# Title page

Towards a collaborative approach to entrepreneurship development in the Information, Communication & Technology (ICT) sector

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A research project submitted to the Gordon institute of business science, University of Pretoria, in partial fulfillment of the requirements for the degree of master of Business Administration

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**Abstract**

This Research was undertaken to explore and better understand the approach employed by entrepreneurship development and support agencies in developing and supporting entrepreneurship in the ICT sector. In particular, the study intended to establish if the entrepreneurship development and support agencies in South Africa do employ a collaborative approach to entrepreneurship development in the ICT sector. The study was motivated by the low levels of entrepreneurship activity in the country (Herrington, Kew, & Kew, 2009), and the extent to which such could be attributed to lack of collaborative approach to entrepreneurship development.

The research was conducted, in Johannesburg through interviews with experienced managers of three of the entrepreneurship development and support agencies and questions asked on the usage of the variables to the constructs of collaborative approach to entrepreneurship development in the ICT sector.

The resulting findings showed very limited to no practice at all of the respective variables of collaborative approach to entrepreneurship development in the ICT sector. These findings also indicate that in certain instances, even the normal entrepreneurship development practices, let alone a collaborative approach, are not being practiced by some of the entrepreneurship development agencies.

## 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.

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Dumisani Lawrence Bengu

Date: 10 November 2010

## Acknowledgements

Special thanks goes to my wife, Teboho for her understanding, tremendous support and sheer restraints when our life was literally put on hold to allow me time and space to undertake and finalise my studies. This was particularly challenging as we got married on the 28th February, a weekend originally meant for my very first MBA exams and thus our honeymoon had to be postponed for the duration of the course.

To my children for giving me a reason to want to leave longer and prosperously in order to guarantee your success, thank you for the pain you took in forgoing all the family playtime and i can't wait to resume all of that joy soon. You all provide a motivation for me to keep trying harder.

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Last but not least to my supervisor, Dr Alex Antonites for being a source of inspiration and for highly motivational interventions when it looked like wheels were coming off at high speed, your guidance and push has been worth all the pain and i could not have wished for a better supervisor.

Thank you all for being part of this wonderful journey and the sanity you gave me when it looked like it was me against the world!!!

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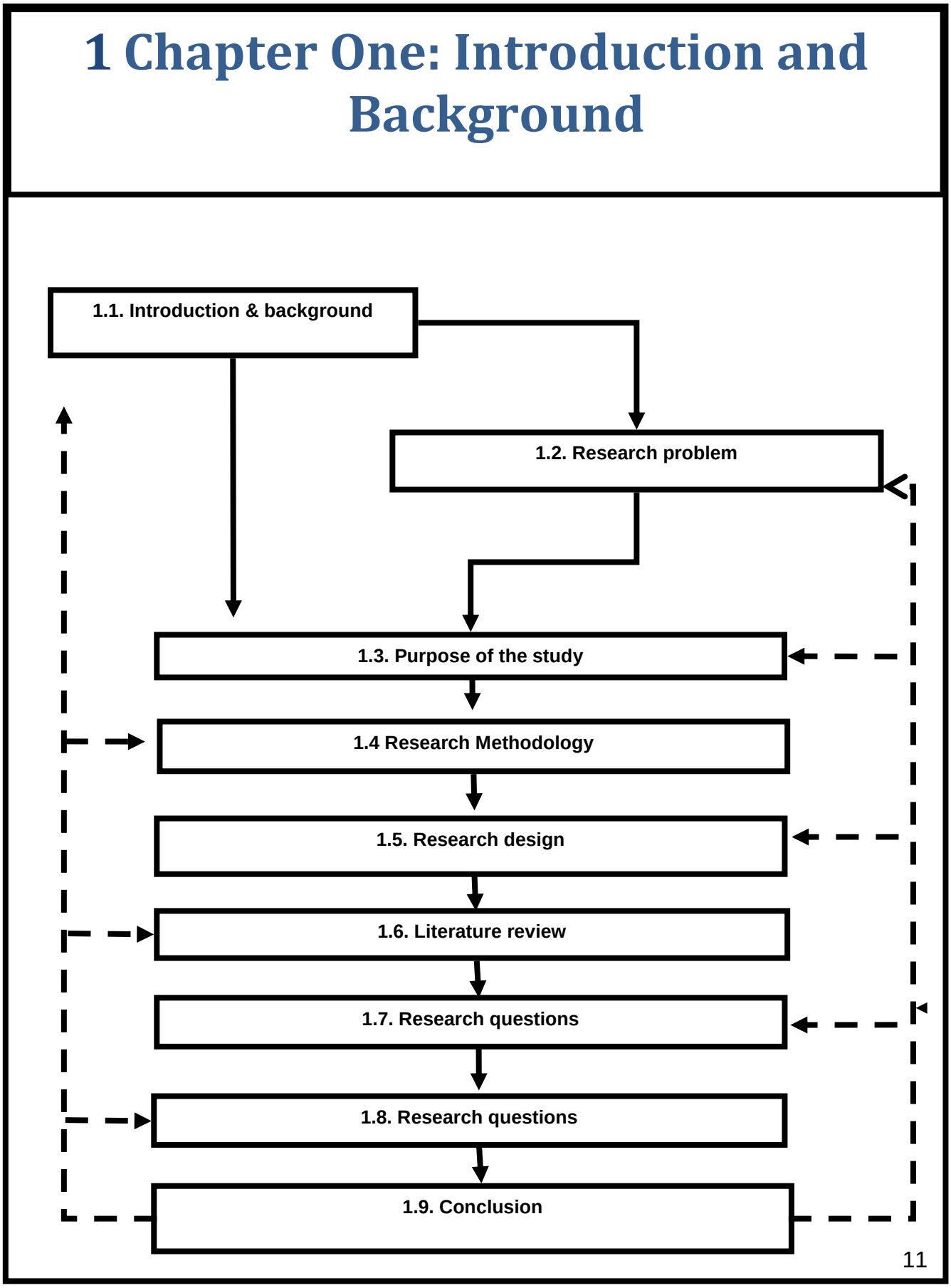





Figure 1: Chapter 1 roadmap: Adapted from Nyanjom, 2007

## 1.1 Introduction

Entrepreneurship has become one of the central points in the debate about black economic empowerment and economic growth in South Africa (Nieman & Nieuwenhuizen, 2009). In fact, Schumpeter, (1934) and Bird, (1989) state that economic development can be directly attributed to the level of entrepreneurial activity. This line of thought receives further support from various authors who observes that, the most significant factor for accelerated economic growth is true entrepreneurship, (Sanyang & Huang, 2010), (Acs, 2006), (Reynolds, Hay, Bygrave, Camp, & Autio, 2000), and also that the correlation between entrepreneurship and economic growth exceeds a correlation coefficient of 0.7, a figure that is highly statistically significant. Based on these observations, the researcher suggests that entrepreneurship activity must perform optimally in order to have a positive impact on economic development in the country.

In South Africa, a significant amount of entrepreneurial activity takes place within the small, medium and micro enterprises (SMME), which form 97.5% of all private sector businesses (Nieman & Nieuwenhuizen, 2009). The author goes to mention that this sector generates 35% of gross domestic product (GDP), contribute 43% of the total value of salaries and wages paid, and employ 55% of all formal private sector employees. The message from these statistics should be enough to make the small and medium sector, and by implication entrepreneurship, a key player in the economy of the country. This also supports the researcher's suggestion that it is critical for the sector to be developed and supported through effective entrepreneurship development and support programs in order to continue providing

a positive and improved contribution to the country's economic growth and unemployment reduction.

It is concerning to note that, the level of entrepreneurial activity in South Africa, at 7.8 % in 2008 (Maas & Herrington, 2008) and even less at 5.9% in 2009 (Herrington, Kew, & Kew, 2009). These figures are a concern because they fare poorly against proxy countries in the same category and level of economic growth as indicated by the Global entrepreneurship Monitor. The Global Entrepreneurship Monitor (GEM), measures entrepreneurial activity by collecting data on people in the process of setting up new businesses as well as those who own and manage running businesses (Maas & Herrington, 2008). This is done by capturing information on entrepreneurial attitudes, activity and aspirations in different phases of entrepreneurship, from general intentions through early stage entrepreneurial activity, to stature as established firms and index them in terms of the total entrepreneurship activity (TEA rate) (Maas & Herrington, 2008). A GEM model of entrepreneurship process is depicted on figure 2 below:

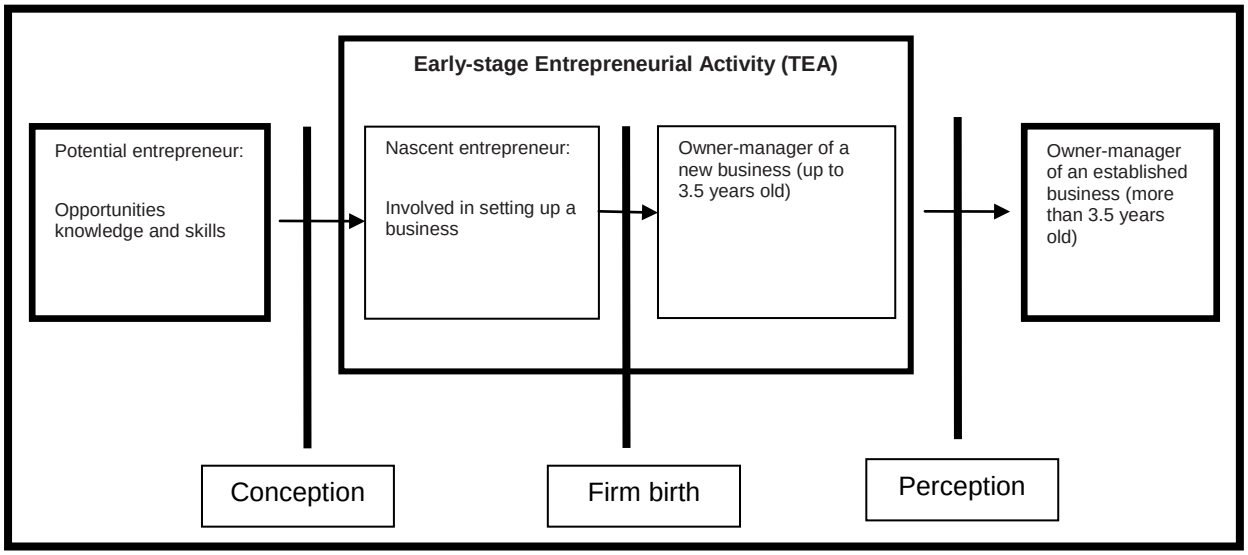



**Figure 2: The GEM Model of the Entrepreneurial process (Herrington, Kew, & Kew, 2009)**

The early stage entrepreneurship activity (TEA), which is an index used by GEM to measure entrepreneurship activity, indicates the prevalence of business start-ups (or nascent entrepreneurs) and new firms in the adult (18 to 64 years of age) population (Maas & Herrington, 2008), and is applied to a select countries to measure entrepreneurship activity a list of variables in terms of the GEM Model, as in figure 3 below.

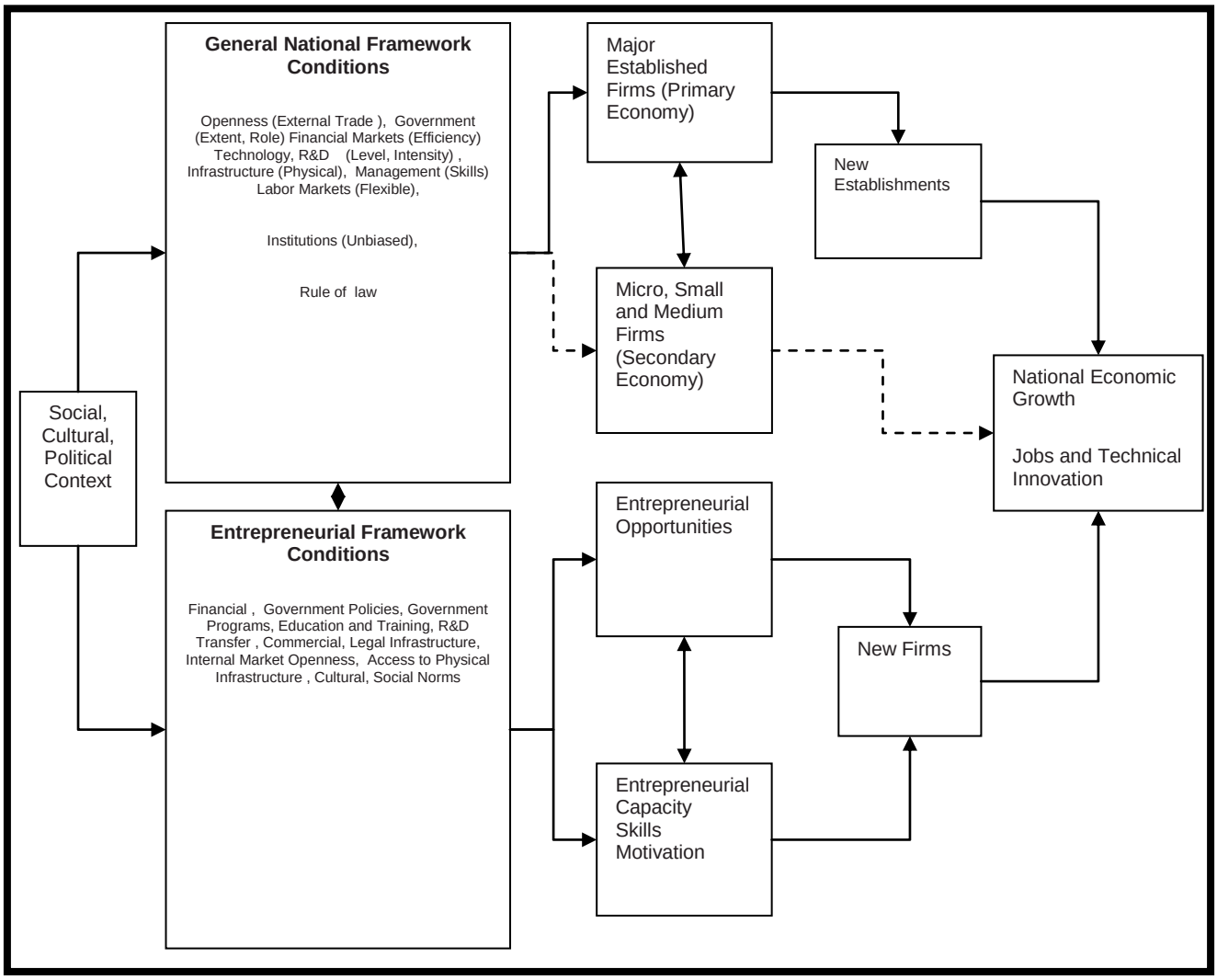



**Figure 3: GEM model, Source Acs, Arenius, Hay, Minniti, (2004)**

According to Maas & Herington (2008), the early stage entrepreneurship activity (TEA) rate for South Africa was scored at just 7.8% in 2008 and 5.9% in 2009. This score is low in comparison to some of the countries in the same category of efficiency driven economies as South Africa. It is lower than Mexico at 13.1% in 2008 and Brazil at 12.0% in 2008 respectively (Herrington, Kew, & Kew, 2009), (Maas & Herrington, 2008). The only countries being surveyed in the same category (efficiency driven economies) to score below South Africa are Turkey and the former Soviet Union states of Russia, Serbia, Latvia, and Romania where the entrepreneurship orientation has been suppressed by years of communist rule (Bosma, Acs, Autio, Coduras, & Levie, 2009). A country at South Africa's stage of economic development would be expected to have a TEA rate in the order of 13%, almost double South Africa's actual rate of 7.8% and 5.9 for the years 2008 and 2009. (Maas & Herrington, 2008), (Herrington, Kew, & Kew, 2009). The researcher is therefore convinced that this situation calls for a focussed approach which incorporates effective entrepreneurship development and support programs aimed at addressing the problem of entrepreneurship activity in South Africa and thereby improve economic performance, reduce unemployment and boost the country's competitiveness.

According to (Porter, 2008), the search for a nation's competitiveness and international success should lie in technology and skill intensive segments and industries, which underpin high and rising productivity. For South Africa, it makes sense therefore that the approach to entrepreneurship development and support should also focus on high technology and skills based ventures in order to contribute

to global competitiveness. South Africa was ranked in terms of the Global Competitiveness Index (GCI) at number 45 out of 134 countries in 2008 (World Economic Forum, 2009), and that figure deteriorated to number 54 out of 134 countries in the year 2009 according to the world economic forum (2010) . One of the efficiency enhancers is according to the global competitiveness report, technology readiness (World Economic Forum, 2009), which can be attained by amongst other stimulants, the existence of technology entrepreneurial firms and high levels of education in the country. The collaborative entrepreneurship development interventions should therefore contribute immensely in addressing issues of levels of education, new technology firms and the accompanying competitiveness and economic growth, according to the researcher.

## 1.2 Research problem

It is the intention of this research to establish if the entrepreneurship development and support agencies in the country do have effective programs to improve the level of entrepreneurship in the technology sector. In particular, the researcher is interested in studying the usage of collaborative approaches amongst the stakeholders in achieving this objective.

The problem in terms of this research is to determine if the entrepreneurship development and support agencies in South Africa, do engage in collaborative models and approach of entrepreneurship development and support to bring about new firm entry in the Information, Communication & Technology (ICT) sector. In this regard, the study endeavours to determine if the variables to the constructs of collaborative entrepreneurship development such as entrepreneurship, the

entrepreneurial process, collaborative entrepreneurship development and support models such as clusters, incubators, collaborative capabilities, franchising, and clan models, are being applied by the entrepreneurship development and support agencies to develop and support entrepreneurship in the ICT sector.

## 1.3 Purpose of the research

According to (Hanlon & Saunders, 2007) 'a key assumption… [of] entrepreneurial success is contingent upon the entrepreneur mustering and receiving support from other individuals'. They go on to define support as 'the act of providing an entrepreneur with access to a valued resource and a supporter as any individual who willingly performs such an act. This notion of entrepreneurial support is further advanced on a model of regional entrepreneurship development to influence regional economic development from the lessons of entrepreneurship support policies from German micro data sets (Wagner & Sternberg, 2004).

The purpose of this research is to determine the activities and operations of the entrepreneurship development and support agencies in South Africa and the approach that they apply in developing and supporting entrepreneurship in the ICT sector. In this way, the result of entrepreneurship which is the entry of ICT entrepreneurial firms (Nieman & Nieuwenhuizen, 2009), is used as the dependent variable (DV) and the variables to entrepreneurship, entrepreneurial process, entrepreneurial development models, and also the collaborative models of entrepreneurship development, are used as independent variables (IV) to determine if there is any usage of the independent variables by the entrepreneurship and or

enterprise development and support agencies in an attempt to influence the dependent variable (entry of new ICT firms).

## 1.4 Research methodology

According to Weman, Kruger, & Mitchel (2005: 2), research methodology is the process of considering and explaining the logic behind research methods and techniques, which allows the means to explore a phenomenon. Insight to this line of thought is further added by Cooper & Schindler (2006: 31), who states that 'through the use of methods and techniques that are scientifically defendable, we may come to the conclusions that are valid and reliable'.

The intention of this research is to describe and come up with scientifically defendable explanations, considerations and conclusions on the application of collaborative models of entrepreneurship development and support, to develop and support entrepreneurship in the ICT sector, and then make a finding on the utilisation of the collaborative models to develop and support the achievement of the results of entrepreneurship in the ICT sector, which should be new ICT entrepreneurial firms.

In this regard, a qualitative research method, using experience survey design is used to collect data. Having collected this data, analytical methods are used to describe the scope of the actual usage of collaborative models of entrepreneurship development in the ICT sector by entrepreneurship development and support agencies to bring about new entrepreneurial ICT firms in South Africa.

## 1.5 Research design

The research design provides the glue that holds the research project together (Trochim, 2006). A design is used to structure the research, show how all of the major parts of the research project such as the samples or groups, measures, treatments or programs, and methods of assignment work together to address the central research questions (Trochim, 2006). In terms of this research, the experience survey design was chosen as an effective method to answer the relevant research questions. The purpose of the experience survey method is to obtain information from knowledgeable managers who have had personal experiences in the field of the researcher's problem situation (Zikmund, 2003). It is expected that the account of their organization's experiences in this regard shall give an indication on the usage and extent thereof, of collaborative models of entrepreneurship development to support and develop the entry of entrepreneurial ICT firms.

The agencies involved in entrepreneurship development and support and some of its support service providers in South Africa, are selected for study and questions asked on the nature, character, and scope of collaborative models of entrepreneurship development and support on their activities, through interviews carried out with some of their managers. The results of interviews in question are subjected to analysis in order to describe the nature, and scope of their activities and operations, against the variables to the constructs of collaborative models/ approach of entrepreneurship development and support.

The descriptive analysis of this data is based on descriptive research tools. Descriptive research is a scientific method which involves observing and describing

the behavior of a subject without exercising any influence on it in any way possible (Cooper & Schindler, 2006). It is a method of research, in which information is collected without a particular question in mind (Casadevall & Fang, 2008). The descriptive research methods includes reporting and summarizing data in terms of measures of central tendency which include means, median, mode, deviance from the mean, variation, percentage, and correlations between variables (Zikmund, 2003). The descriptive statistical methods are therefore chosen to facilitate description and explanation of the activities of the entrepreneurship development and support agencies in developing and supporting entrepreneurship in the ICT sector.

## 1.6 Literature review

The examples of collaborative models of entrepreneurship development and support includes those described by Rocha & Miles, (2009) as an Aristotelic–Thomistic approach to collaborative entrepreneurship within and across communities of firms operating in complementary markets. These include collaborative networks (Shuman & Twombly, 2009), clusters (Bouwman & Hulsink, 2002), incubators (Caravannis & von Zedwitz, 2003), and franchising (Beshel, 2001). These models are used to provide variables of collaborative models, and those variables are extrapolated to form the independent variables to be matched against the dependent variable (entry of new ICT firms) in investigating the usage of collaborative models of entrepreneurship development by entrepreneurship development agencies in developing and supporting entrepreneurship in the ICT sector. A summary of various

collaborative models of entrepreneurship development is provided on the paragraphs below.

### 1.6.1 The collaborative networks

The collaborative networks provide an innovative capability that allows for the harnessing of strategic competencies. Innovation today is said to be occurring in the very definition of an organization, its boundaries, and how it interacts with its stakeholders and communities, and in this regard organisations have been forced by globalisation to move away from silo identities and operations, forcing them to build collaborative network relationships and thereby harness joint capabilities to gain competitive advantage (Shuman & Twombly, 2010), (Rocha & Miles, 2009), Camarinha-Matos & Afsarmanesh, 2008). The extent to which these joint capabilities can provide variables for collaborative activity in developing entrepreneurship shall be explored and applied in this research as independent variables.

### 1.6.2 Clusters

According to (Bouwman & Hulsink, 2002), (Porter, 2008) clusters can be defined as a geographically proximate group of firms and associated institutions in related industries, linked by economic and social interdependences. The best known of these clusters such as Silicon Valley and route 28, provides examples of collaborative activities to be used in this study. The researcher shall use the variables to the cluster model, to provide independent variables to the collaborative entrepreneurship development construct.

### 1.6.3 Incubators

According to (Caravannis & von Zedwitz, 2003), incubators have often served as catalysts and even accelerators of entrepreneurial cluster formation and growth. The Authors mention further that incubators are the types of programs designed to support the successful development of entrepreneurial companies. This is done through business support resources and services, which are developed and implemented by the incubator and often through third party service providers. They argue that this may be more so in less developed economies where incubators can help bridge knowledge, digital, socio-political and even cultural divides and help increase the availability, awareness, accessibility and affordability of financial, human, intellectual, and even social capital; variables that are the key ingredients of entrepreneurial success. Incubation is a method of fast-tracking the growth of early stage businesses, improving the survival rate of start-up companies by helping their financial viability within a short period of time (Chen, Ma, & Chang, 2007). They do this by combining technology, capital and specialized knowledge to accelerate new companies development by providing affordable space, shared support services, and business development services; an environment conducive to enterprise creation, survival, and early stage growth; bridge knowledge and skills gap, provide the service access to the usage of Universities and its facilities (Chen, Ma, & Chang, 2007). The researcher shall draw on the lessons from incubator models and formulate the independent variables to the construct of collaborative approach to entrepreneurship development and support.

### 1.6.4 Franchising

Franchising is defined by the International Franchise Association (IFA) as 'a contractual relationship between the franchisor and the franchisee in which the franchisor offers or is obliged to maintain a continuing interest in the business of the franchisee in such areas as know-how and training; wherein the franchisee operates under a common trade name, format or procedure owned by or controlled by the franchisor, and in which the franchisee has made or will make a substantial capital investment in his business from his own resources' (Beshel, 2001), (Castrogiovanni, Combs, & Justis, 2006)

This type of relationship harnesses the collaborative capabilities of two parties to bring about new firms. According to (Miles & Hector, 2008), some of these activities are undertaken by various multinational corporations entering developing countries where they can only make it work through collaborative capabilities. The concept of franchising is but one of the strategies of multinational and other companies used to enter and grow new markets but generally, the reasons behind decisions to franchise are often based on resource scarcity and agency theories (Castrogiovanni, Combs, & Justis, 2006). According to the resource scarcity theory, firms often franchise their businesses in their early years because they lack the managerial expertise and capital needed to grow (Combs & Ketchen, 2003), and on the other hand franchisees can provide both. Agency theory on the other hand portends that franchising is adopted when there is a benefit of minimizing agency costs due to the best available alignment between management incentives and firm's objectives (Rubin, 1978). This research attempt to learn from such collaborative activities as provided by the

franchising system, and develops the variables to assess the application of such by entrepreneurship development and support activities by entrepreneurship development agencies in this study.

## 1.7 Research questions

This study has formulated two questions to be asked in addressing the research problem the questions being asked are as follows:

### 1.7.1 Question 1.

Do entrepreneurship development and support agencies in South Africa use collaborative models of entrepreneurship development such as collaborative networks, clusters, incubators and franchising effectively to improve entrepreneurship in the ICT sector?

### 1.7.2 Question 2

Which variables of the models of entrepreneurship development and support such as collaborative networks, clusters, incubators and franchising, are used by the entrepreneur and or enterprise development and support agencies in bringing about new firm entry in the ICT sector?

## 1.8 Research objectives

The research has formulated primary and secondary objectives as indicated below to provide direction and flow guide for this study.

### 1.8.1 Primary objective

The primary objective is to determine whether the entrepreneurship development agencies in South Africa do use collaborative models of entrepreneurship development to develop and support new enterprise entry in the ICT sector.

### 1.8.2 Secondary objectives

Based on the primary objective, the study developed secondary objectives, which are to determine the following:

- To determine the scope of collaboration models being applied by the entrepreneurship development agencies in promoting new firm entry in the ICT sector.
- To propose the nature and character of collaborative models that could be applied in developing and supporting entrepreneurship in the ICT sector.

## 1.9 Conclusion

The level of entrepreneurship activity in South Africa performs at levels lower than those required to have an acceptable contribution to economic growth, unemployment reduction and improvement in the competitiveness of the country. The TEA rate needs to be improved by amongst other factors effective entreprenership development and support practices. It is therefore important to establish if collaborative models of entrepreneurship development are being practiced by entrepreneurship development agencies in order to improve this. Once that has been established, it might be possible to deduce that the level of

entrepreneurship activity can be improved by employing collaborative models of entrepreneurship development and support.

# 2 Chapter Two: Literature Review

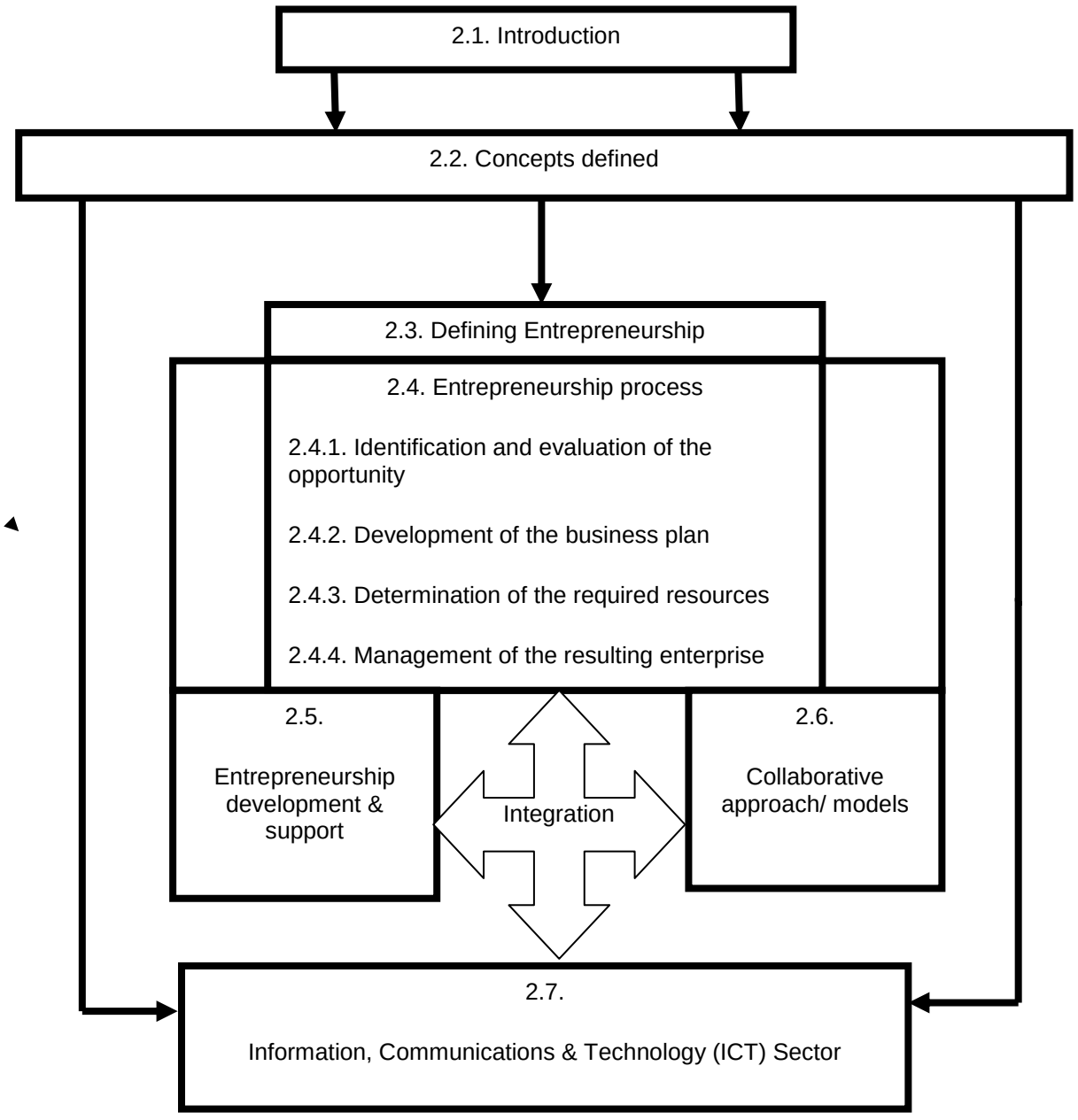





Figure 4: Chapter two: Adapted from Nyanjom ( 2007)

## 2.1 Introduction

The literature review is structured and based on the various concepts of this study. In this regard, the constructs and concepts are defined, explained and applied in a clarity seeking and explanatory way to put context to the study. These concepts are reflected in the road map on figure 4 above as entrepreneurship, entrepreneurial process, entrepreneurial development and support, collaborative approach and the information, communications and technology (ICT) sector.

## 2.2 Concepts defined

Concepts and its embedded constructs can be referred to as the building blocks of any theoretical model (Weman, Kruger, & Mitchel, 2005). It is an abstraction representing a phenomenon, an object or certain properties (Welman et al, 2005:20). According to Cooper and Schindler (2006:36), a concept is a generally accepted collection of meanings or characteristics associated with certain events, objects, conditions situations and behaviors. It is therefore clear from the views of the authors above that concepts provide the basis of communication, and a means to group, classify and generalize on certain attributes. Concepts were therefore used on this study to provide a base for literature review, perspective on various literature attributes, and as a means to provide meaning to entrepreneurship properties, entrepreneurial process classifications, entrepreneurial development events, objects of collaborative models, conditions and behaviors under which collaborative entrepreneurship development occurs.

The term construct derives from the verb construe, which refers to a process of abstraction whereby properties are attributed to events or, in effect poses some

meaning on those events (Plank & Greene, 1996), (Elaydi, 2006). The authors explain further that the mental process of construing constitutes a process of interpreting the environment in order to make sense of it. A construct therefore refers to the operationalisation in the study. It could be said to refer to an alternative word for a complex psychological concept (Plank & Greene, 1996). It is on the basis of observed similarities between constructs and situations, that individuals form inferences in regard to patterns and themes of behavior concerning other people, roles, expected actions, events, etc to which meaning can be assigned (Elaydi, 2006).

In order to provide clarity and direction to this research, it is imperative to distinguish and explain the concepts and constructs that form the body of this study. The concepts and constructs to be defined are entrepreneurship, entrepreneurship process, entrepreneurship development & support, collaborative approach and models and finally information, communications and technology sector (ICT). These concepts and or constructs are therefore defined below.

## 2.3 Defining Entrepreneurship

Entrepreneurship is defined by various authors as the creation of new economic activity (Low & Macmillan, 2001), (Shane & Venkataraman, 2000), often resulting in the creation of new organisations (Schumpeter , 1934, 1975), (Gartner W. , 1989) or the pursuit of innovation (Schumpeter, 1934, 1975).

Ma & Tan, (2005 pp. 705-706) refers to entrepreneurship as a ‘particular type of mindset, a unique way of looking at the world, a creative kind of adventure, and the

ultimate instrument toward self realization and fulfilment. The authors go on to explain that at the heart of entrepreneurship lies the desire to achieve, the passion to create, the yearning for freedom, the drive for independence, and the embodiment of entrepreneurial visions and dreams through tireless hard work, calculated risk-taking, continuous innovation, and undying perseverance. Finally, they refer to people who dare such dreams and commit their spirit, soul, and entire life's work to realize their dreams as a privileged bunch that they call entrepreneurs.

Whilst these authors seem to offer different versions of the definition of entrepreneurship and generally lack consensus, there are a few concepts of similarity that can be extracted from each of their arguments such as creativity, innovation, entrepreneurial mindset, need for success, and exploitation of opportunities, risk appetite and initiative by individuals in pursuit of value. Lack of consensus in this area is further exemplified by a number of OECD reports where entrepreneurship is defined from a pure Knight 'an perspective as, ' anyone who works for him or herself, but not for someone else' (Iversen, Jorgensen, & Malchow-Moller, 2008), a Kirzner'ian approach where the entrepreneur is said to have 'the ability to marshal resources to seize new business opportunities' (Iversen, Jorgensen, & Malchow-Moller, 2008), towards a Schumpeterian inspired definition where entrepreneurship is 'the dynamic process of identifying economic opportunities and acting upon them by developing, producing, and selling goods and services' (Iversen, Jorgensen, & Malchow-Moller, 2008).

According to Nieman & Nieuwenhuizen (2009), entrepreneurship is the emergence and growth of new businesses.

For the purposes of this research, the researcher takes a holistic definition that incorporates most of the variables indicated above and define entrepreneurship as 'the process in which pioneers, innovators or champions of innovation, immersed in and guided by the creativity-oriented perspective, engage in the practice of creation and innovation driven activities, which lead to certain levels of performance as indicated by the realized creation and innovation (Ma & Ta, 2005). This definition is further reflected as a 4 P model of entrepreneurship in figure 3 below:

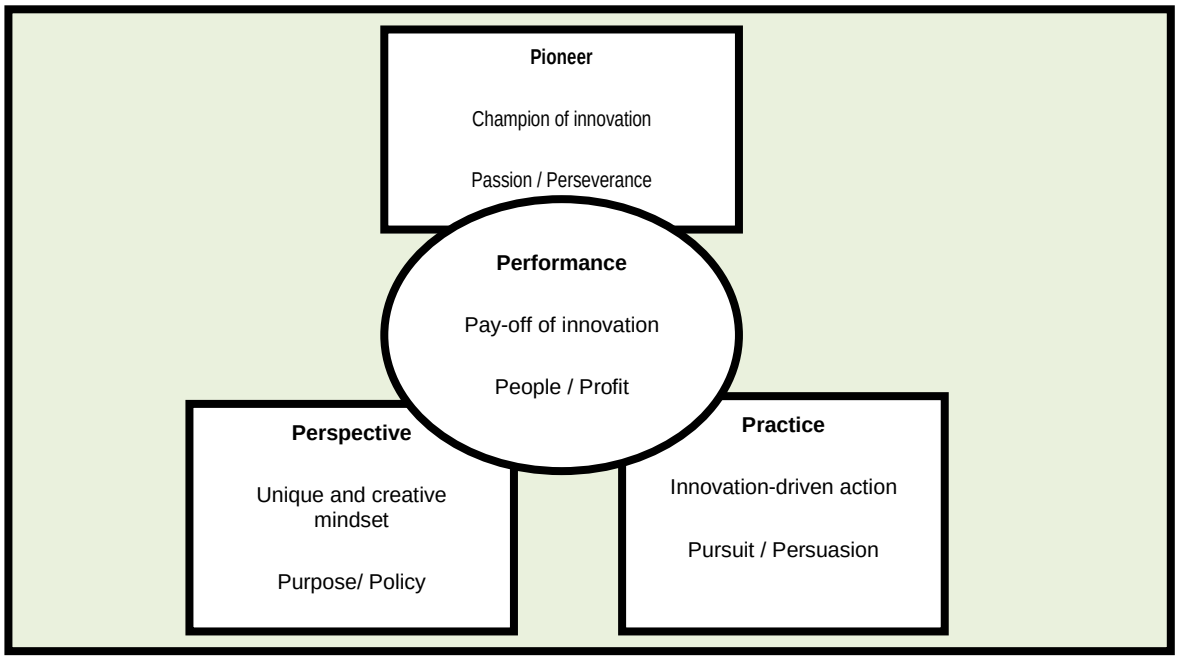



**Figure 5: The 4P Model of Entrepreneurship, Source Ma & Tan (2006)**

## 2.4 The entrepreneurial process

According to Hisrich, Robert, Michael, Peters, Dean, and Shepherd (2005), the entrepreneurial process encompasses four distinct phases such as follows:

- Identification and evaluation of the opportunity
- Development of the business plan,
- Determination of the required resources,

- Management of the resulting enterprise.

Nieman & Nieuwenhuizen (2009) concurs with these phases and provide more detail by adding the concept of getting started (pp. 155-169) and financing an entrepreneurial venture (pp171-214). This line of thought is further supported by Ma & Tan, (2006), when they refer to entrepreneurship as a construct with variables of pioneer (the entrepreneur, innovator or champion for innovation); perspective (entrepreneurial mindset); practice (entrepreneurial activities); and performance (the result of entrepreneurship). These concepts are explained in detail on the paragraphs below.

### 2.4.1 Identification and evaluation of the opportunity

The process of identification and evaluation of the entrepreneurial opportunity involves creativity and innovation. The creativity and innovation process involves according to Nieman & Nieuwenhuizen (2009), Ma & Tan (2005), and Shane & Venkataraman (2000), phases of idea generation or discovery process, invention or viability assessment and finally innovation or transformation and implementation as indicated in figure 6 below.

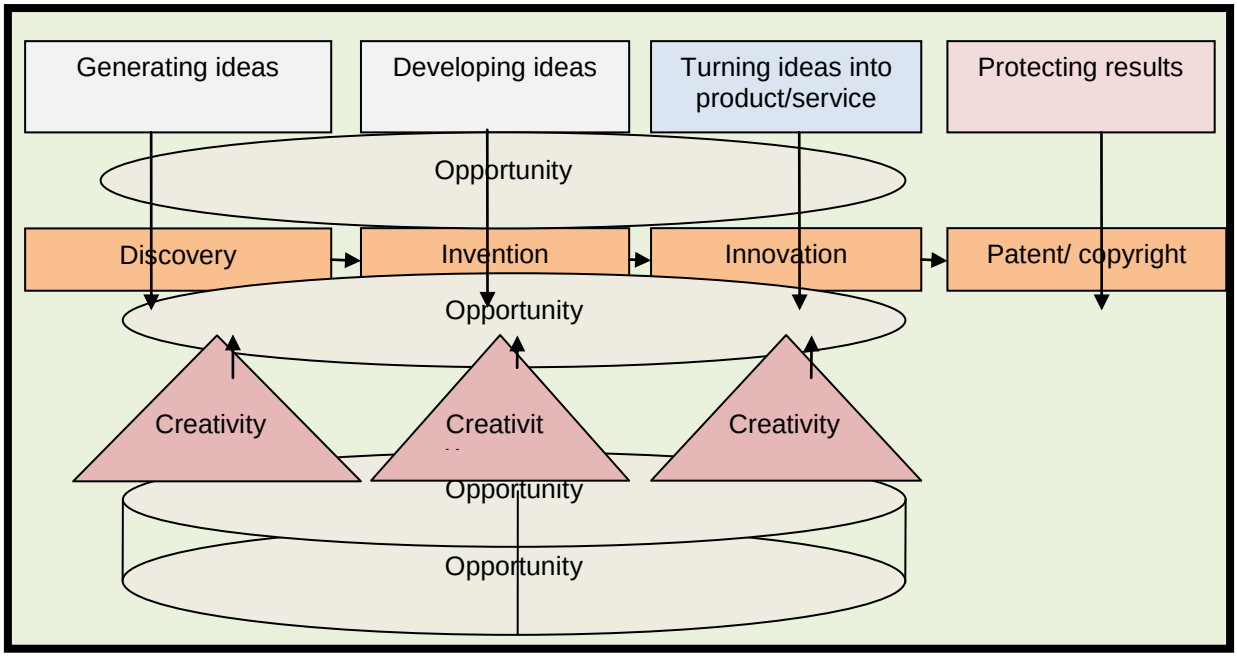



**Figure 6: The process of developing an innovation: Source Nieman & Nieuwenhuizen, 2009**

Couger (1995), advances that creativity is a concept that has the interaction of variables such as person, product and process within a particular environmental context. The author postulates the model of creativity as the 4P's of innovation which include person, process, product and press or the environment as in figure 7 below.

Person

According to Nieman & Nieuwenhuizen (2009), the person in this regard engages in creativity influenced by three attributes which are expertise, motivation, and creative thinking skills. They go on to mention that creativity can be influenced by attributes such as creativity myths, environmental barriers, cultural barriers, and perceptual barriers (Morgan, 1997). Ultimately, the decision to exploit the opportunity involves weighing the value of the opportunity against the costs to generate that value (Venkataraman, 1997).

The process

The process involves idea generation, invention, innovation, and invention protection (Nieman & Nieuwenhuizen, 2009), (Ma & Tan, 2005), and this process is reflected in figure 6 above.

The product

The product is a result of a creative process. According to Nieman & Nieuwenhuizen (2009), Ma & Tan (2005) and McGrath & MacMillan (2000), the ultimate product would have started with the problem or gap in the market that would stimulate a creative process to solve such problem. Ideas would be generated, evaluated and the suitable ones subjected to product development process resulting in a new and innovative product (Hisrich et al 2005). Once the product has been developed, it becomes an intellectual property that can be legally protected in order to secure the economic benefit that may arise out of it. The legal protection in this regard can be in the form of patents, trademarks, registered designs, unlawful competition laws, copyright, licenses, etc (Nieman & Nieuwenhuizen, 2009).

The press (Environment)

Nieman & Nieuwenhuizen, (2009), in his reference to factors blocking creativity refers to barriers such as environmental, cultural and perceptual barriers. They argue that environmental barriers can consist of the social, economic and physical environments (Morgan, 1997). The authors are further supported by (Baez & Abolafia, 2002) and (Wagner & Sternberg, 2004), list examples of these environmental barriers as follows:

Social forces

The challenges of understanding and support for new ideas among friends and family in the community may also pose a constraint. In this regard, the propensity for risk taking may not be allowed, autocratic decision making structures within families which forbids children from making decisions may be a challenge and cultural barriers or inhibitions may also be an inhibition in terms of entrepreneurial activity (Baez & Abolafia, 2002), (Morgan, 1997).

Economic environment

The economic conditions may not lend themselves to new ideas and venture creation. In this regard, general lack of financial support for development of new ideas and lack of incentives for new and feasible ideas coupled with low appetite for risk are often an inhibiting factor for entrepreneurial activity (DTI, 2005), (Baez & Abolafia, 2002).

The physical environment

Location distractions such as noise, climate and lack of energy on the part of the surrounding environment and people are also a consideration when reviewing the environment for entrepreneurship activity (Brutom, Ahlstrom, & Li, 2010), (Stevenson & Lundstrom, 2001). The Authors go on to mention that conventional venues in education and training environment are not always conducive to innovation & creativity as they are not designed for this activity. This is in addition to general work and home routine which are also not always amenable for fresh new ideas and this poses a hindrance to entrepreneurial activity (Nieman & Nieuwenhuizen, 2009).

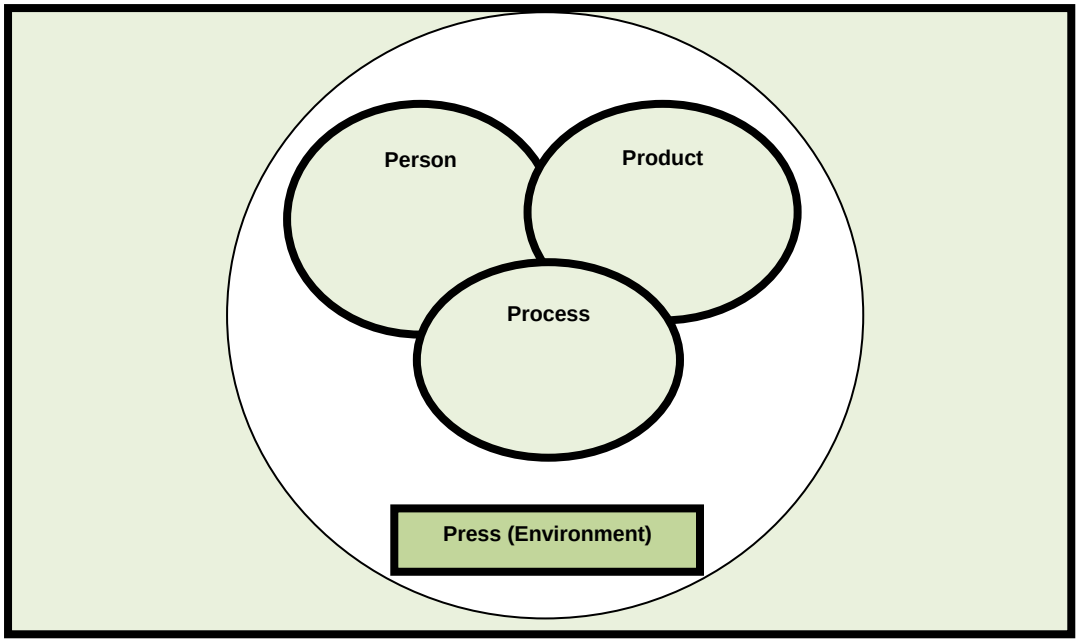



Figure 7: The 4 P model of creativity ( Nieman & Nieuwenhuizen, 2009)

### 2.4.2 Development of a business plan

The business plan is a written document that spells out where the business is heading and explains in detail how it is going to reach that destination (Nieman & Nieuwenhuizen, 2009), (Hisrich, Peters, & Sheperd, 2004). A business plan is a useful document in any business because it is used to obtain funding, used as a tool to manage and reduce risk and also serves an internal purpose of giving a roadmap for the business to focus its resources and activities (Nieman & Nieuwenhuizen, 2009), (Brinckmanna, Grichnik, & Kapsa, 2008). Although there are many formats that can be used to formulate a business plan, the areas that needs to be covered generally involves cover sheet, table of contents, Summary, Products and services plan, marketing plan, operations plan, management plan, financial plan and lastly appendices of specimen, assumptions and other attachments (Hisrich, Peters, & Sheperd, 2004).

### 2.4.3 Determination of the required resources

The resources needed for exploiting the business opportunity must be determined (Hisrich et al, 2005), (Brinckmanna, Grichnik, & Kapsa, 2008). The process of determination of these resources involves also appraising the entrepreneurs on the extent to which he or she can provide these and also sources where these resources can be drawn from. These resources come in many forms and can involve categories such as finance, human resources, physical resources, networks and information (Hisrich, Peters, & Sheperd, 2004) (Nieman & Nieuwenhuizen, 2009), (Ma & Tan, 2005).

### 2.4.4 Getting started and running the resultant enterprise

Once the process of determining and identifying sources of resources has been followed, it is incumbent upon the entrepreneur to use the particular resources acquired to implement the business plan (Hisrich et al, 2005) (Brinckmanna, Grichnik, & Kapsa, 2008). At this stage, the operational problems of the growing enterprise must also be examined. This involves implementing a management style and structure, as well as determining the key variables for success. Nieman & Nieuwenhuizen, (2009), Ma & Tan, (2005), Hisrich et al (2004), declares that ‘the management of the risks involved needs to be evaluated and attention given to aspects such as total quality management. They go on to propose that aspects such as ethical considerations also need to be focused on and managed. In this regard, a control system must therefore be established, so that any problem areas can be quickly identified and resolved (Hisrich et al, 2009), (Brinckmanna et al, (2008).

Finally, the entrepreneur needs to finance the entrepreneurial venture. In this regard he or she needs to determine financial requirements and the sources prepare and submit a bankable business finance application to the chosen financial institution and or venture capitalist (Ma & Tan, 2005).

## 2.5 Entrepreneurship development & support

Nieman & Nieuwenhuizen, (2009), supported by Ma & Tan (2006) postulate a model of entrepreneurial development as possessing entrepreneurial orientation, a supportive environment and cooperative environment. They project a model of entrepreneurial development as represented in figure 8. Entrepreneurial development and support can be said to refer to the value that accrues from networking, counseling, mentoring, business incubation, creating an enabling environment for small business and the role that is played by different stakeholders in creating an environment conducive for entrepreneurial venture creation. The entrepreneurial development model in figure 8 encompasses entrepreneurship orientation, supporting environment and cooperative environment, which promotes the entry of entrepreneurs, who possess inherent and acquired abilities to develop products and services that results in entrepreneurial venture (Nieman & Nieuwenhuizen, 2009). The model of entrepreneurship development provides key variables to be used by the researcher in establishing the usage of collaborative models of entrepreneurship development by entrepreneurship development agencies.

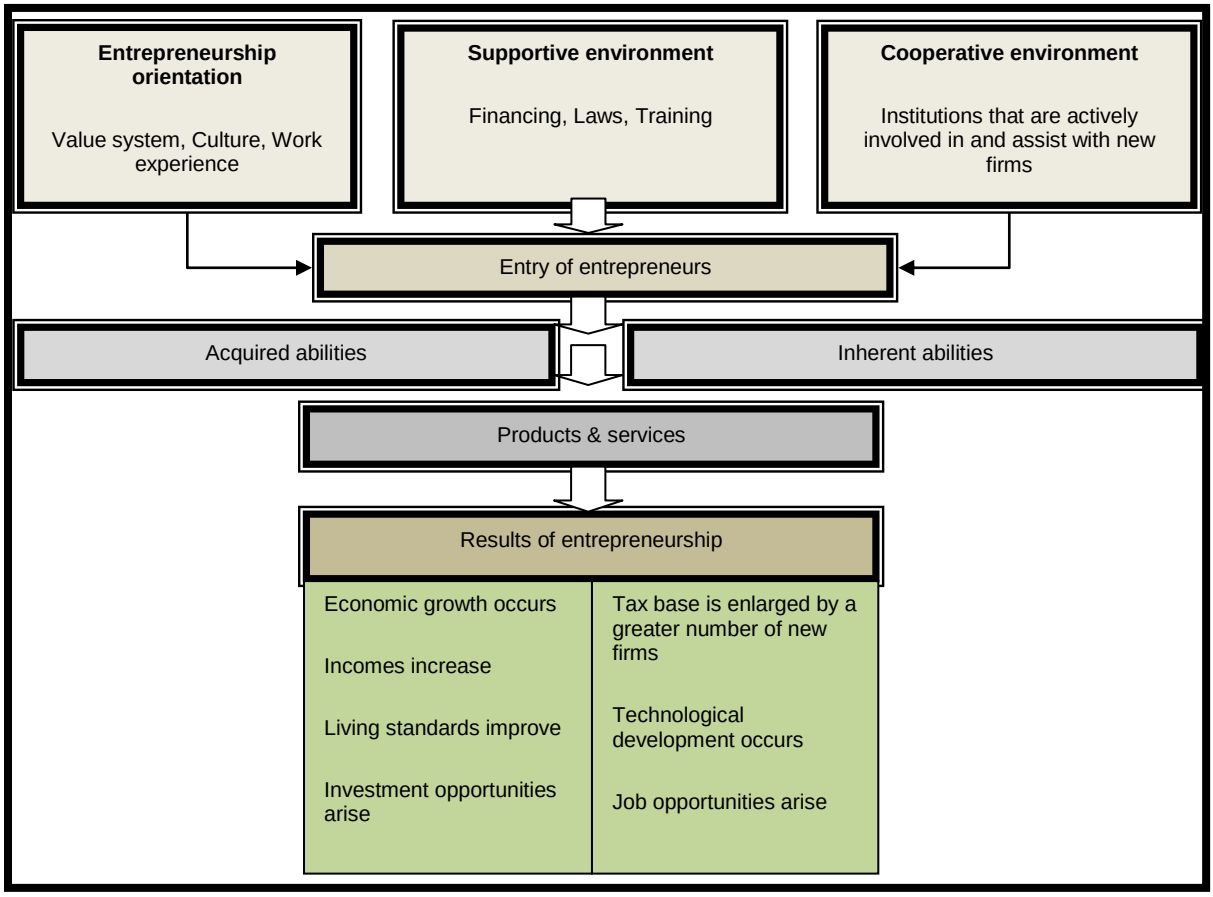



**Figure 8 :A model of Entrepreneurship development (Nieman & Nieuwenhuizen, 2009) - Adapted from (Maasdorp & Van Vuuren, 1998: 720)**

This model is further corroborated by Low (2005), as providing critical elements in developing and supporting entrepreneurship. The ddetails of these activities are summarized by the authors in the paragraphs below as follows:

### 2.5.1 Entrepreneurial orientation

Entrepreneurial orientation consist of a blend of factors which includes culture, family & role models, education, work experience and personal orientation (Zahra & Filatotchev, 2004). These factors play a critical role and can be influential I a

person's propensity to engage in entrepreneurial activities through support, influence, role modeling, and network effects, etc.

Culture

Culture is perhaps the most important and most difficult to deal with. The stigma that is attached to failure in start up businesses may take away the motivation to want to start in the first place. High avoidance of uncertainty (Zahra & Filatotchev, 2004) especially in communities with high power distance takes away the decisiveness necessary to start a business. The culture of collectivism especially in African communities also takes away the individual disposition to act in a manner influenced by a quest for individual gain and differentiation, which may limit entrepreneurship activity (Nieman & Nieuwenhuizen, 2009), (Ma & Tan, 2005), (Baez & Abolafia, 2002), (Wagner & Sternberg, 2004).

Family and other role models

Family lineage and activities tend to influence the tendency of children growing in that family when it comes to career choice. Children growing up in families with business interests are more likely to want to pursue the entrepreneurship route (Baez & Abolafia, 2002), , (Ma & Tan, 2005) (Wagner & Sternberg, 2004) than children growing up in families without entrepreneurial and or business interests.

Education

There is a notion that entrepreneurship can be learned and in this regard, education plays a pivotal role. The skills in terms of business management and growth, which are so important in entrepreneurship, can be acquired through education. An

educational curriculum that teaches learners to become employers rather than employees is also important in entrepreneurial development (Nieman & Nieuwenhuizen, 2009), (Wagner & Sternberg, 2004), (Ma & Tan, 2005), (Baez & Abolafia, 2002).

Work experience

Work experience equips individuals with skills and knowledge that enables them to see a gap when it exists in the market. With the knowledge and experience acquired at the work place, they are then able to apply it to satisfy the gap in the market and thereby engage in entrepreneurship activity (Baez & Abolafia, 2002), (Ma & Tan, 2005), (Wagner & Sternberg, 2004), (Nieman & Nieuwenhuizen, 2009).

Personal orientation

This is an individual perspective that is based on personal dynamics such as creativity and innovation, autonomy, risk appetite, pro-activeness and competitive aggressiveness (Baez & Abolafia, 2002). It highly unlikely, that an individual without this orientation will engage in entrepreneurship activity (Baez & Abolafia, 2002), (Ma & Tan, 2005), (Wagner & Sternberg, 2004).

### 2.5.2 Supportive environment

This refers to an environment favorable to entry for entrepreneurs. This can take the form of infrastructure and regulatory regime. The questions to be asked are whether there are roads, telecommunications, power and technology in existence to cater for the needs of the economic activity. The question is do the laws of the country inhibit or promote the ease of doing business and opening of new businesses? The

business support services such as business advice centers, counseling agencies, mentoring services, finance providers, training institutions, incubators and clusters are important in promoting entrepreneurship. (Nieman & Nieuwenhuizen, 2009), (Burtress & Macke, 2008), (Stevenson & Lundstrom, 2001). The authors explain that an environment that contains effective supportive institutions is more likely to achieve better performance in entrepreneurial development than one that does not.

### 2.5.3 Cooperative environment

A cooperative environment can be one that boasts characteristics of a coordination model. From a descriptive point of view, a coordination model describes the management of dependencies between organizational activities (Omicini & Ossowski, 2004). The authors explain further that interrelation among these activities is modeled as a Producer / consumer dependency, which can be managed by inserting additional notification and transportation actions into the workflow to bring about improved entrepreneurial performance.

Skurnik & Vihriala, (1999) supports this view by declaring that cooperation presupposes agents that have goals and can act upon them. Moreover, cooperation among agents entails that these agents have some common goals and specifically act towards their fulfillment. This is an area of entrepreneurship that should coordinate the activities of all the stakeholders in the entrepreneurship value chain. The stakeholders in question may include academic institutions, large firms, non-governmental organizations, support service providers and also government whose

role would be creating an enabling environment (O Donnel, Gilmore, Cummins, & Carson, 2001).

According to (Nieman & Nieuwenhuizen, 2009), (Gartner, 2009) academic institutions should do research to increase the body of knowledge on this new science. The authors proceed to declare that large firms and non-governmental organization should empower communities through community social investments to offer services that are on their blind spot or are not big enough to be carried out economically by them. Government should create an enabling environment through a regulatory regime that removes obstacles and make it easier for entrepreneurs to gain entry (Porter, 2008).

### 2.5.4 Entry of entrepreneurs

Entry for entrepreneurs can be affected by the typical business and economic conditions affecting all other businesses. The factors that affect entry in general are listed by Baye, (2009) adapted from Porter, (1980) as entry costs, speed of adjustment, sunk costs, economies of scale, network effects, brand reputation, switching costs and government restraints. All of these attributes have to be seriously considered and capacity built to tackle then in order for entrepreneurial activity to succeed. According to Nieman & Nieuwenhuizen, (2009), (Burtress & Macke (2008), business entry is fundamentally a different activity than managing a business, and entrepreneurship education must address the equivocal nature of business entry. They argue further that ‘the integrated and applied nature, specific skills, and business life cycle issues inherent in new ventures differentiate

entrepreneurship from traditional business (Nieman & Nieuwenhuizen, 2009), (Schumpeter 1934, 1975), and therefore by implication, entrepreneurship entry needs a specialized attention and support to succeed. According to Ireland, Hitt, & Simon (2003), exploiting entrepreneurial opportunities contributes to the firm's efforts to form sustainable competitive advantages and create wealth.

### 2.5.5 Abilities: Acquired and inherent

The abilities refer to the human capacity and capability that is required for entrepreneurial activity to take place. This capacity is inherent in the sense that the entrepreneurs must possess and espouse originally whilst some other abilities can be acquired. The inherent abilities entails according to Nieman & Nieuwenhuizen, (2009), and supported by Ireland, Hitt, & Simon (2003) creativity & innovation, risk orientation, leadership, good human relations, positive attitude, perseverance and commitment. The authors suggest that these are success factors or personal characteristics that entrepreneurs should originally possess or have. They go on to argue that it is important for entrepreneurs to analyze themselves to know exactly what their strengths and weaknesses are so that they can then capitalize on their strengths and develop their weaknesses.

Over and above the personal characteristics that entrepreneurs should originally have, Zahra & Filatotchev (2004) postulates that entrepreneurs need to possess, acquire or develop managerial competencies such as planning, organizing, controlling, knowledge of competitors, market orientation, client service, quality focus, financial insight and management, business knowledge and skills and the use

of experts (Kanniainen & Poutvaara, 2007). These two attributes provide space for entrepreneurial development in terms of skills upgrade and the role of academic and training institutions.

### 2.5.6 Products and services

The products and services offered must be such that their time has come, the window of opportunity is still open and there is potential for gaining competitive advantage (Nieman & Nieuwenhuizen, 2009), (Jiao, Ma, & Tseng, 2003). Competitive advantage can be achieved if the product or service contains characteristics such as uniqueness, good product attributes, good customer experience, convenience, and value for money as reflected in figure 9 below (Oliva & Kallenberg, 2003), (Nieman & Nieuwenhuizen, 2009).

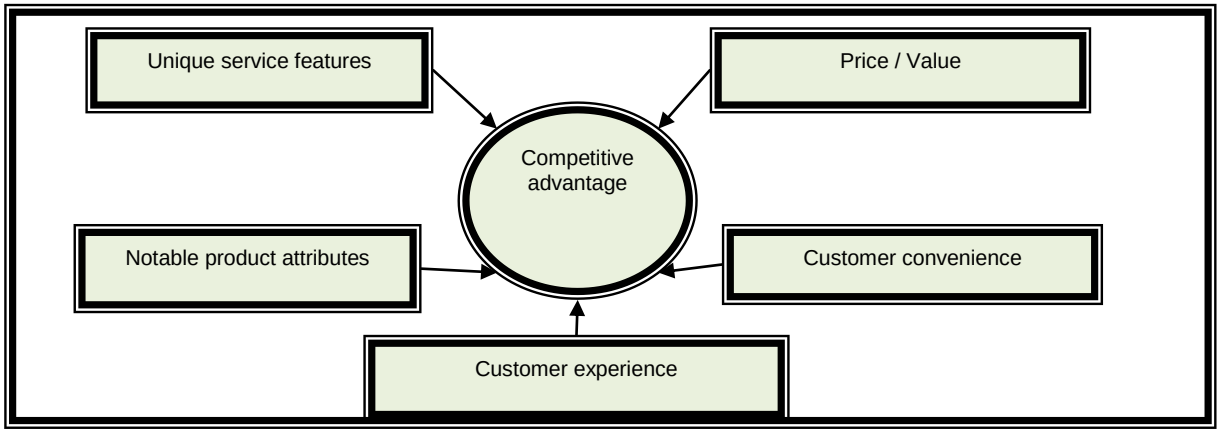



**Figure 9: The bases of competitive advantage (Nieman & Nieuwenhuizen, 2009)- Adapted from Small business Management and Entrepreneurial emphasis with CD rom, 12th edition by Longnecker, Moore & Petty**

### 2.5.7 Results of entrepreneurship

The results of entrepreneurship are listed by Nieman & Nieuwenhuizen (2009), Audretsch & Keilbach (2007 ) as eeconomic growth, income increase, living standards improvements, investment opportunities larger tax base, technological

development, and more Job opportunities. A collaborative approach to entrepreneurship development should therefore take into consideration the desired results of entrepreneurship and ensure that they are the ultimate goal of interventions.

## 2.6 Collaborative approach to entrepreneurship development

### 2.6.1 The collaborative approach: Definition

According to the South African Oxford dictionary (2006), the term collaborative is a derivative of the term ‘collaborate’, which means work jointly together on an activity or project. The term approach is defined by the South African pocket Oxford dictionary (2006) as to ‘start to deal with in a certain way’. It goes on to explain approach as a ‘way of leading to a place’. The term collaborative approach can therefore be defined, using a combination of these definitions, as a method of working jointly together on an activity or project in a way that leads to a particular place or destination, which for the purposes of this research must be entrepreneurship activity. The collaborative approach can include various models such as collaboration networks, the clan model, clusters, incubators, collaborative capabilities share, and franchising.

### 2.6.2 The collaboration networks

According to Shuman & Twombly (2010), Rocha & Miles (2009), collaboration happens in a network, as organizations open themselves up to a variety of stakeholders and communities. The authors explain that a network is dynamic and

"fit for purpose," entity with the ability to change the components and how they relate to each other legally and operationally. It is a way of harnessing the strength of contributors, the network benefits and connects all parties in new and innovative ways (Shuman & Twombly, 2010), (Rocha & Miles, 2009), (Camarinha-Matos & Afsarmanesh, 2008). The benefit the of collaboration are noted by the authors to lie in the five factors of a successful collaboration, which are a unifying purpose, value proposition, economic opportunity, organizing mechanism and collaboration intensity depicted in the model of collaborative networks in figure 10 below.

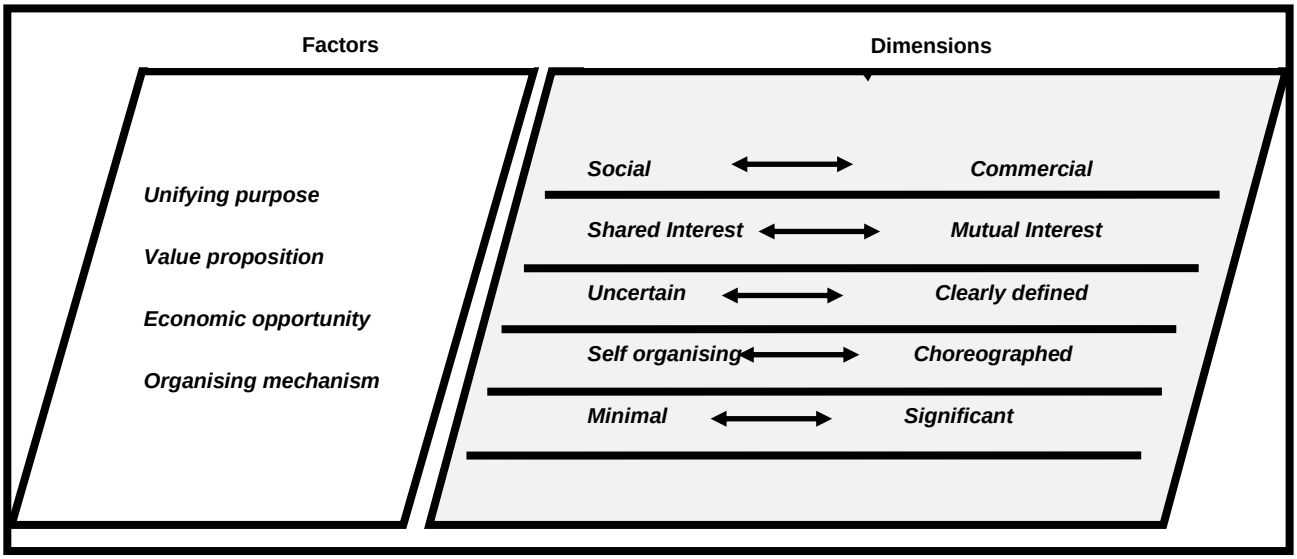



**Figure 10: Model of Collaborative Networks, Source Shuman & Twombly**

## Unifying purpose

The unifying purpose is why the collaborative network comes together. The purpose is what the network choreographer and members hope to accomplish by giving of their time, energy, and currencies. The unifying purpose is the goal for the network choreographer. It is why the network is organized. For members of the network, achieving the goal may be a means to achieving their own individual objectives

(Shuman & Twombly, 2010), (Agranoff, 2006). In terms of collaborative entrepreneurship development, the goal is entrepreneurship entry and the network must work towards the attainment of this goal.

Value proposition

The value proposition describes the exchange of goods, services, relationship currencies and other resources that occurs within a collaborative network (Agranoff, 2006). To be collaborative and function as a network, relationship currencies must be integral to the overall value proposition (Shuman & Twombly, 2010).

The economic opportunity

The economic opportunity describes how well the network has established a way of monetizing the value proposition, including the collective currencies of the network members (Agranoff, 2006), (Shuman & Twombly, 2010).

The organizing mechanism

The organizing mechanism is the method through which the people and entities that are members of the network come together and govern (manage) themselves (Agranoff, 2006), (Shuman & Twombly, 2010).

The collaboration intensity

The collaboration intensity is defined by the degree to which activities are coordinated, information of appropriate relevance, quality, and timeliness are shared, and participant's resources are leveraged for the benefit of all parties (Bititci, Martinez, & Albores, 2004), (Agranoff, 2006).

There are few important factors that determine the success of collaborative networks and those factors are listed by Shuman & Twombly (2010), Agranoff (2006), (Bititci, Martinez, & Albores (2004) as follows:

- *Organizations and people only actively engage in collaboration when the benefit they derive is greater than the time and effort it takes to collaborate.*
- *Collaborative networks are fit for purpose and the purpose determines how the network is structured.*
- *Every network must have a choreographer or the individual or entity that organizes the network and is responsible for achieving the purpose of the network.*
- *There must be governance as the system for managing the joint and individual work of the collaboration. Governance principles have both structural and behavioural components as in table 1 below*
- *Innovation, both in organization design and in management*

**Table 1: Collaborative Network Governance Framework, Source Shuman & Twombly (2010)**

| Structural Elements | Behavioural Elements |
|---|---|
| Committee Composition | Communication Protocols |
| Roles and Responsibilities | Meeting Management |
| Decision Making Authority | Decision Making Norms |
| Escalation | Conflict Resolution |
| Milestones | Evaluation |
| IP Rights | Review Processes |

The collaborative networks provide an innovative capability that allows for the harnessing of strategic competencies (Camarinha-Matos & Afsarmanesh, 2008). Innovation today is said to be occurring in the very definition of an organization, its

boundaries, and how it interacts with its stakeholders and communities (Agranoff, 2006) (Bititci, Martinez, & Albores, 2004). The pressures of globalisation forces organisations to move away from silo identities and operations, forcing them to build collaborative network relationships and thereby harness joint capabilities to gain competitive advantage (Shuman & Twombly, 2010). A model of collaborative networks is provided on figure 11 below and indicates various components of collaborative networks. The components in question include partners, joint ventures, suppliers, affiliates and strategic alliances. The components get involved in a complex relationship with both your organisation and customers including third party organisations and thus create a collaborator network that encompasses all relevant stakeholders.

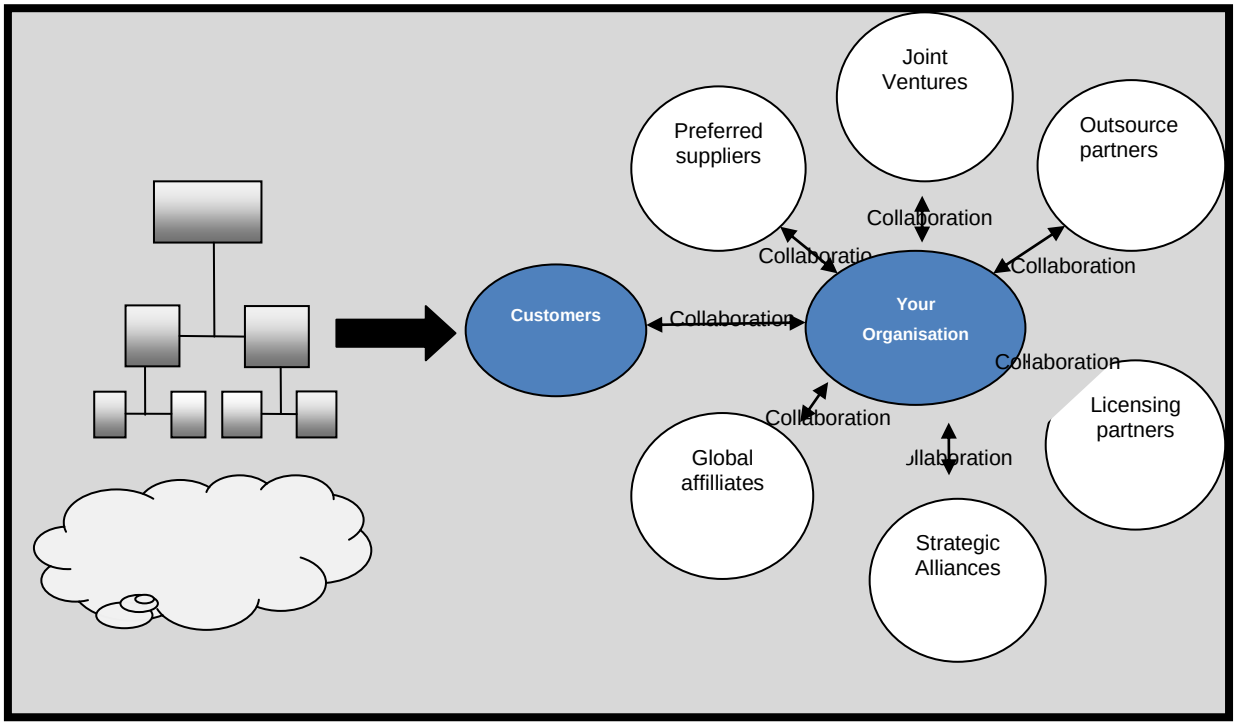



Figure 11: Structure of collaborative networks, Source Shuman & Twombly, 2002

### 2.6.3 The clan model and the role of third party organizations

The roots and history of the market–hierarchy–clan model can be traced back to the pioneering works of a number of authors which includes Lindblom (1977), Williamson (1975), Baez & Abolafia (2002) and Ouchi (1980). This is particularly true of the early work of Williamson which outlined markets and bureaucracies as resource allocation systems in the societies where they serve as rule-making systems. In this regard, the rules of supply and demand, which determine the allocation of goods and services in bureaucracies, administrative structures, policies and procedures, are replaced by rulemaking systems which serve to allocate resources or incentives, prices, exchange and opportunism due to the need to control inefficiencies, discourage collusion and provide services when pure market-place rules would not work.

Ouchi's concept of the clan suggests another dimension or domain for rule making and resource allocation which is critical in simplifying the world entities live in (Baez & Abolafia, 2002). The formal institutions in civil society, churches, political groups, associations and advocacy organisations are advanced as a conduit of rule-making systems that can lead to better efficiencies in bringing about the desired outcome.

The concept of being explicit about values and objectives, while integrating environmental and stakeholder interests,…[as in these rule making systems ] is at the heart of corporate citizenship (Waddock, 2004),and could help institutionalise and promote entrepreneurship development. The concept of self regulation and rule making system on the clan model is reflected in annexure A.

Collaborative approach can also refer to a way of providing a rules set for the community by the community itself. Boddewyn (1989) notes that the overlap between self-regulation and other forms of social control is necessary to the extent that a good part of the law reflects generally accepted community and market standards.

As an innovation, self-regulation signifies a movement away from strictly adversarial relations between business and government to a way of joining hands and lead the industry in the direction that take the interests of players into account. It is also a way that entrepreneurship could be developed through defining rules of entry, ethical standards of operation and provision of advocacy for the profession. In this way some of the inhibiting factors of entrepreneurship such as risk can be managed and support services such as entrepreneurial finance lured into the sector since financiers and other service providers have their risk shared with the industry advocacy institution. Annexure A provides the context for collaboration and control from a theoretical point of view.

### 2.6.4 Collaborative approach to entrepreneurship development and support

The nature and characteristics of entrepreneurship development collaboration models are described by Rocha & Miles (2009) as an Aristotelic–Thomistic approach to collaborative entrepreneurship within and across communities of firms operating in complementary markets. Adopting a scholarship of integration approach, and supported by Boddewyn (1989), Camarinha-Matos & Afsarmanesh (2008),they argue that the sustainability of inter-organizational communities depends on how rich

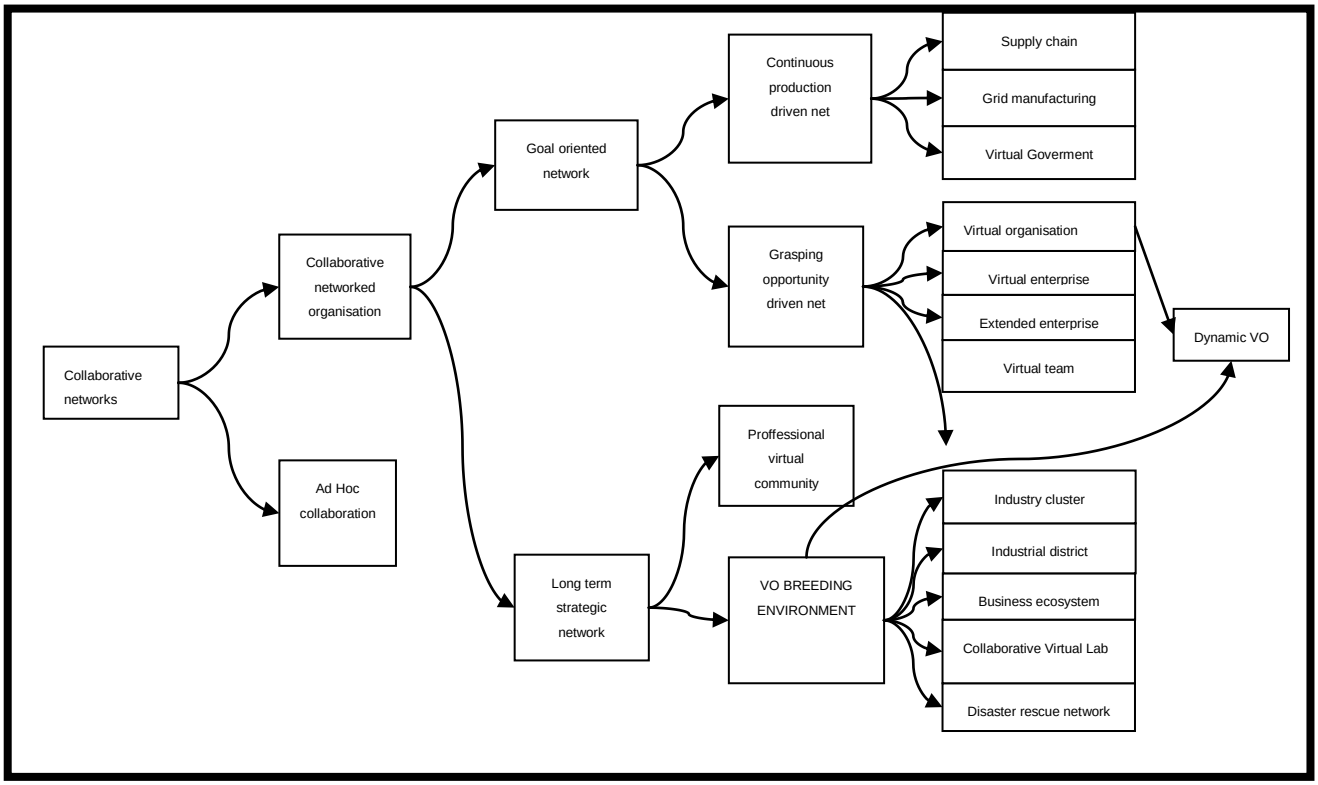



**Figure 12: A Model of Collaborative networks, Source (Camarinha-Matos & Afsarmanesh, 2008)**

is the set of assumptions about human nature upon which they are based. According to Brutom, Ahlstrom, & Li (2010), issues such as culture, legal environment, tradition and history in an industry, and economic incentives form the basis of these assumptions can impact an industry and, in turn, entrepreneurial success in a collaborative relationship. A model of collaborative networks is depicted on figure 12 above.

### 2.6.5 Clusters

According to Bouwman & Hulsink (2002), the most inspirational and well-known clusters in the field of Information and Communication Technologies (ICT) are Silicon Valley, Route 128, Massachusetts and Silicon Alley (New York). The authors elaborate its support from others by stating that these clusters are based on the

spontaneous cross-fertilisation between local universities and research laboratories and established high-technology companies through dominant practices such as subcontracting non-core business activities, partnering in research and product development, permanent intra- and entrepreneurship, and practising knowledge diffusion by job-hopping and the creation of spin-offs (Porter, 2008).

A cluster can be defined as 'the geographical concentration of mutually interdependent companies with vertical as well as horizontal, and with co-operative as well as competitive relational patterns, companies that in addition operate within the same branch or on the basis of the same basic technology' (Bouwman & Hulsink, 2002), (Porter, 2008). The reason for creating such clusters is amongst others to 'develop new industries as a national policy, to regenerate a declining or stagnant region, and to develop a milieu of innovation' (Bouwman & Hulsink, 2002), (Rocha & Sternberg, 2005). According to the authors the high tech cluster model contains aspects of innovative ideas and concepts, high-tech entrepreneurs, the clustering of supply and demand, the creation of technology networks, the clustering of investors, local authorities and knowledge centres, Socio-institutional embedded-ness, and Increasing returns (chance & necessity), (McQuai, 2002), (Rocha & Sternberg, 2005) These aspects play a big role in high tech clustering and are represented in figure eleven below:

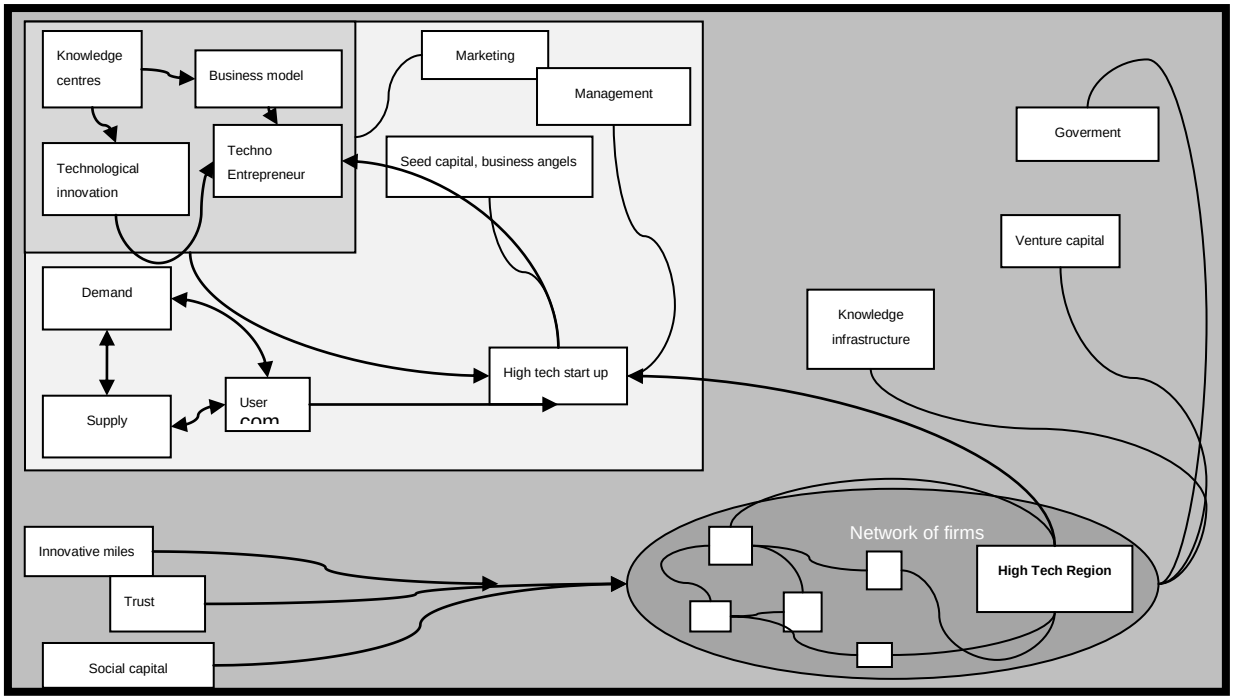



Figure 13: A dynamic model of Cyber- Entrepreneurship and cluster formation, Source Bouwman & Hulsink, 2002

### 2.6.6 Incubator model

Incubation fast-tracks the growth of early stage businesses, improving the survival rate of start-up companies by helping them become financially viable, usually within two to three years (Chen, Ma, & Chang, 2007). The authors explain further that incubation is a concept that creates an environment where entrepreneurs can share learning, create working partnerships and do business together and it helps to open doors to markets and resources. Incubation also creates a synergistic environment where entrepreneurs can share learning, create working partnerships and do business together and it helps to open doors to markets and resources. According to Caravannis & Von Zedtwitz, (2003), entrepreneurship is at the heart of sustainable, organic growth for most developed, as well as transitioning and developing economies and incubators have often served as catalysts and even accelerators of

entrepreneurial cluster formation and growth. They go on to argue that this may be more so in less developed economies where incubators can help bridge knowledge, digital, socio-political and even cultural divides and help increase the availability, awareness, accessibility and affordability of financial, human, intellectual and even social capital, the key ingredients of entrepreneurial success. The authors see incubation as having recently experienced increased attention as a model of start-up facilitation. This is because venture capitalists see incubators as a means to diversify risky investment portfolios, while would-be entrepreneurs approach incubators for start-up support (Caravannis & Von Zedtwitz, 2003). The authors suggest the existence of five incubator archetypes which are as follows:

- The university incubator
- The independent commercial incubator
- The regional business incubator
- The company-internal incubator
- The virtual incubator

Caravannis & Zedtwitz (2003) go on to propose an overarching incubator model that synthesizes elements and best practices emanating from the five archetypes empirically identified and also incorporates substantially higher economies of scale and scope, as well as global and local (gloCal) knowledge arbitrage potential. They present an architectural blueprint for designing a gloCal, real and virtual network of incubators (G-RVIN) as a knowledge and innovation infra-structure and infra-technology which would link entrepreneurs and micro-entrepreneurs with local,

regional, and global networks of customers, suppliers and complementary and thus help not only bridge, but also leverage, the diverse divides (digital, knowledge, cultural, socio-political, etc.).

### 2.6.7 Collaborative capabilities

Rocha & Miles (2009) refers to activities undertaken by various multinational corporations entering developing countries where they can only make it work through collaborative capabilities. In such cross-sector partnerships, parties contribute complementary capabilities along each stage of the value chain to develop products or services that neither could produce alone, creating and delivering value in novel ways while minimizing costs and risks (Ireland, Hitt, & Simon, 2003), (Rocha & Miles, 2009). Beyond contributing to particular value chain activities, NGOs and companies can offer missing capabilities to complete each other's business models, or even co-create new and innovative multi-organizational business models (Ireland, Hitt, & Simon, 2003), (Shuman & Twombly, 2010), (Rocha & Miles, 2009). They go on to stress various strategic imperatives for the success of corporate-NGO developing market partnerships which are innovative combinations of firm and NGO resources and skills; the importance of trust-building, and of fit between the two organizations' goals; and supporting and understanding the local business infrastructure and environment. Collaborative capabilities are also a basis for other collaborative models of entrepreneurial development such as franchising where parties contribute varying capabilities for mutual benefit.

### 2.6.8 Franchising

The International Franchise Association defines a franchise as ‘a contractual relationship between the franchisor and the franchisee in which the franchisor offers or is obliged to maintain a continuing interest in the business of the franchisee in such areas as know-how and training; wherein the franchisee operates under a common trade name, format or procedure owned by or controlled by the franchisor, and in which the franchisee has made or will make a substantial capital investment in his business from his own resources’ (Beshel, 2001)

Franchising can also be a form of marketing and distribution in which the franchisor grants to an individual or company (the franchisee) the right to run a business selling a product or providing a service under the franchisor's business format and identified by the franchisor's trade mark or brand. A modern franchise includes a format for the conduct of the business, a management system for operating the business and a shared trade identity.

Franchising can be described as a pooling of resources and capabilities. The franchisor contributes the initial capital investment, know-how and experience; the franchisee contributes the supplementary capital investment, motivated effort and operating experience in a variety of markets. Franchising is a comprehensive business relationship, not just a buyer-seller relationship (Mathewson & Ralph, 1985).

There is considerable interdependence between the franchisor and the franchisee. A business format franchise is where the franchisor licenses a business format,

operating systems and trademark to his/her franchisees. The franchisor does not always sell products to the franchisee (Beshel, 2001), The franchise value chain, which underlies the strategy for franchising is hereby depicted on figure fifteen below.

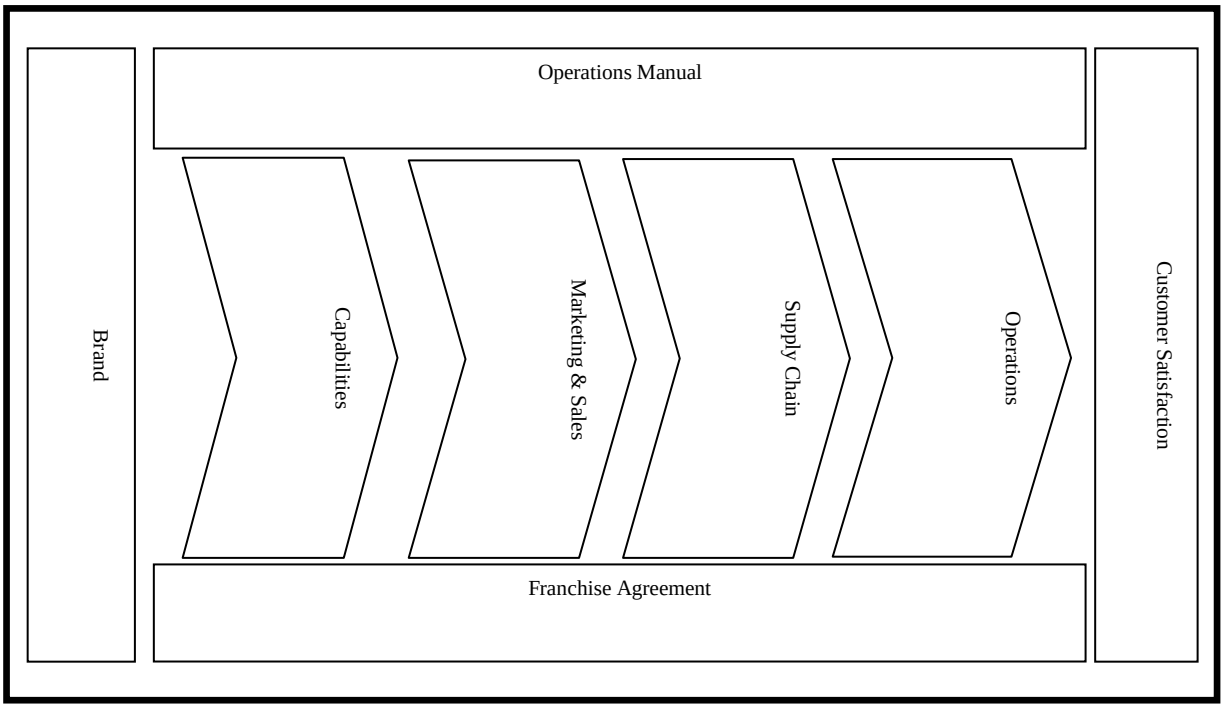



**Figure 14: The Franchise Value Chain Source: Own adaptation from (Porter , 1985)**

## 2.7 The information, communications and telecommunications (I.C.T) sector

According to the (Oxford, 2006), a sector is 'a distinct part of the economy, society, or field of activity. In terms of definitions in the ICT charter, the term "ICT" is said to define Information and Communication Technology as a combination of manufacturing and services industries that capture, transmit and display data and information electronically' (Mpofu, 2002).

### 2.7.1 The ICT cluster

The South African Information Technology (IT) sector is analyzed in this paper in the context of the Information and Communication Technology (ICT) due to the fact that IT is a subset of the ICT sector. (Intoweb, 2010) States that the ICT industry encompasses participants in the following spheres, namely:

- Telecommunications services and equipment manufacture;
- Computer hardware;
- Software development, and;
- IT professional services such as consulting.

South Africa is the leader of the ICT sector in the African continent (South Africa Info, 2010). This highlights the progress that has been achieved in growing this sector over the years. South Africa is also the 20$^{th}$ largest consumer of IT products and services globally (South Africa Info, 2010).

According to (Mait, 2009), South Africa accounts for 0.6% of the world's ICT revenues while the ICT sector contributes 6.4% of South Africa's GDP (Gauteng Economic Development Agency, 2010). The activities performed within this sector are scattered across the provinces in South Africa. Gauteng is the most economically active province in South Africa, and accounts for at least 40% of the country's GDP followed by the Western Cape and KwaZulu Natal (Mait, 2009). More than two thirds of the South African ICT industry is based in the Gauteng province (Geda, 2010).

Some sectors within the South African ICT industry such as the telecommunications sector have made progress in providing access of ICT services to the South African public, however social and economic divide remains a challenge within the population. ICT availability makes a country favorable for economic investment and enhances enterprise development, job creation and growth of SMME's which are viewed as key drivers of economic growth (Thlabela, Roodt, Paterson, & Weir-Smit, 2006). The concern is that rural areas in provinces such as the Eastern Cape that have poor ICT availability are likely to be viewed as less favorable for economic investment and may not experience the developmental gains from this sector.

### 2.7.2 The Size of the IT Sector

The following table depicts the IT end-user spending (money spent on acquiring ICT services) in 2008 and forecast from 2009 to 2013.

**Table 2: ICT Sector Breakdown in US$: Source, Gartner and IHS Global insights (October 2009**

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | CAGR%* |
|---|---|---|---|---|---|---|---|
| Computing Hardware | 2,312.3 | 1,789.0 | 1,887.7 | 1,958.7 | 2,064.3 | 2,176.7 | -1.20% |
| Software | 1,121.9 | 1,081.4 | 1,170.5 | 1,267.4 | 1,389.0 | 1,517.7 | 6.20% |
| IT Services | 5,445.0 | 5226 | 5,630.0 | 5,954.0 | 6,328.0 | 6,751.0 | 4.40% |
| Telecommunications | 16,160.0 | 16,471.1 | 17,357.0 | 18,042.0 | 18,962.0 | 20,249.0 | 4.60% |
| Total IT ($ US M) | 25,039.2 | 24,567.4 | 26,045.2 | 27,222.1 | 28,743.3 | 30,694.4 | 4.20% |
| Real GDP ($ US B) | 228.9 | 226.6 | 232.1 | 242 | 251.9 | 261.6 | 4.80% |
| Real GDP Growth (%) | 6.80% | -1.00% | 2.40% | 4.30% | 4.10% | 3.80% | |
| Population (Millions) | 48.8 | 49.3 | 49.6 | 49.9 | 50.2 | 50.5 | 0.70% |

The sectors from the table above are broken down into computing hardware, software, IT services, and telecommunications. The telecommunication sector is the largest followed by IT services. The expenditure on the ICT sector is expected to

show a steady increase over the forecasted period and this is due to the fact that the South African economy from the last quarter of 2009 showed signs of recovery from recessionary period (Gartner, 2009). The forecasted increase in IT spending can also be attributed to the 2010 FIFA World Cup event. The preparations of the event have positively influenced IT investments on the systems that are directly related to the event as well as the infrastructure. The infrastructure investment enabled the broadcasting of the FIFA 2010 World Cup in high definition and some games in three dimensions (3D) (Gartner, 2009).

### 2.7.3 High Level View

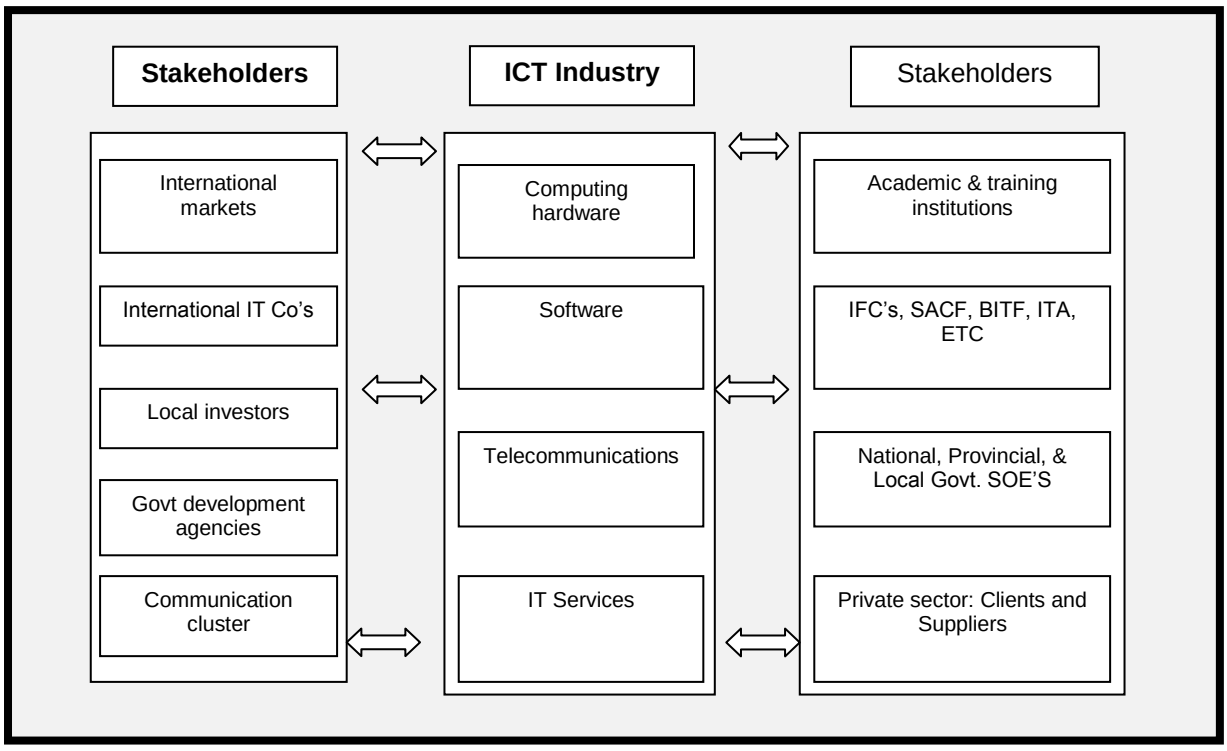



**Figure 15: South Africa's ICT Cluster**

The figure 15 above shows the ICT Industry, the State and other stakeholders like academic and training institutions which include schools, universities, further

education and training centers, Meraka e-Skills Institute, NEMISA and Private Sector educators. IFCs like SACF, ITA and CSSA and investors are also represented in the cluster. International markets are also available for South African ICT players.

The State influences the ICT Sector through legislation, ICASA, the three spheres of government (national, provincial and local government) and other state owned enterprises like the SABC, Sentech, SAPO, Broadband InfraCo, SITA, USSASA, PNC on ISAD and SEDA. It is important to note that SITA was started in order to centralize procurement of ICT services by government thus achieving economies of scale and bulk buying discounts and to reduce duplication and increase sharing of ICT resources. USSASA was started to 'bridge the digital divide' meaning to take ICT services to remote and rural areas. PNC on ISAD was started to ensure that the State had a more consistent approach in ICT Policy making and implementation and to establish South Africa as an advanced information society where ICT is a key driver of economic and societal development. Broadband InfraCo was an intervention aimed at lowering the telecommunications costs in South Africa.

According to (Brand South Africa, 2010) the leader of information and communication technology (ICT) development in Africa, South Africa is the 20th largest consumer of IT products and services in the world. South Africa's IT industry is characterised by technology leadership, particularly in the field of electronic banking services. South African companies are world leaders in pre-payment, revenue management and fraud prevention systems and in the manufacture of set-top boxes, all exported successfully to the rest of the world (Brand South Africa, 2010). This industry is therefore a very important player in the economy of the

country and needs to contribute in developing entrepreneurship for its own growth and that of the country's economy and jobs and competitiveness.

## 2.8 The approach to entrepreneurship development and support for the ICT sector in South Africa

In South Africa, there is no coherent and integrated entrepreneurship development and support policy and this is confirmed by Minister Mandisi Mphahlwa in his foreword to the integrated strategy on the promotion of entrepreneurship and small enterprises by declaring that, 'We are, … mindful that important gaps [ in the entrepreneurship development framework] still remain (DTI, 2005). The author went on to state that there is an ongoing challenge that requires improvement of the scope and quality of the offerings to small business. The minister mentioned finally that 'key among these [challenges], is the need to rapidly improve the integration of support provided by the various governmental departments and institutions (DTI, 2005).

A piece of legislation that is aimed at the promotion of entrepreneurship and small enterprises is the National Small Business Act no 102 of 1996. The aim of the Act is 'to provide for the establishment of the National Small Business Council and the Ntsika Enterprise Promotion Agency; and to provide guidelines for organs of state in order to promote small business in the Republic; and to provide for matters incidental thereto. This Act was amended in 2004 'so as to repeal all provisions pertaining to Ntsika enterprise promotion agency; to provide for the establishment of the Small Enterprise Development Agency; to make provision for the incorporation of the Ntsika Enterprise Promotion Agency, the National Manufacturing Advisory Centre and any other designated institution into the Agency to be established; to provide for

the necessary transitional arrangements to this effect; and to provide for matters connected therewith. The other entrepreneurship and or enterprise development and support agencies except for Small Enterprise Development Agency, include Khula Enterprise Finance, National Empowerment Fund, and the South African Micro Finance Apex Fund (DTI, 2005). The National Youth Development Agency is also one of the entrepreneurship development agency charged with the responsibility to create and promoting coordination in youth development matters (NYDA, 2010). The profile of the entrepreneurship development and support agencies mentioned above are listed in annexure B. The Gauteng Enterprise Propeller and the Johannesburg Centre for Software Engineering are also entrepreneurship development and support agencies and together with Small Enterprise Development Agency are a subject of investigation in this study.

### 2.8.1 Conclusion

It is clear from the above literature that various attempts have been made to develop and support entrepreneurship in the ICT sector. The nature, characteristics and scope of these attempts varies and obviously their successes would vary depending on their intensity and focus. It is the researcher's observation and argument as well that the nature, level and character of collaboration in terms of these activities is also very fragmented, limited and in no way structured optimally. It is for this reason that the researcher would like to study, describe and interpret the nature, character, and scope of the collaborative relationships in terms of these entrepreneurship development and support interventions in this industry. In this regard the usage of collaborative models of entrepreneurship development shall be a focus of this study.

# 3 Chapter Three: Research Questions

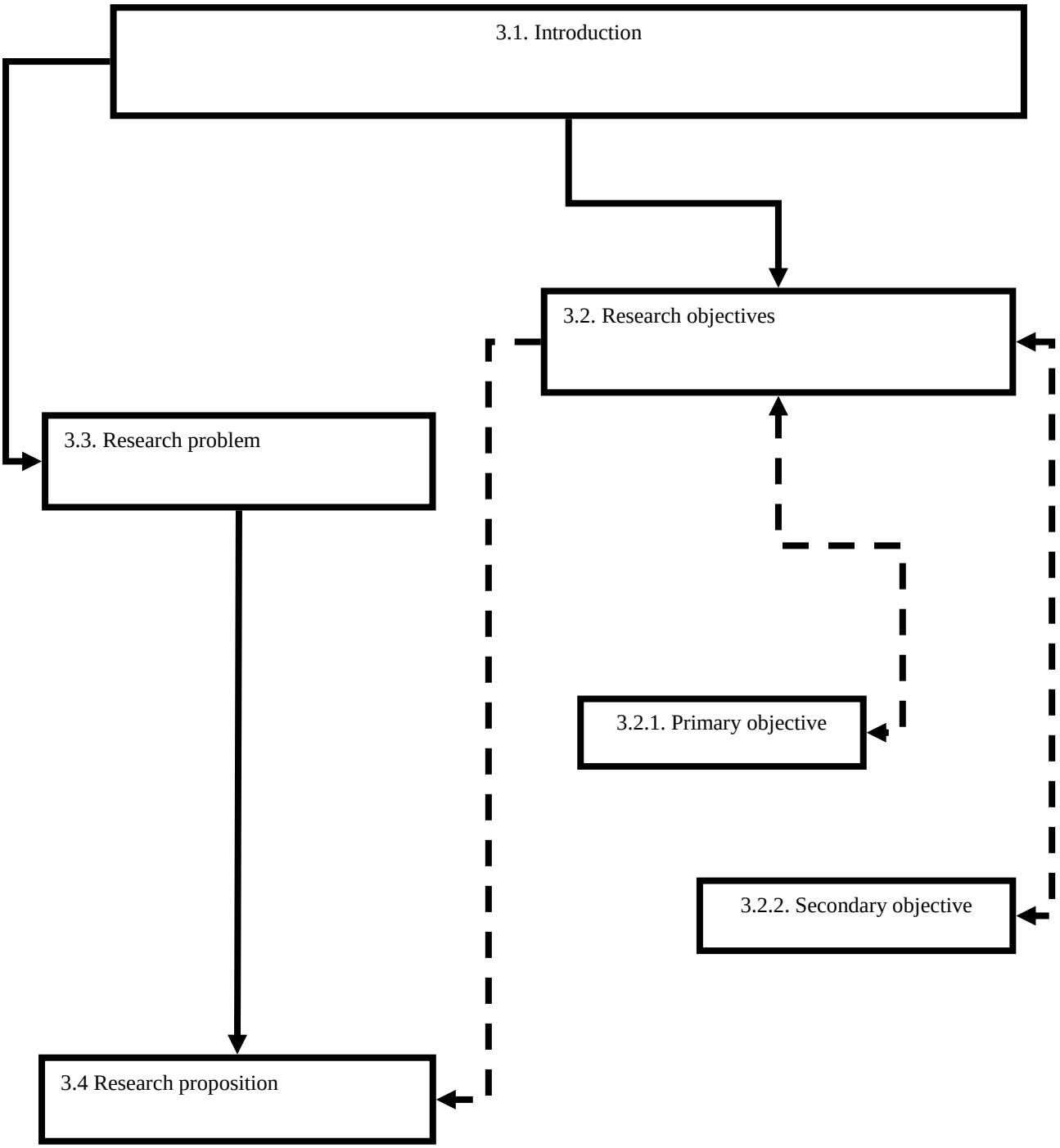





Figure 16: Reseach proposition: Source Adapted from Nyanjom, 2007

## 3.1 Introduction

According to Cooper & Schindler (2006:138), Saunders, Lewis & Thornhill (2000:90) and Welman et al. (2005:2), the strategy for development of research comprises a general plan of how a researcher goes about answering a set research question and the methods employed to achieve such a process. Since this study seeks to provide an understanding of whether government mandated entrepreneurship development agencies do engage in collaborative models of entrepreneurship development in the ICT sector, a comprehensive plan for achieving the set objectives must be put in place.

This chapter provides a plan that specifies how the research is structured in terms of attempting to answer the questions inherent to it. In this regard, the research questions identified in the first chapter are defined based on the literature review and then synchronized and narrowed down to specific variables which are then used to investigate the research problem.

## 3.2 Research problem

It is the intention of this research to establish if the entrepreneurship development and support agencies in the country do have effective programs to improve the level of entrepreneurship in the high technology sector. In particular, the researcher is interested in studying the extent of collaboration amongst the stakeholders in achieving this objective.

The problem in terms of this research is to determine if the entrepreneurship development and support agencies in South Africa, do engage in collaborative

models of entrepreneurship development and support to bring about new firm entry in the Information, Communication & Technology (ICT) sector. In this regard, the study endeavours to determine if the variables of the constructs of entrepreneurship, entrepreneurial process and collaborative entrepreneurship development and support models such as clusters, incubators, collaborative capabilities, franchising, and clan models, are being applied by the entrepreneurship development and support agencies such as the Small enterprise development agency (SEDA) and support service providers such as Gauteng enterprise propeller and the Johannesburg centre for software engineering to develop and support entrepreneurship in the ICT sector.

## 3.3 Research objectives

The research has formulated primary and secondary objectives as indicated below to provide direction and flow guide for this study.

### 3.3.1 Primary objective

The primary objective is to determine whether the entrepreneurship development agencies in South Africa do use the collaborative models of entrepreneurship development to develop and support new enterprise entry in the ICT sector.

### 3.3.2 Secondary objectives

Based on the primary objective, the following secondary objectives, were developed to determine the following:

- To determine the scope of collaboration models being applied by the entrepreneurship development agencies in promoting new firm entry in the ICT sector.
- To propose the nature and character of collaborative models that could be applied in developing and supporting entrepreneurship in the ICT sector.

## 3.4 Research questions

This study has formulated two questions to be asked in addressing the research problem the questions being asked are as follows:

### 3.4.1 Question 1.

Do entrepreneurship development and support agencies in South Africa use the collaborative models of entrepreneurship development such as collaborative networks, clusters, incubators and franchising effectively to improve entrepreneurship in the ICT sector?

### 3.4.2 Question 2

Which variables of the models of entrepreneurship development and support such as collaborative networks, clusters, incubators and franchising, are used by the entrepreneurship and or enterprise development and support agencies in bringing about new firm entry in the ICT sector?

## 3.5 Conclusion

The research questions are meant to provide insight into the methods of entrepreneurship development and support being practiced by entrepreneurship

development and support agencies in South Africa. Such insight should provide a basis for further research in this field which should be more rigorous and provide generalisable conclusions to this field.

# 4 Research Methodology

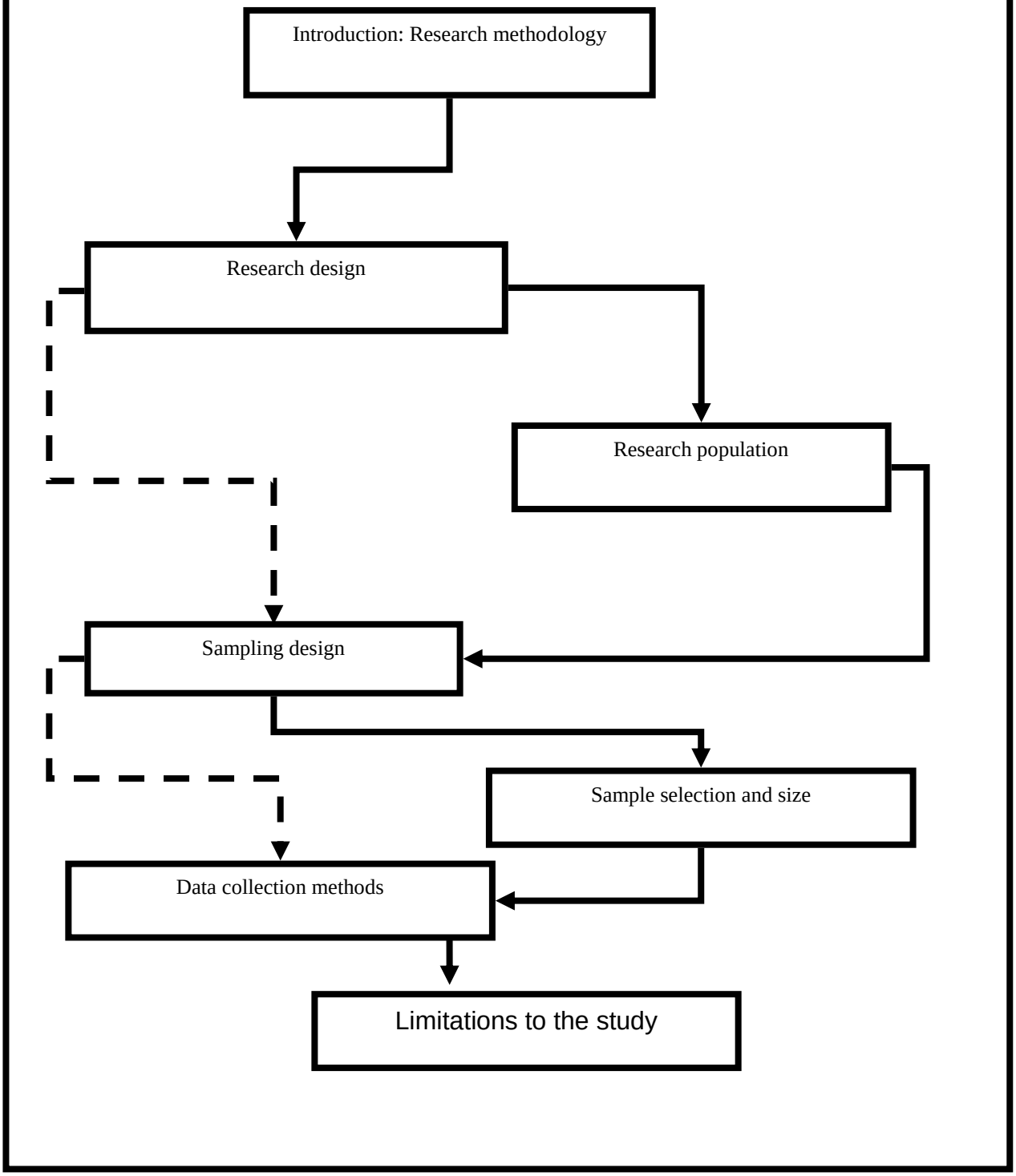



**Figure 17: Research Methodology roadmap: Source Adapted from Nyanjom, 2007**

## 4.1 Introduction: Research methodology

According to Weman, Kruger, & Mitchel (2005: 2), research methodology is the process of considering and explaining the logic behind research methods and techniques, which allow the means to explore a phenomenon. Insight to this line of thought is further added to by Cooper & Schindler (2006: 31), who states that through the use of methods and techniques that are scientifically defendable, we may come to the conclusions that are valid and reliable.

The intention of this research is to describe and come up with scientifically defendable explanations, considerations and conclusions on the application of collaborative models of entrepreneurship development and support, to develop and support entrepreneurship in the ICT sector, and then make a statement on the utilisation of the collaborative models to develop and support the achievement of the results of entrepreneurship in the ICT sector, which should be new ICT entrepreneurial firms.

In this regard, a qualitative research method, using experience survey design is used to collect data. Having collected this data, analytical methods are used to describe the scope of the actual usage of collaborative models of entrepreneurship development in the ICT sector by government mandated entrepreneurship development and support agencies to bring about new entrepreneurial ICT firms in South Africa.

## 4.2 Research design

The research design provides the glue that holds the research project together (Trochim, 2006). A design is used to structure the research, show how all of the major parts of the research project such as the samples or groups, measures, treatments or programs, and methods of assignment work together to address the central research questions (Trochim, 2006). This research was qualitative and exploratory in nature providing qualitative data to gain insight into the phenomenon of interest (Zikmund, 2003). Since qualitative studies are field based in nature, the research interviews were carried out at the premises of the respondent organizations with the respective managers.

In terms of this research, a combination of the case study and experience survey design was chosen as an effective method to answer the relevant research questions. The purpose of the experience survey method is to obtain information from knowledgeable managers who have had personal experiences in the field of the researcher's problem situation (Zikmund, 2003). It is expected that the account of their organization's experiences in this regard shall give an indication on the usage and extent thereof, of collaborative models of entrepreneurship development to support the development and support of entry of entrepreneurial ICT firms.

The institutions involved in entrepreneurship development and support and some of its support services providers in South Africa, were selected for study and questions asked on the usage of the variables of collaborative models of entrepreneurship development and support on their activities, through interviews carried out with some

of their senior managers. The data collected from interviews are subjected to descriptive analysis in order to describe the nature, and scope of their activities and operations, and the usage of the variables of collaborative entrepreneurship development and support in the ICT sector.

The analysis of this data is based on descriptive research tools. Descriptive research is a scientific method that involves observing and describing the behavior of a subject without exercising any influence on it in any way possible (Cooper & Schindler, 2006). It is a method of research, in which information is collected without a particular question in mind (Casadevall & Fang, 2008).

The descriptive research methods includes reporting and summarizing data in terms of measures of central tendency which include means, median, mode, deviance from the mean, variation, percentage, and correlations between variables (Zikmund, 2003). The descriptive methods are therefore chosen to facilitate description and explanation of the usage of collaborative approach to entrepreneurship development and support agencies in the ICT sector by entrepreneurship development agencies.

## 4.3 Unit of analysis

The unit of analysis is the major entity that you are analyzing in your study (Trochim, 2006). The unit of analysis in an experience survey often represents the views and perceptions of a system rather than those of an individual because an interview with a manager draws from a combined depth of views from contacts that he or she relies on for information (Zikmund, 2003). The unit of analysis in terms of this study comprises the respective variables to the constructs of entrepreneurship

development in the ICT sector. The respective variables are represented against each of their constructs on the table below:

**Table 3: Variables to the construct of collaborative entrepreneurship development in the ICT sector**

| Construct | Variables |
|---|---|
| **The entrepreneur and entrepreneurship** | *Definition of the entrepreneur and entrepreneurship* |
| **Entrepreneurial process** | *Identification and evaluation of the opportunity, development of the business plan, determination of the resources required, management of the resultant enterprise* |
| **Entrepreneurial development and support** | *Entrepreneurial orientation, supporting environment, cooperative environment, required skills, products and services, results of entrepreneurship* |
| **Collaborative models of entrepreneurship development** | *Collaborative networks, the clan model, clusters, incubators, collaborative capabilities, franchising* |
| **The ICT sector** | *Telecommunications industry, technology hardware industry, software development industry, IT professionals industry* |

## 4.4 Research population

A population can be said to include all people or items with the characteristics similar to the ones the researcher wishes to understand. It can be defined as 'any complete group of people, companies, hospitals, stores, college students, or the like that share some set of characteristics. The population in terms of this study encompasses all

public agencies and public private partnership institutions involved in entrepreneurship development and support. These are institutions that use public resources to build entrepreneurial firms and start ups in the ICT sector, and are required to ensure sustainability of these ventures. The institutions that share these characteristics in South Africa are listed on annexure B.

## 4.5 Sampling design

A sample is a subset, or some part of a larger population (Zikmund, 2003). Sampling is done to enable researchers to estimate some unknown characteristics of the population. The process of sampling involves any procedure using a small number of items or parts of the whole population to make conclusions regarding the whole population (Zikmund, 2003). Sampling therefore is required where the size of the population is too large and does not lend itself to surveying every member of the population due to resources and time constraints. The alternative to sampling can be a census. A census is an investigation of all the individual elements that make up the population (Zikmund, 2003). A census is relevant where the researcher is investigating a population with an extremely small number of population elements (Zikmund, 2003). A population element comprises of an individual member of a specific population (Zikmund, 2003).

## 4.6 Sample selection and size

A non probability convenience sample was used for sample selection in this study. The population elements selected in this regard includes the following organizations:

- Small Enterprise Development Agency (SEDA)

- Gauteng Enterprise Propeller (GEP)
- The Johannesburg Centre for Software engineering (JCSE)

The institutions above were selected due to the similarities in terms of the reason for their existence. The similarities in question are as follows:

- They all seek to develop and support entrepreneurship in the ICT sector
- They are all focused on public private partnership in their attempt to develop and support entrepreneurship in the ICT sector.
- They provide and or provide support in both financial and non financial value stream of entrepreneurship development and support
- They seek to influence entry of new firms as a result of their vision and activities
- They have a strategic intent to specifically develop and support entrepreneurship in the ICT sector

The sample of the population was surveyed through interviews with experienced managers of the respective population elements.

## 4.7 Data collection methods

Data collection is a critical stage of the research because the research project is no better than data collected in the field (Zikmund, 2003). The data for this research was collected by the researcher in person through interviews with senior managers of the respondent organizations. The research instrument used was semi formal interviews with the managers of the respective institutions in terms of the

combination of an experience survey. The interviews were done with the pre-determined interview questionnaire but semi formal in the sense that respondents were allowed to elaborate on their answers to give more clarity.

The discussions in terms the experience survey were carried out with knowledgeable people inside the organizations, hence the choice of managers (Zikmund, 2003). The responses were recorded electronically through voice recorders and also manually through recorded notes.

## 4.8 Limitations to the study

Limitations to a study can be caused by various attributes such as reliability, validity, biases, research methodology, sampling and questionnaire design. The limitations in question manifest themselves in various styles and the researchers have considered them as follows:

### 4.8.1 Reliability

Reliability is the consistency of your measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. (Zikmund, 2003) In short, it is the repeatability of your measurement. A measure is considered reliable if a person's score on the same test given twice is similar. There are two ways that reliability is usually estimated and those are test/retest and internal consistency. These tests are more relevant to quantitative research method and therefore the researcher could not do a reliability test on this study.

### 4.8.2 Validity

Validity is the strength of the conclusions, inferences or propositions drawn from the study. According to Cook & Campbell (1979), validity is the "best available approximation to the truth or falsity of a given inference, proposition or conclusion." There are four types of validity commonly used in social research such as follows:

Types of Validity:

- Conclusion validity asks is there a relationship between the program and the observed outcome?
- Internal Validity asks if there is a relationship between the program and the outcome we saw, is it a causal relationship?
- Construct validity asks if there is a relationship between how you operationalize concepts in this study to the actual causal relationship.
- External validity refers to our ability to generalize the results of our study to other settings.

Validity is a measure that can only be carried out in inferential statistics and since this is an exploratory research, there are no measures to determine validity, which is a limitation of the research method used.

### 4.8.3 Biases

The responses to questionnaires are often influenced by errors and or biases. There is a host of errors and or biases that can be experienced and for the purposes of this research; the researcher noted a few that can provide limitations for this research

such as follows:

Response bias

Sometimes respondents tend to answer in a particular direction. This may happen as a result of conscious or unconscious misrepresentation. It is the duty of the researcher to take note of this bias. The researcher in this regard takes note of this bias. The fact the respondents are individuals directly responsible for performance associated with the subject of this study may lead to the response bias.

Research methodology

The researcher selected a qualitative, exploratory research as this method was found to be relevant for the study. Interviews were conducted with experienced managers through a semi structured questionnaire to survey the sample for data collection. Although surveys are a good primary research method (Zikmund, 2003), they also have risks and limitations which need to be considered. The limitations in question involve biased samples, poorly phrased questions; poor instruction and supervision of respondents, and results may be misrepresentation (Zikmund 2003). Whilst this limitation is noted, the researcher is however convinced that the questions asked are clear, unambiguous and easy to understand. Furthermore, the sample of the population being surveyed is literate, possesses a tertiary qualification and is proficient in the English language. These conditions mitigate the limitation that could be posed by the exploratory research method on this study.

Sampling

Sampling can present sampling errors, which obviously provide limitations for the sample and by extension the research. There are two types of sample designs according to Zikmund (2003), which are non-probability and probability samples. Both types of sample designs have advantages and disadvantages. The researchers chose to use the non-probability convenience sample design because they had access to and knew the population elements.

The researcher prefers this sampling technique because it is fast, inexpensive, easy, and the subjects were readily available for selection by the researcher (Castillo, 2009). A representative sample comprising the characteristics of the population was conveniently selected as a sample of the population. The limitations of the convenient sample design is that the sample is not necessarily representative of the whole population and therefore, the results of the study cannot speak for the entire population, which results to a low external validity of the study (Castillo, 2009). Since the researchers did not have all the information about the population demographics, this could pose a challenge in the accuracy of the selected sample in that it might not be representative.

Questionnaire design

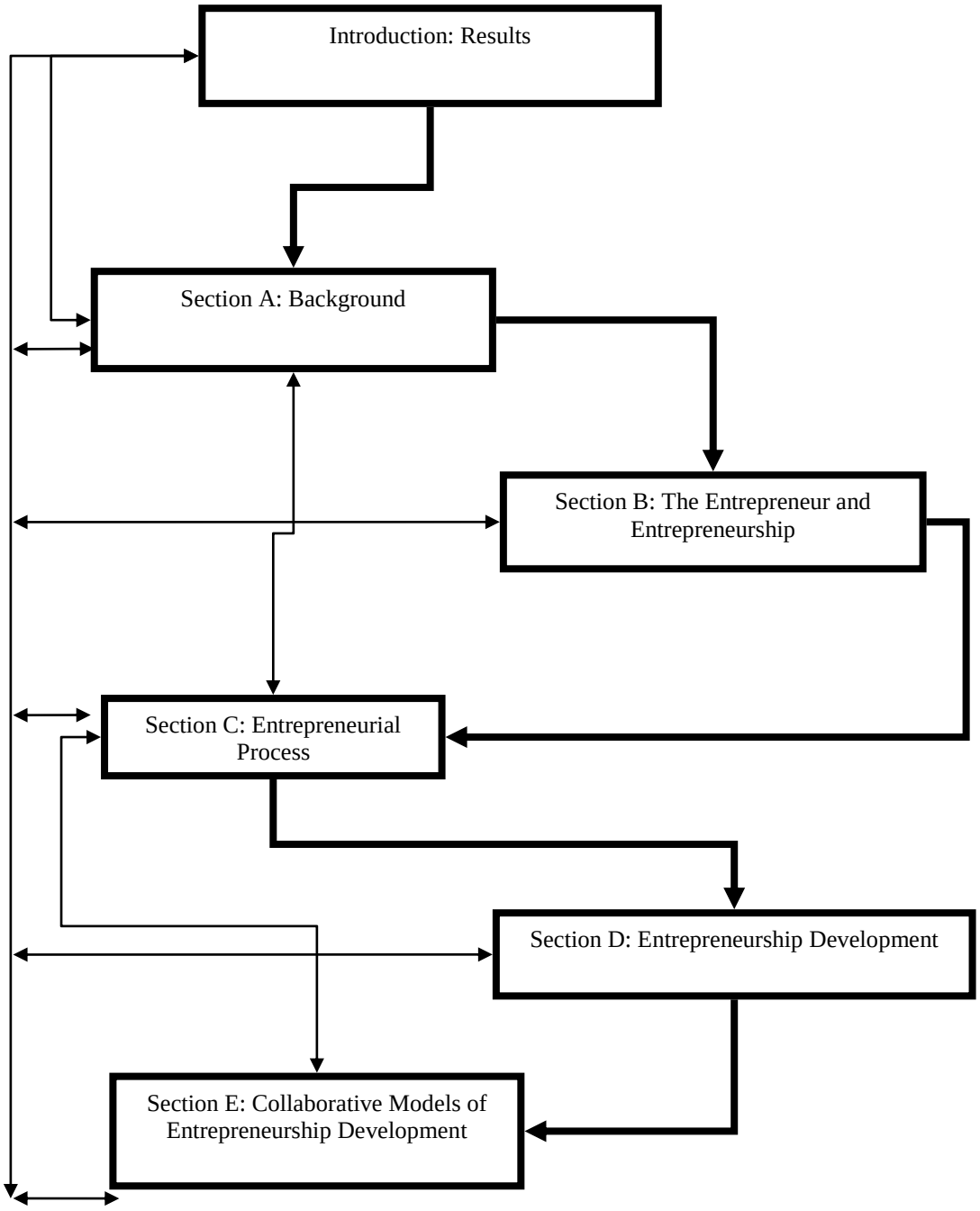
The main consideration when designing a questionnaire is to check for relevancy and accuracy. A ‘questionnaire is relevant if no unnecessary information is collected’ (Zikmund, 2003). According to Zikmund, the questionnaire is accurate if it is reliable and valid. Furthermore questionnaire should ask fixed alternative questions as opposed to open-ended question.

Questions for particularly mail, self administered survey should be less complex and avoid conversation (Zikmund, 2003). They should not be leading, not ambiguous, and not double barrelled and must not have an order bias. The researcher has taken note of these considerations and endeavoured by all means to avoid the shortfalls, the interview schedule might be perceived to be following a particular order and therefore result in respondents following a particular pattern when answering, but since this was an interview as opposed to a questionnaire, the researcher managed to control the direction and flow of the interview.

## 4.9 Conclusion

The research methodology employed in this study is qualitative and exploratory research. In this regard, an experience design was used through interviews with experienced managers of agencies involved in entrepreneurship development and support. It is expected that such interviews shall provide a system results as they would be representing the system practices in this regard.

# 5 Chapter five: Results



## 5.1 Introduction

This chapter serves to present the results of data collected from the population sample. The sample comprised of three agencies involved in entrepreneurship development and support in the ICT sector. Whilst some of these agencies have mandates which goes beyond the scope of the ICT sector, they nevertheless are also charged with bringing about entrepreneurship in the ICT sector. The data is categorised according to the constructs of the study as in this way, the answers direct themselves specifically to the variables that are integral to answering the research questions. In this regard, the categories of data presented below are background, the entrepreneur and entrepreneurship, entrepreneurial process, entrepreneurial development and finally the collaborative models of entrepreneurship development.

## 5.2 Section A: Background

The background to this study involves answers to the 5 W questions to the respondent organisations. The 5 W questions are the what, why, where, who and when. The 5 W questions asked were what are the operations of the respondent organisations, where do they practice their operations, who is their target market, why do they engage in the activities that they do and lastly when and at what stage do they start engaging in the entrepreneurship development and support activities. Answers to these questions give an indication of the nature and characteristics of the respondent sample of the population.

### 5.2.1 The activities carried out by the respondent organisation

This section covers the scope of the operations of the respondent organisations

**Table 4: Scope of operations**

| SEDA | GEP | JCSE |
|---|---|---|
| To develop and provide support small and medium enterprises. | To improve the economy of Gauteng province by developing and supporting small, medium enterprises through financial and non financial interventions. | To work with and provide support to institutions involved in developing small enterprises in the software engineering field |

### 5.2.2 The location of the respondent organisations

**Table 5: Location of the respondent organisations**

| SEDA | GEP | JCSE |
|---|---|---|
| Seda is based at the national office in Pretoria with 9 Provincial offices that further have district and branch offices. | GEP is based in Gauteng and has jurisdiction in Gauteng province only. | JCSE is located in JHB (Wits university) and provide services within the Gauteng province |

### 5.2.3 The target market of the respondent organisations

**Table 6: Target market**

| SEDA | GEP | JCSE |
|---|---|---|

| | | |
|---|---|---|
| Seda targets entrepreneurs & start ups from enterprise growth stage to medium size level of the enterprise. | Any small and medium enterprise that employ from a minimum of two to two hundred employees. | JCSE targets anyone in software development business including organisations in software areas of business such as banks and various SME's |

### 5.2.4 Reasons for target market selection

**Table 7: Mandate of the respondent organisations**

| SEDA | GEP | JCSE |
|---|---|---|
| Seda is mandated by the government in terms of the SEDA Act, to develop & support small and medium enterprises | An agency of Gauteng economic development department, mandated to boost the economy of Gauteng by helping small and medium enterprises to graduate from the informal stage into the mainstream, formal economy. | To improve the image of the country as a software development destination in line with international standards, quality, cost, training, etc |

### 5.2.5 Point of engagement with the market

**Table 8: point of engagement**

| SEDA | GEP | JCSE |
|---|---|---|

| | | |
|---|---|---|
| From the stage of an entrepreneurial idea, up the value chain till the set up and early stage support of the enterprise | As soon as approached for assistance from business idea stage right through value chain till the set up of the enterprise. | From referral stage from universities, companies, and generally as and when interest is shown by an eligible candidate |

### 5.2.6 Key performance indicators

**Table 9: Key performance indicators**

| SEDA | GEP | JCSE |
|---|---|---|
| Seda measures the before and after status of their intervention, to determine the value added. | GEP measures customer satisfaction and sme turnover and staff increase to determine success. | JCSE does not often measure success except through test scores of students being trained in the field |

## 5.3 Section B: The entrepreneur and the entrepreneurial idea

In order to establish if the entrepreneurial development agencies do engage in collaborative approach to entrepreneurship development and support in the ICT sector, the sample were asked if they engage in entrepreneur and entrepreneurial idea development and support variables and the responses were as follows:

### 5.3.1 The entrepreneurial variables

***The Entrepreneurial idea or proposal leads to new economic activity***

**Table 10: Entrepreneurial idea and new economic activity**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | ✓ | | **2** | **66.66** |
| **No** | | | ✓ | **1** | **33.33** |

***The idea leads to emergence of new firm or organisation***

**Table 11: The emergence of new firm**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

***The applicant has an entrepreneurial mindset***

**Table 12: the entrepreneurial mindset**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

### *The applicant has creative adventure*

**Table 13: Creative adventure**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

### *The applicant has self realisation and fulfilment needs*

**Table 14: Self realization and self fulfillment**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

### *The applicant has the desire to achieve*

**Table 15: The desire to achieve**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

### *The applicant has the passion to create*

**Table 16: The passion to create**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |

| | | | | | |
|---|---|---|---|---|---|
| **No** | | ✓ | | **1** | **33.33** |

*The applicant has the yearning for freedom*

**Table 17: Yearning for freedom**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

*The applicant has entrepreneurial vision*

**Table 18: Entrepreneurial vision**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

*The applicant is orientated towards calculated risk taking*

**Table 19: Calculated risk taking**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

*The applicant engages in continuous innovation*

**Table 20: Continuous innovation**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

***The applicant has an undying perseverance***

**Table 21: Undying perseverance**

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

***The applicant has a compelling commitment***

**Table 22: A compelling commitment**

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

***The applicant knows how to evaluate and exploit the opportunity***

**Table 23: Evaluation and exploitation of an opportunity**

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

### *The applicant seeks self employment*

**Table 24: Self employment**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

### *The applicant has the ability to marshal resources*

**Table 25: Marshalling resources**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

### *The applicant is oriented towards the production & selling of goods & services*

**Table 26: Production and selling of goods & services**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | ✓ | | **2** | **66.66** |
| **No** | | | ✓ | **1** | **33.33** |

### *The applicant can engage in business growth & development*

**Table 27: Business growth and development**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |

| | | | | | |
|---|---|---|---|---|---|
| **No** | | ✓ | ✓ | **2** | **66.66** |

### 5.3.2 Summary of the entrepreneur and entrepreneurial idea variables

Out of the eighteen variables to the entrepreneur and entrepreneurial idea development and support, SEDA was found to be practicing all of them. The Gauteng Enterprise Propeller practiced only two of these variables and the Johannesburg Centre for Software Engineering practiced six of them.

## 5.4 Section c: The entrepreneurial process

### 5.4.1 The entrepreneurial process variables

A. There is identification & evaluation of the opportunity (creativity & innovation) in terms of...

**Person** -expertise, motivation, creative thinking skills, creativity myths, environmental barriers, cultural barriers, perceptual barriers

Table 28: Person

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

**Process** - Idea generation, invention, innovation, invention protection

Table 29: Process

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

**Product** - The development of new/ innovative product, legal protection, product economic benefit

Table 30: Product

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

**Press (environment)** – The alleviation of environmental, cultural & perceptual barriers

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | ✓ | | **2** | **66.66** |
| **No** | | | ✓ | **1** | **33.33** |

**Social environment**: The promoting of friends & family support, risk averse, family decision making structure, cultural inhibitions.

Table 31: Social environment

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

**Economic environment :** analysis of economic state, growth prospects, financial support for new ideas, incentives for feasible ideas, appetite for risk

Table 32: Economic environment

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

**Physical environment:** removal of climate distractions & boosting energy levels, selection of proper type of venues, alignment of work & home routines

Table 33: Physical environment

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | | ✓ | **1** | **33.33** |
| **Unsure** | | ✓ | | **1** | **33.33** |

Development of business plan

Type of business plans

**Table 34: Type of business plan**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

Structure of the business plan

**Table 35: Structure of the business plan**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | ✓ | | **2** | **66.66** |
| **No** | | | ✓ | **1** | **33.33** |

Governance of the business plan

**Table 36: Governance of the business plan**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.33** |

Determination of required resources

**Table 37: Entrepreneur appraisal**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | ✓ | ✓ | **3** | **100** |

Table 38: Sources of resources

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | ✓ | | **2** | **66.66** |
| **No** | | | ✓ | **1** | **33.33** |

Getting started & management of the resultant enterprise

Table 39: Usage of resources

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | ✓ | | **2** | **66.66** |
| **No** | | | ✓ | **1** | **33.33** |

Table 40: Operational plan and execution

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | ✓ | | **2** | **66.66** |
| **No** | | | ✓ | **1** | **33.33** |

Table 41: Management structure and style

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |

| | | | | | |
|---|---|---|---|---|---|
| **No** | | ☑ | ☑ | **2** | **66.66** |

**Table 42: Key performance variables**

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ☑ | | | **1** | **33.33** |
| **No** | | ☑ | ☑ | **2** | **66.66** |

**Table 43: Risk asessment**

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ☑ | | ☑ | **2** | **66.66** |
| **No** | | ☑ | | **1** | **33.33** |

**Table 44: Risk management**

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ☑ | | ☑ | **2** | **66.66** |
| **No** | | ☑ | | **1** | **33.33** |

**Table 45: Total quality management**

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

Table 46: Ethical considerations

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

Table 47: Operational controll system

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

Table 48: Financial control system

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

Table 49: Financial requirements sourcing

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

### 5.4.2 Summary of the entrepreneurial process

Out of the twenty three variables to collaborative models of entrepreneurship development and support, SEDA was found to be practicing all of them. The Gauteng Enterprise Propeller practiced only six of these variables and the Johannesburg Centre for Software Engineering practiced seven of them.

## 5.5 Section D: The entrepreneurial development model

In order to establish if the entrepreneurial development agencies do engage in collaborative approach to entrepreneurship development and support in the ICT sector, the sample were asked if they practice the variables to entrepreneurial development and support and the responses were as follows:

### 5.5.1 The entrepreneurial development model variables

#### *Entrepreneurial orientation*

- **Culture**: Stigma, Avoidance of uncertainty, high power distance, Collectivism,
- **Family**: lineage, family entrepreneurial attributes, family & friends role models
- **Education**: Entrepreneurial education, business management skills, business development skills, education curriculum
- **Work experience**: Work experience, work knowledge, work qualification

- **Personal orientation:** Creativity, autonomy, risk appetite, pro-activeness, competitive aggressiveness

Table 50: Entrepreneurial orientation

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

### *A supportive environment*

- Infrastructure, regulatory framework, business advice centres, counselling agencies, mentoring services, finance providers, training institutions, Incubators, clusters

Table 51: Supportive environment

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

### *A cooperative environment*

- Coordination of infrastructure dependencies, producer &consumer dependencies, notification & transportation work-flow, agent goals, agent cooperation toward goal fulfilment, stakeholder coordination in)i.e. NGO's, large firms, academic institutions, service providers, government

Table 52: Cooperative environment

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | ✓ | ✓ | **3** | **100** |

### *Entry of entrepreneurs*

- Support and consideration of entry costs, speed of adjustment, sunk costs, economies of scale, network effects, brand reputation, switching costs, government restraints, Inherent business life cycle

**Table 53: Entry of entrepreneurs**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ☑ | | | **1** | **33.33** |
| **No** | | ☑ | ☑ | **2** | **66.66** |

### *The entrepreneurial abilities*

#### ***Inherent abilities***

- Creativity & innovation, risk orientation, leadership, human relations, positive attitude, perseverance, commitment

**Table 54: Inherent abilities**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ☑ | | | **1** | **33.33** |
| **No** | | ☑ | ☑ | **2** | **66.66** |

#### ***Acquired abilities***

- Planning, organizing, controlling, knowledge of competitors, market orientation, client service, quality focus, financial insight, business knowledge, usage of experts

**Table 55: Acquired abilities**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **1** | **66.66** |
| **No** | | ✓ | | **2** | **33.33** |

### *The products and services*

- Uniqueness, good product attributes, good customer experience, convenience, value for money

**Table 56: Product features**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **1** | **66.66** |
| **No** | | ✓ | | **2** | **33.33** |

### *The results of entrepreneurship*

- New firms, economic growth, income increase, living standards improvement, investment opportunities, increased tax base, technological development, Job opportunities

**Table 57: Entrepreneurial results**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **1** | **66.66** |
| **No** | | ✓ | | **2** | **33.33** |

### 5.5.2 Summary of the entrepreneurial development model

Out of the seven variables to entrepreneurial development model, Seda was found to be practicing all of them. The Gauteng Enterprise Propeller practiced only one of these variables and the Johannesburg Centre for Software Engineering practiced four of them.

## 5.6 Section E: The Collaborative approach

In order to establish if the entrepreneurial development agencies do engage in collaborative approach to entrepreneurship development and support in the ICT sector, the sample were asked if they practice the variables to the collaborative models of entrepreneurial development and support and the responses were as follows:

### 5.6.1 Variables to collaborative model

#### *Collaborative networks*

- **Unifying purpose:** Reason for the network, common goal, network choreographer
- **Value proposition:** Exchange of goods, services, relationship currencies,
- **Economic opportunity:** Monetization of the value proposition
- **Organizing mechanism:** Joint governance
- **Collaboration intensity:** Benefit, fit for purpose, chorographer, structural & behavioural governance, organisational & management innovation

Table 58: Collaborative networks

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **1** | **66.66** |
| **No** | | ✓ | | **2** | **33.33** |

### *The Clan Model*

- Resource allocation system, Inefficiency control system, advocacy, rule set on entry & ethical standards, shared risk

**Table 59: The clan model features**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

### *Specific collaborator assumptions*

- Assumptions about environment, culture, legal, tradition, history, economic incentives.

**Table 60: Collaboration assumptions**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

### *Cluster model*

- Cross fertilisation between universities, laboratories, high tech companies, partnering in research & product development, partnership in Sub-contracting non core business, partnership in intra & entrepreneurship, partnering in knowledge diffusion, concentration of interdependent with cooperative as well as competitive relational patterns

**Table 61: Cluster model variables**

| Item | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |

| | | | | | |
|---|---|---|---|---|---|
| **No** | | ✓ | | **1** | **33.33** |

### *High tech Cluster approach*

- Innovative ideas & concepts, high tech entrepreneurs, the clustering of supply & demand, clustering of inventors, local authorities, & knowledge centres, socio-institutional embeddedness, increasing returns.

**Table 62: High technology**

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | | **1** | **33.33** |
| **No** | | ✓ | ✓ | **2** | **66.66** |

### *Incubator Model*

Facilities and resources to help increase the availability, awareness, accessibility, affordability of the resources such as knowledge, digital, socio-political, cultural divides, start up support

**Table 63: Incubators**

| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|
| **Yes** | ✓ | | ✓ | **2** | **66.66** |
| **No** | | ✓ | | **1** | **33.33** |

### *Joint development & support activities with the ICT sector companies and institutions*

Joint activities with firms in industries such as information, communication, telecommunications, equipment/ hardware companies, software products companies, telecommunications companies.

**Table 64: Joint operations**

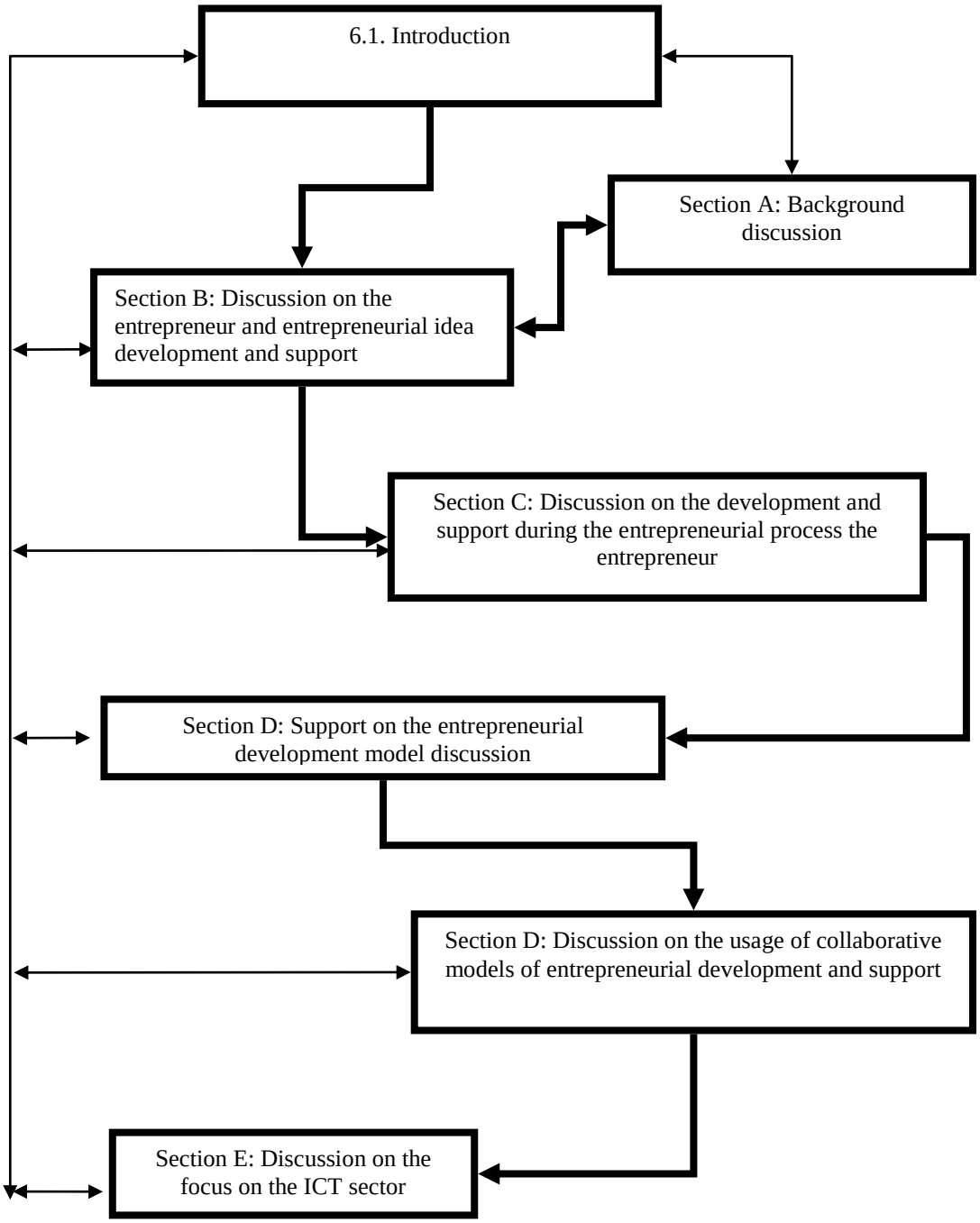
| **Item** | SEDA | GEP | JCSE | Total | % |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| **Yes** | ☑ | | ☑ | **2** | **66.66** |
| **No** | | ☑ | | **1** | **33.33** |

### 5.6.2 Summary of the entrepreneurship development models

Out of the seven variables to collaborative models of entrepreneurship development and support, SEDA was found to be practicing all of them. The Gauteng Enterprise Propeller did not practice any one of these variables and the Johannesburg Centre for Software Engineering practiced four of them.

# 6 Chapter Six : Discussion



## 6.1 Introduction

The literature review in chapter two revealed that collaborative approach to entrepreneurship development involves linking various facets onto one value chain. It involves providing a linkage between various concepts which are otherwise standalone but dependent on one another in order to bring about a successful result. This prompted a need to investigate the variables that are attached to a collaborative approach to entrepreneurial development in the ICT sector.

Chapter three, the research questions sought to give direction and focus to this study by giving it questions to be answered. The questions were directed at stipulating the exact purpose of this study. In this regard, a clear expectation for the study to provide answers to these questions was created. The methodology to be used in answering these questions was provided in chapter four (research methodology) and in chapter five, the researcher presented the results of the survey as data gathered. This chapter seeks to discuss these results in terms of the research questions and literature and extrapolate insights from such data.

The first part comprises section A which is the background of the organizations surveyed. This helps to show that a relevant population was surveyed in this regard. It provides insights on the operations of these organizations and reveal their usage or not of the collaborative approach to entrepreneurship development in the ICT sector.

Sections (B) to (E) provides data received on the questions raised about the application of collaborative approach to entrepreneurship development in the ICT

sector. In this regard the entrepreneurial support, entrepreneurial process, entrepreneurial development and the application of collaborative models in the process of providing this intervention is presented

## 6.2 Background

The three organizations surveyed in this study are as follows:

- Small enterprise development agency (SEDA)
- Gauteng enterprise propeller (GEP)
- Johannesburg centre for software development (JCSE)

The background to these organizations is as follows:

### 6.2.1 Small enterprise development agency (SEDA)

The small enterprise development agency (Seda) is an agency of the South African Department of Trade and Industry (the dti). Seda was established in December 2004, through the National Small Business Amendment Act, Act 29 of 2004 in order “to implement government’s small business strategy; design and implement a standard and common national delivery network for small enterprise development; and integrate government-funded small enterprise support agencies across all tiers of government” (SEDA, 2010). It has a national office in Pretoria with 9 provincial offices that further have district and branch touch points. It provides support and development to entrepreneurs & start ups firms at pre-entrepreneurship stage right through to medium level of the growth stage of development. It measures its

achievement by monitoring the before and after status of their interventions which determines the value created.

### 6.2.2 The Johannesburg Centre for Software engineering

The Johannesburg Centre for Software engineering (JCSE) is another entity involved in entrepreneurship development and support of the ICT sector in South Africa. The Joburg Centre for software Engineering is a three way partnership between government, academia and industry (Johannesburg Centre for Software Engineering, 2010). Based at Wits University, the JCSE is a multifaceted with various programmes and facilities positioning it as a focal point of the software development industry in Gauteng. It supports this goal by promoting best practice in software development within an African context; growing the country's capacity to deliver world class software; and developing research and training initiatives to strengthen the local software development industry (Johannesburg Centre for Software Engineering, 2010).

This is done practically by offering various courses to industry, hosting laboratories, housing start-up companies in its pre-incubator, hosting the Gauteng SPIN (Software Process Improvement Network) and Extreme Programming (XP) forum meetings, conducting research and promoting the adoption of the Capability Maturity Model Integration (CMMI) process improvement model in South Africa (Johannesburg Centre for Software Engineering, 2010).

### 6.2.3 Gauteng Enterprise Propeller (GEP)

The Gauteng Enterprise Propeller (GEP) is a provincial government agency established in 2005 under the auspices of the Department of Economic Development to provide non-financial support; financial support; and co-ordinate stakeholders for the benefit of Small Medium and Micro Entrepreneurs (SMME's) in Gauteng (Gauteng Enterprise Propellor, 2010).

The aims and objectives of GEP are to:

- *Promote, foster and develop small enterprises in Gauteng*
- *Implement the policy of the Gauteng Provincial Government for small enterprise development*
- *Design and implement small enterprise development support programmes within Gauteng*
- *Establish and promote a support network in order to increase the contribution of small enterprises to the Gauteng economy*
- *Promote economic growth, job creation and equity*
- *Integrate all government-funded small enterprise support agencies in Gauteng*
- *Strengthen the capacity of service providers to assist small enterprises to compete successfully domestically and internationally*

The primary mechanisms, by which GEP aims to achieve its objectives (Gauteng Enterprise Propellor, 2010) are as follows:

- Provide Financial and non-financial support to SMME
- Provide a one-stop service to entrepreneurs
- Facilitate SMMEs from the second economy participating in mainstream economy
- Increase the sustainability and profitability of SMME's
- Enhance SMME contribution to GDP, equity and employment in the Province.

## 6.3 Research Question One

*Do entrepreneurship development and support agencies use the collaborative models of entrepreneurship development such as collaborative networks, clusters, incubators and franchising to develop and support entrepreneurship in the ICT sector ?*

Answer:

SEDA

The Small enterprise development agency performs all the variables of the entrepreneur and entrepreneurial idea collaborative development and support (18/18) 100%, entrepreneurial process 23/23 100%, entrepreneurial development model 8/8 100%, and the collaborative models of entrepreneurship development such as collaborative networks, clusters, incubators, clan model and franchising in an approach to develop entrepreneurship (7/7) 100%. They also have a specific mandate to develop entrepreneurship in the ICT sector and have been successful in developing and supporting new entrepreneurial ICT firm entry. The small enterprise

development agency scored an outstanding 100% in terms of collaborative approach to entrepreneurship development. In as far as this respondent is concerned, the answer to question one of the research is yes Seda does engage in collaborative support to entrepreneurship development and support in the ICT sector

GEP

Of the 18 variables to the entrepreneur and entrepreneurial idea support and development, the Gauteng enterprise propeller only performs three (2/18) 11.11%, which are ensuring that the proposal leads to new economic activity, assess whether the entrepreneur knows how to marshal resources, and whether he or she is oriented towards producing and selling the respective goods and services. Of the 23 questions related to the entrepreneurial process, the GEP only performs six (6/23) 26.08%, which are ensuring that the innovative product is legally protected, a business plan is available, the entrepreneur is appraised on his/ her ability to determine the required resources, can source the resources required, use them properly, and monitor the operational plan. In terms of the 7 entrepreneurial development model questions, the GEP only provide support and development on one (1/7) 14.26%, which is creating a supportive environment by referring entrepreneurs to business mentors and support service providers. The practicing of collaborative models of entrepreneurship development had 7 variables of which the GEP performs none, 0%. The mean average performance of the GEP in terms of collaborative approach to entrepreneurship development is equal to 12.89%

JCSE

The JCSE performed 6 variables to the entrepreneur and the entrepreneurial idea collaborative approach to development and support (6/18) 33.33%. In terms of entrepreneurial process the JCSE provide support and development on seven variables (7/23) ,30.43%, and on the entrepreneurship development model they provide support and development on 4 variables which are ensuring the results of entrepreneurship, training, ensuring unique products, and fostering a cooperative environment (4/7) 57.14%. The performance of the JCSE in terms of usage of collaborative models was recorded at 4 which makes it (4/7) 57.14%. the total average performance of the JCSE in performing collaborative models and approach to entrepreneurship development is equal to 44.51%.

The overall performance by all three agencies who were a subject of this case study is equal to 52.46%.

## 6.4 Research Question Two

*Which variables of the models of entrepreneurship development and support such as collaborative networks, clusters, incubators and franchising, are used by the entrepreneurship and or enterprise development and support agencies in bringing about new firm entry in the ICT sector?*

### 6.4.1 Answers

#### *SEDA*

The Small enterprise development agency uses all the variables of the collaborative models of entrepreneurship development such as collaborative networks, clusters,

incubators, clan model and franchising in an approach to develop entrepreneurship 7/7.

### *GEP*

The Gauteng Enterprise Propeller (GEP) scored lowest in all constructs. The construct on which they achieved the highest score was entrepreneurial process. Even on this category, the only variables that they perform are related to managing the risk on the loans that they give to entrepreneurs, alleviation of environmental barriers, structuring of the business plan, determination of resources required, appraisal of the entrepreneur, sourcing the required resources and operational plan and execution. The practicing of collaborative models of entrepreneurship development had seven questions of which the GEP practices none. The other two constructs of entrepreneur and entrepreneurial idea support and development are performed at only 14.26% and 11.11 % respectively. On the entrepreneur and entrepreneurial idea development and support, they help on the idea leading to economic activity, desire to achieve and production and selling of goods orientation. Based on these results the finding of this study is that GEP does not practice collaborative approach to entrepreneurship development.

### *JCSE*

The performance of the JCSE in terms of usage of collaborative models was recorded at 4 which makes it (3/7) and 57.14%. The models being used were cluster, incubator and joint development and support activities with ICT companies. On entrepreneurial development models, the JCSE performed at 54.17% again, a score

of 4 out of seven again. The variables being developed and supported are ensuring the results of entrepreneurship, training, ensuring unique products, and fostering a cooperative environment. This figure is more than half the number of variables and therefore the researcher could conclude that they do perform the variables to this construct. On the entrepreneurial process, the JCSE 30.43% or a total of seven out of twenty three variables. The variables that they do includes product, entrepreneur appraisal, risk assessment, risk management, total quality management, operational control system and financial control system. Since this is significantly less than half of the variables to this construct and even less than a third, the researcher concludes that the JCSE does not do collaborative approach to entrepreneurship development and support in the ICT sector with respect to this construct.

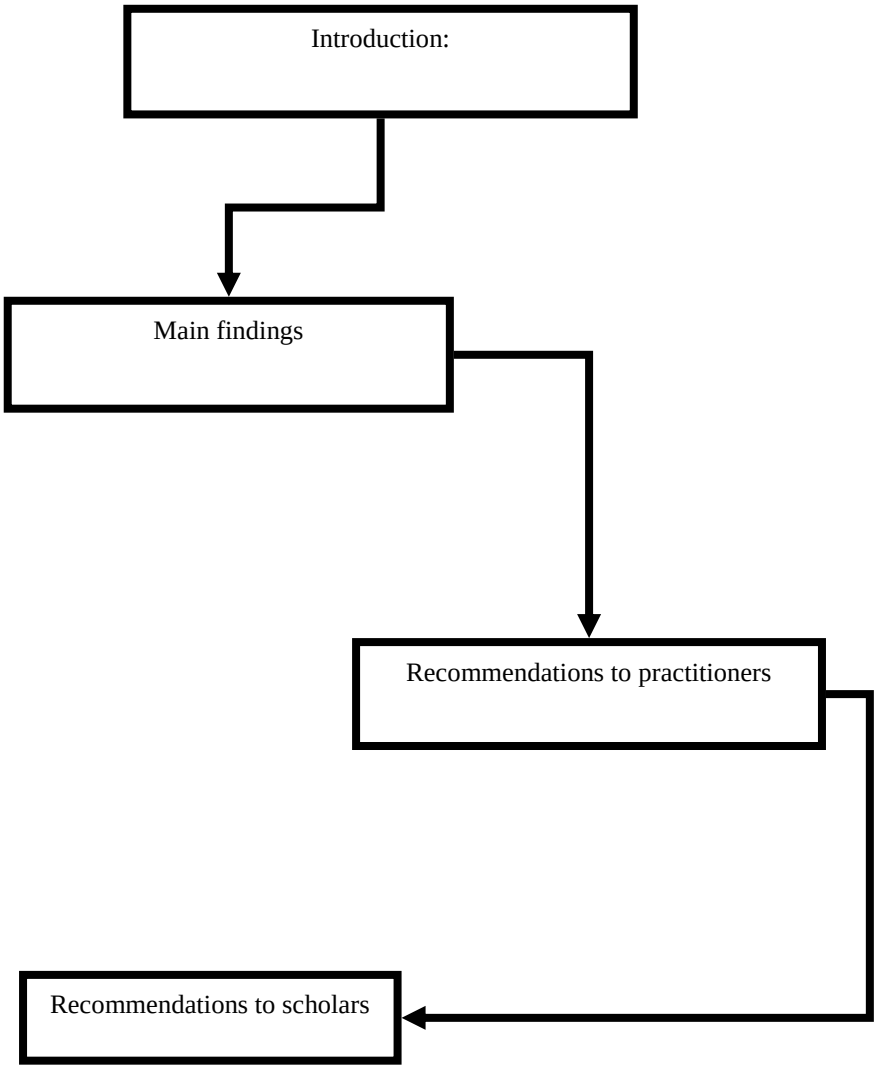
On the construct of the entrepreneur and entrepreneurial idea development and support, the JCSE performed at 33.33% which represents a score of six out of eighteen variables. The variables being performed include self realisation and self fulfilment needs, desire to achieve, passion to create, undying perseverance, evaluation and exploitation of the opportunity and marshalling of resources. This is only a third of variables to this construct and the researcher concludes therefore that the JCSE does not do a collaborative approach to entrepreneurship development in the ICT sector

## 6.5 Conclusion

It is clear from the discussion above that save for the one respondent, the other two respondents have limitations in terms of performance of collaborative approach to entrepreneurship development in the ICT sector. The spread of challenges seem to

be spread across all the constructs. The finding that would come out of this discussion generally is that a collaborative approach to entrepreneurship development in the ICT sector is not being practiced by the entrepreneurship development agencies.

# 7 Chapter seven: Conclusion



## 7.1 Introduction

This chapter serves to highlight the findings of the study. The results are grouped into categories along the lines of the constructs in a manner that seeks to make recommendations based on the answers to the research questions. The recommendations are directed at national economic policy development practitioners, entrepreneurship practitioners and scholars.

According to (Rauch, Wiklund, Lumpkin, & Frese, 2009) there has been a number of 'reviews and assessments of the entrepreneurship research field that have concluded that the development of a cumulative body of knowledge has been limited and slow because there is lack of agreement on many key issues regarding what constitutes entrepreneurship'. They go on to argue that this due to the fact that researchers often fail to build upon each others' results and also because the measurements of key variables are generally weak.

The literature reviewed shows a tremendous amount of collaborative models of entrepreneurship development in the ICT sector (Bouwman & Hulsink, 2002), (Rocha & Miles, 2009), (Camarinha-Matos & Afsarmanesh, 2008), , but there is a need to extend this empirical research to the application of such variables to the South African context. Furthermore, there is a need to measure the application of the variables to the constructs of collaborative approach to entrepreneurship development in the ICT sector within the South African context.

Employing a collaborative approach to entrepreneurship development and support in the ICT sector would harness the joint capabilities of stakeholders (Miles & Hector, 2008), and bring about a more coordinated and effective result in the quest to improve entrepreneurship activity (Acs, Arenius, & Hay, 2004).

## 7.2 Main findings

In terms of the performance of providing support and development for the entrepreneur and the entrepreneurial idea, the study found that the entrepreneurial development agencies in South Africa do not practice a collaborative approach to entrepreneurship development in the ICT sector. This is due to the fact that two thirds of the entrepreneurship development and support agencies performed far less than 50% of the variables to the constructs of collaborative approach to entrepreneurship development and support. According to (Ma & Tan, 2005), (Nieman & Nieuwenhuizen, 2009), the variables to the construct of the entrepreneur and the entrepreneurial idea are critical in ensuring entrepreneurial success.

On the construct of support and development with regards to the entrepreneurial process, the study found that the entrepreneurial development and support agencies in South Africa do not practice a collaborative approach to entrepreneurship development and support in the ICT sector. Again the performance scores on the variables to the construct of collaborative approach to entrepreneurship development in the ICT sector were less than 50%. According to (Hisrich, Peters, & Sheperd, 2004), (Shane & Venkataraman, 2000) and (Baez & Abolafia, 2002), this construct is critical to the performance of entrepreneurship.

The construct of entrepreneurship development performed at less than 50% and therefore the study found that the entrepreneurship development and support agencies do not practice a collaborative approach to entrepreneurship development in the ICT sector.

The last construct of collaborative models performed at the mean of 52.38%. although this is above 50%, the results are heavily skewed as the first respondent scored 100%, the second one 0% and the last one 57.14%. the findings therefore would be that the collaborative models are being used by entrepreneurship development and support agencies.

### 7.2.1 Recommendations for the practitioners

The recommendations for the practitioners include the following:

A collaborative approach to entrepreneurship development and support includes the constructs of entrepreneur, entrepreneurship, entrepreneurship process, and entrepreneurship development models. In order to achieve the desirable outcomes, it would be recommendable to carry out a comprehensive and quantitative research on the application of the variables to these constructs.

The measurement of the nature, extent, scope and scale of the variables to the constructs of entrepreneurship development and support also needs to be carried out in order to appraise the effectiveness of the entrepreneurship development and support agencies.

### 7.2.2 Recommendations for the scholar

In the process of conducting studies aimed at improving the level of entrepreneurship activity in South Africa, it is important for the scholar to study more rigorously the concepts of collaborative approach to entrepreneurship development and support in South Africa. This study needs to quantify the scope, scale and characteristics of interventions currently being practiced in this regard. It is therefore a recommendation from the researcher that scholars should study this concept much more rigourously and provide more depth and breadth in terms of the application of the constructs applicable to this concept.

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# 9 Annexure A: The clan Model

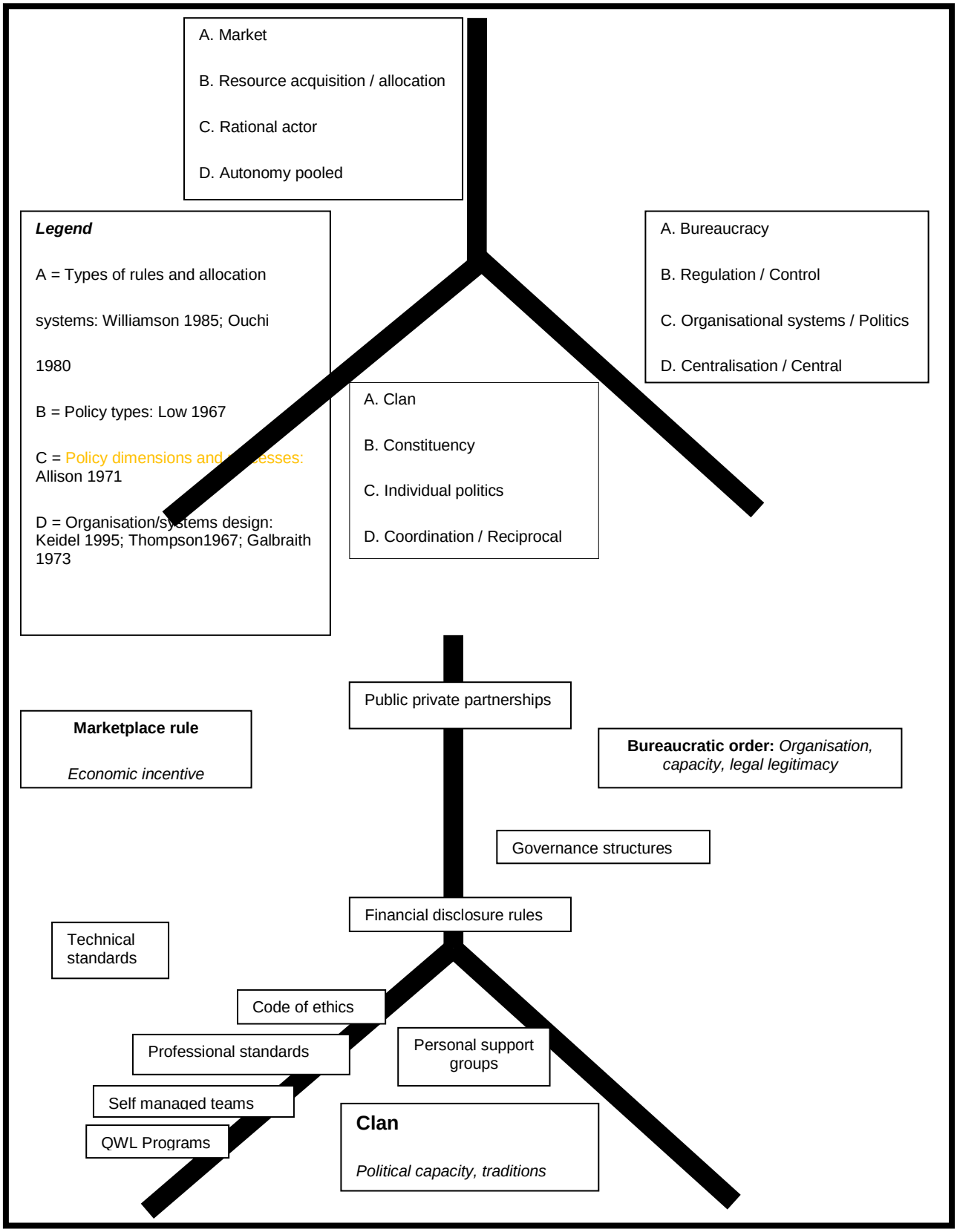


**Figure 18: Context for collaboration and control: theoretical roots and examples: Source (Lad & Caldwell, 2009)**

# 10 Annexure B: Entrepreneurship development and support agencies

**1. Industrial Development Corporation of South Africa**

**Mission statement**

The IDC is a self-financing national development finance institution, whose primary objectives are to contribute to the generation of balanced, sustainable economic growth in Africa and to the economic empowerment of the South African population, thereby promoting the economic prosperity of all citizens. The IDC achieves this by promoting entrepreneurship through the building of competitive industries and enterprises, based on sound business principles.

**Overview**

Established in 1940, the IDC is a self-financing, state-owned development finance institution;

The vision of the IDC is to be the primary source of commercially sustainable industrial development and innovation to the benefit of South Africa and the rest of the African continent;

Provides financing to entrepreneurs engaged in competitive industries and enterprises, based on sound business principles;

- Pays income tax at corporate rates and dividends to the shareholder;
- Aims to maximise developmental and financial returns within an acceptable risk profile.

**Strategic Goals**

The IDC's objective is to provide development finance, so as to support industrial capacity development and entrepreneurship.

South Africa has a diversified economy, with well-developed agricultural, mining, manufacturing and services sectors. However, certain areas of the economy still need further support and development in order for the country to realise its full potential. The IDC plays an important role in this development, by assisting with the development and implementation of government policies, and through identifying and addressing market gaps, bottlenecks and capacity constraints in the economy. In the rest of Africa, where economies are still largely focused on resource-based industries, the IDC's objective is also to unlock the potential of these resources and assist in the industrialisation and modernisation of countries.

In order for the benefits of development to be felt throughout the economy, a strong entrepreneurial class is needed. The IDC develops entrepreneurs through its assistance to Small and Medium Enterprises (SMEs), and through non-financial support to new entrepreneurs.

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The outcomes achieved through the IDC's industrial capacity development and entrepreneurial support are determined by the Corporation's mandate, with the orientation of the organisation being

towards servicing the needs of the entrepreneurs and the business community. Through this, the Corporation aims to achieve the following outcomes:

- Creating sustainable employment opportunities;
- Growing sectoral diversity;
- Supporting new entrepreneurs entering the economy;
- Supporting Broad-Based Black Economic Empowerment (B-BBEE);
- Support for SMEs;
- Promoting regional equity, including:
- Development of rural areas;
- Supporting development in poorer provinces;
- Stimulating economic activity in previous townships;
- Industrialisation in the rest of Africa;
- Supporting export-focused enterprises; and
- Ensuring environmentally sustainable growth.

**Products and Services**

The IDC offers a wide array of financial instruments for businesses, including:

- Equity;
- Quasi-equity;
- Commercial debt;
- Wholesale finance;
- Bridging finance;
- Share warehousing;
- Export/import finance;
- Short-term trade finance;
- Venture capital.

**2. Khula Enterprise Finance**

**Mission Statement**

To provide finance, mentorship services and small business premises to Small and Medium Enterprises (SMEs) through a network of partnerships and to encourage the sustainable development of SMEs, whilst ensuring that Khula remains financially viable.

**Overview**

Khula is a state-owned development finance institution that was established in 1996 to facilitate access to finance for Small, Micro and Medium Enterprises (SMMEs), by providing finance, mentorship services and small business premises. It is the government's flagship Development Finance Institution (DFI) for small business, which fulfils a public policy mandate to address market deficiencies in the SME financing sector, through a network of partnerships with banks, Retail Financial Institutions (RFIs), Joint Ventures (JVs) and Specialist Funds. The organisation acts as a complementary financial institution that bridges the financing gaps not addressed by the commercial financial institutions.

Khula reports to the Minister of Trade and Industry, Dr Rob Davies, and is registered as a limited liability public company. Khula is dedicated to the development and sustainability of small business enterprises in South Africa.

The Company is a wholesale finance institution, which operates across the public and private sectors, through a network of channels to supply muchneeded funding to small business. These channels include South Africa's leading commercial banks, retail financial institutions, specialist funds and joint ventures, in which Khula itself is a participant. Its primary aim is to bridge the 'funding gap' in the SME market not addressed by commercial financial institutions.

The institution was created as part of the institutional framework envisaged in the 1995 Department of Trade and Industry (**the dti**) White Paper on the National Strategy for the Development and Promotion of Small Business. Khula is the cornerstone of **the dti**'s institutional support framework for financing SMEs.

**Legislative Framework**

Khula falls under the auspices of the Directorate of Enterprise Development (formerly the Centre for Small Business Promotion) within **the dti**. Khula is an independent, limited liability company with its own board of directors.

Khula's creation originated from the National Strategy for the Development and Promotion of Small Business to meet the challenges of creating sustainable jobs, supporting SMMEs and thereby enabling previously disadvantaged communities to integrate into the mainstream economy.

**Mandate**

**Maximisation of Access to Finance for SMEs**

Khula's primary mandate is to intervene in underserved segments of the SME finance market, in order to increase access to finance by small enterprises. A measure of Khula's success in this area is the extent to which it attracts private sector partners to enter the market. In addition, Khula needs to ensure that the impact of its programmes is felt by as many SMEs as possible within its target group, i.e. it should narrow the SME financing gap.

**Maximisation of Development Impact**

In addition to maximising access to finance, Khula is mandated to ensure that its resources are applied in a manner that maximises development impact. The key measures of development impact are sustainable job creation, Black Economic Empowerment (BEE), women empowerment, the geographic spread of its funding activities and the development of the entrepreneurial potential of rural and urban poor communities.

**Financial Sustainability**

Khula has to maximise access to finance for SMEs and maximise development impact while remaining financially sustainable itself.

A long-term objective for Khula as an institution is to attain the capacity to be self-funding. This will be achieved through:

- Gradually changing the pricing from a subsidised basis to one reflecting market conditions, as more players enter the market;
- Optimal asset utilisation (capital, people, infrastructure) and leveraging the resources of its partners;
- Diligent cost management and control; and
- Effective risk management, through appropriate levels of due diligence, post-investment support and portfolio management.

Khula offers non-financial services (mentorship programme) and financial services. As a wholesale financier, Khula leverages its own resources as well as those of its partners.

- *Mentorship Programme* – offers pre-loan and post-loan assistance to existing and potential Khula clients. During the pre-loan stage, entrepreneurs are assisted by experienced mentors with advice, counselling and the development of viable business plans in order to access funding.
- *Khula Land Reform Empowerment Facility (LREF)* – offers financial assistance to emerging black farmers and entrepreneurs, who wish to invest in agriculture or agro-processing projects. The LREF enables black South Africans to control, manage and own land-based income-generating assets in the agricultural sector.
- *Non-Bank Retail Financial Intermediaries (RFIs)* – are independent organisations or companies that receive loan funds from Khula to on-lend to SMEs, according to their own lending policies. RFIs are required to ensure that loans disbursed, are paid back by the SMEs, in order to pay back the loans originally received from Khula.
- *Khula Credit Indemnity Scheme* – the purpose of the Scheme is to share the financing risk with the commercial banks, thus enabling SMEs to access funding from the participating banks. The Scheme enables entrepreneurs to access funding for the purpose of establishing, expanding or buying out an existing business, business assets and working capital. Finance has to be approved by the participating bank and the bank will only apply to Khula for an indemnity where there is inadequate collateral.

**Khula Joint Ventures**

Khula has a number of joint-venture funds with different companies to assist the financing of entrepreneurs. These funds are managed by the companies with which Khula has partnered.

The Joint-Ventures Funds are:

- *Business Partners-Khula Start-up Fund* – is a joint venture initiative between Khula and Business Partners. It was created to help entrepreneurs financially to establish new enterprises, as well as early phase business expansion.
- *Anglo-Khula Mining Fund* – is a joint venture initiative between Khula and Anglo American, which provides seed capital to junior mining projects at pre-feasibility and pre-commissioning phases.
- *Regent Factors Reverse Factoring* – is a joint initiative between Khula and Regent Factors, aimed at addressing the cash flow gap experienced by SMEs that have been awarded contracts by public and private sector entities. The fund allows entrepreneurs to access working capital, thus reducing the time gap between the delivery of goods or services and recipient payments.
- *Enablis-Khula Loan Fund* – is a joint venture initiative between Khula, Enablis Entrepreneurial Network and FNB Enterprise Solutions. The fund provides loan guarantees for loans extended to Information and Communication Technology (ICT)-focused businesses.
- *Khula-Enablis SME Acceleration Fund* – This fund is not sectorspecific, as it enables businesses including transportation, tourism, agriculture and services. It aims to provide risk capital funding to entrepreneurs with start-up and early-stage businesses.

- *Property Portfolio* – Khula provides industrial and retail premises to small businesses at subsidised rentals. Premises vary from shops to mini-industrial units used for manufacturing. The properties are located in seven regions: Gauteng, Western Cape, Eastern Cape, Northern Cape, Free State, KwaZulu-Natal and Mpumalanga.

Khula has Regional Offices in the Following Locations:

- **Free State** – Bloemfontein;
- **Western Cape** – Claremont;
- KwaZulu-Natal – Durban;
- **Eastern Cape** – East London and Port Elizabeth;
- **Northern Cape** – Kimberly;
- **Gauteng** – Johannesburg;
- **Mpumalanga** – Nelspruit;
- **Limpopo** – Polokwane;
- **North West** – Rustenburg; and
- **Gauteng** – Pretoria/Tshwane.

**3. South African Micro-Finance Apex Fund (SAMAF)**

**Mission Statement**

To provide developmental financial and non-financial intermediaries through:

- Effective mobilisation and wholesaling of capital micro-finance institutions with proven potential;
- Development of human capital in the economic environment through capacity building and institutional development;
- Contribution to policy development, in respect of micro-finance, by informing and supporting South African Micro-Finance Apex Fund (**samaf**) staff, its partners, and stakeholders; and
- Development of valuable partnerships between business, government and the community.

**Overview**

**samaf** was approved to operate in terms of Section 38(1), read together with Section 76(4)(b) of the Public Finance Management Act, 1999, as a trading entity, in April 2006.

**Strategic Goals**

- Contribute to poverty alleviation goals;
- Exceed our stakeholder expectations;
- Improve processes to achieve service delivery excellence;
- leverage performance through capability and people; and
- Build a sustainable apex fund.

**Products and Services**

**samaf**'s products and services include loans and institutional capacity building funds.

## 4. Small Enterprise Development Agency

### Mission Statement

To develop, support and promote small enterprises, to ensure their growth and sustainability in co-ordination and partnership with other role players.

### Overview

The Small Enterprise Development Agency (Seda) was established in December 2004 as an agency under the Department of Trade and Industry (**the dti**). The establishment was done by merging three organisations, namely the Ntsika Enterprise Promotion Agency, National Manufacturing Advisory Centre (NAMAC), and Community Public Private Partnership Programme (CPPP). The GODISA Trust and National Technology Transfer Centre were integrated into Seda in April 2006, becoming the Seda Technology Programme.

Seda provides business development and support services for small enterprises through its national network, in partnership with other role players in the small enterprise support. Seda also implements programmes targeted at business development in areas prioritised by the government.

The business model of Seda is based on a number of delivery points located throughout the country, supported by a national office located in Pretoria/ Tshwane. Whilst the national office is responsible for overall co-ordination and provision of support services and systems to the provincial network, the various delivery points are the interface point with the target market, and responsible for the provision of the products and services that Seda offers its clients. These delivery points currently take the form of Seda branches and Enterprise Information Centres (EICs), as well as Seda Technology-supported business incubators.

To increase the number of delivery points through which Seda will access its clients, the institution will increase the rate of co-ordination and number of partnership agreements and associations with other Small, Medium and Micro Enterprise (SMME) support agencies/institutions.

To date, the organisation has established a network of 42 branches, 8 (eight) provincial offices, 53 EICs and a national office in Pretoria. Through this network, various programmes were delivered to over 185,000 clients during the 2007/08 financial year.

### Strategic Objectives

Seda's strategic objectives for the 2009/10 to 2011/12 period are to:

- Enhance competitiveness and capabilities of small enterprises through co-ordinated services, programmes and projects;
- Ensure equitable access for small enterprises to business support services through partnerships; and
- Strengthen the organisation to deliver on its mission.

### Products and Services

Business development and support services, such as advice, business planning, entrepreneurship promotion, training, franchise awareness, access to local and international markets, access to finance, co-operative development, access to technology, etc.

**5. National Youth Development Agency**

**Vision, Purpose and Nature of Business**

**Vision**

To mainstream and integrate youth development in all organs of state, private sector and civil society for sustainable livelihoods.

**Purpose**

To mainstream and integrate youth development for sustainable livelihoods.

**Nature of Business**

To initiate, facilitate, implement, coordinate and monitor youth development interventions aimed at reducing youth unemployment and promoting social cohesion

**NYDA Mandate & Functions**

The NYDA's mandate is to:

- Advance youth development through guidance and support to initiatives across sectors of society and spheres of government.

- Embark on initiatives that seek to advance the economic development of young people.
- Develop and coordinate the implementation of the Integrated Youth Development Plan and Strategy for the country. The two documents serve as guiding instruments in advancing youth development at all levels of government.

**The functions of the NYDA include the following:**

- National Youth Service and Social Cohesion
- Economic Participation
- Policy, Research and Development
- Governance, Training and Development
- Youth Advisory and Information Services
- National Youth Fund

**Developmental Focus**

- The NYDA's primary target group is young people aged between 14 and 35 years.

- The majority of our beneficiaries will be from low income households.

- Emphasis will also be on young persons with disabilities.