors that contribute to failure of these entrepreneurs in this industry?

3. Scale-up

- 3.1 What help does your organization provide to the manufacturing entrepreneurs for them to scale up their business?