

**Facilitating Policy Implementation on Entrepreneurship in South Africa using  
ICTs**

Mini – dissertation by

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God of the impossibilities because He has guided me through the darkest of times to the light.

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## Table of Contents

Table of Contents .....	iii
List of Figures & List of Tables .....	iv
Abbreviations .....	v
Abstract .....	vi
Chapter 1: Introduction .....	ix
Chapter 2: Literature Review .....	ix
2.1 Small and Medium Enterprises (SMEs) .....	ix
2.2 Entrepreneurship .....	ix
2.3 ICT for Development (ICT4D) .....	ix
2.4 ICT for Entrepreneurship .....	ix
2.5 Towards an ICT entrepreneurial Culture .....	ix
2.6 Summary .....	ix
Chapter 3: Research Approach .....	ix
3.1 Research paradigms .....	ix
3.2 Research method .....	ix
3.3 Research techniques .....	ix
3.4 Role of the researcher .....	ix
3.5 Analysis approach .....	ix
Chapter 4: Analysis & Discussion of Findings .....	ix
4.1 Need for trust .....	ix
4.2 Communication - Keeping in touch .....	ix
4.3 Communication – <i>Awareness</i> .....	ix
4.4 Communication – New developments .....	ix
4.5 Lack of knowledge of Entrepreneurship support services .....	ix

4.6 <i>Expectations to an ICT-Entrepreneurial future</i> .....	ix
Chapter 5: Conclusion .....	ix
References .....	ix
Appendixes.....	ix

## **List of Figures & List of Tables**

**Figure 1: ICT facilitation through the differentiation strategies**

**Figure 2: Bygrave (2004:2) steps contrasted against McDougall & Oviatt (2000:903)**

**Figure 3: Iterative stages of the entrepreneurial process**

**Figure 4: Integrative framework of ICT in development (Sein & Harindranath, 2004:20)**

**Figure 5: Employment Groups**

**Figure 6: Age Groups**

**Table 1: Extract: National Small Business Act, (1996)**

**Table 2: MDGs and Entrepreneurship**

**Table 3: Layout of thesis**

**Table 4: Definitions of entrepreneurship**

**Table 5: Different definitions of Entrepreneur**

**Table 6: Summary of the factors that influence enterprise success (Kunene, 2009:80)**

**Table 7: Perspectives of ICT4D**

**Table 8: Internal & External Barriers for SMEs adopting ICTs**

**Table 9: Strategic Priorities of MTSF (2009 - 2014), (The Presidency, 2005)**

**Table 10: Case Study Limits**

**Table 11: Analysis Statistics**

**Table 12: Summary of feedback from interview questions**

**Table 13: Characteristics classified as internal or external factor or barrier**

**Abbreviations**

ICT	Information Communication Technology
ICT4D	Information Communication Technology for Development
MDGs	Millennium Development Goals
MTSF	Medium Term Strategic Framework
SME	Small Medium Enterprise
DC	Developing Country
GDP	Gross Domestic Product
SEDA	Small Enterprise Development Agency
CIPC	Companies and Intellectual Property Commission
FRSC	Financial Reporting Standards Council
RDP	Reconstruction and Development Programme
GEAR	Growth, Employment and Redistribution
GEM	Global Entrepreneurship Monitor
SEIDET	Siyabuswa Educational Improvement and Development Trust
SDI	Sustainable Development Initiatives
NPO	Non-profit Organisation
DTI	Department of Trade and Industry
NYDA	National Youth Development Agency

ECD	Early Childhood Development
M & E	Monitoring & Evaluation
CBD	Central Business District
CIDA	Community and Individual Development Association
MPCCs	Multipurpose Community Centres

## **Abstract**

There have been many initiatives in developing countries around the world when it comes to ICT and it has been shown that ICT does not in itself lead to any socioeconomic development. Rather, it is the use of ICT in various initiatives, for example as in this research in using ICT to foster an entrepreneurial culture which eventually leads to developmental change. These entrepreneurial cultures include individuals or groups of individuals having ideas that will enable them to bring about an economical change in their lives and in the country. It is the responsibility of government to create and stimulate a culture of entrepreneurship. This research investigated influences on how policy can be designed to create an environment that fosters an entrepreneurial culture in rural communities of South Africa by using ICTs. The findings suggest ways that South Africans' can use to enhance the entrepreneurial culture. The case study approach is used in a rural area in Mpumalanga, South Africa where entrepreneurs and non-entrepreneurs are interviewed about their use of ICTs. The findings reveal that the implementation and facilitation of policies on entrepreneurship in South Africa are not well diffused amongst people living in rural areas, specifically at Kwa-Mhlanga. ICT can play a role in making people in rural areas aware of entrepreneurial opportunities and the introduction of ICTs at the lowest level of the education syllabi for example at the foundation phase will also help create an ICT entrepreneurial culture. This will also ensure that when the students finish their tertiary education a certain percentage of them can create jobs for the unemployed rather than the whole population of students looking upon government to create jobs for them.

I, Ntombizodwa N. Mahlangu declare that this research thesis is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree **Magister Commercii (Informatics)**, by course work in

**the Faculty of Economic and Management Science, University of Pretoria,  
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Signed at Pretoria

On the ..... day of ..... 2012



## Chapter 1: Introduction

In a developing country like South Africa, there are many laws; regulations; policies; and procedures introduced into the system since the present government came into operation in 1994. These include the introduction of entrepreneurship in order to make sure that the economy of the country is enhanced. Government has also been aware that Information Communication Technology (ICT) will play an important role in the future of the country. ICT meetings have been organised to make sure that the citizens and the government departments are aware of what ICTs can do to improve the development of the country and increases the economy levels of South Africa.

There have been many initiatives in developing countries around the world as far as ICT is concerned. ICT includes tools like the Internet; mobile communication with instant messaging, video conferencing, etc. ICT does not in itself lead to any socioeconomic development. Rather, it is the use of ICT in various initiatives, for example using ICT to foster an entrepreneurial culture, which will lead to development (Roode et al., 2004:2). These entrepreneurial cultures include individuals or groups of individuals having ideas that will enable them to bring about social and economic change in their lives and in the country. The change or growth could start at different levels, for example deciding to have a business at the side of the road or at a fruit market. Such a business is more commonly understood as a growing business and termed a Small Medium Enterprise (SME). The National Small Business Act (102/1996) uses a criterion of classification for describing what qualifies a business as a small business (Table 1). In the community that was investigated most of the business situated there are in the manufacturing business. The exact of the criteria is shown in the Table 1 below. When we look at the extract for manufacturing companies, it is clear that our case study falls in the micro class because most participants had less than five employees working at their businesses. These businesses make less than the total annual turnover listed in the table. When the SME starts to bring more profit and other SMEs are formed, that

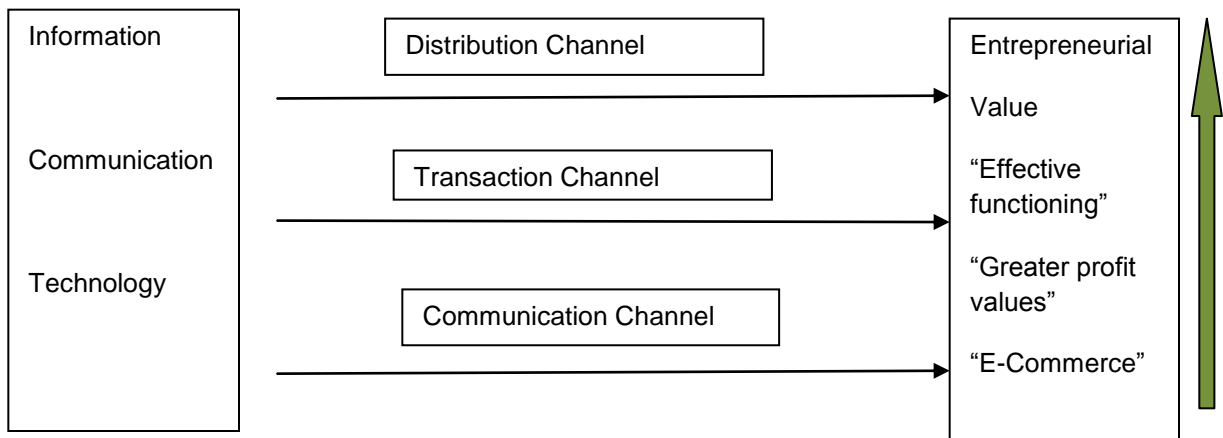
process of creating the idea and having more than one SMEs with a desired outcome it is termed entrepreneurship. There is no one universal definition for entrepreneurship but rather rounded understandable descriptions of the fact that an idea is the initial concept originating with an individual or a group of individuals. Entrepreneurship, describes the process in which a person starts new projects, opportunities or ventures. It can be setting up a business, a social enterprise or offering an existing or new product or service into a new or existing market, this can be for profit or non-profit (Tebelius, 2006:6). In realisation of the idea it is important to note that there will be innovation and risk associated with the venture or business created.

Sector or sub-sectors in accordance with the Standard Industrial Classification	Size of class	Total full-time equivalent of paid employees Less than:	Total annual turnover Less than:	Total gross asset value(fixed property excluded) Less than:
Manufacturing	Medium	200	R40.00m	R15.00m
	Small	50	R10.00m	R3.75m
	Very small	20	R4.00m	R1.50m
	Micro	5	R0.15m	R0.10m

**Table 1: Extract: National Small Business Act, (1996)**

Literature suggests that one of the ways that ICT can promote entrepreneurial value is by supporting differentiation strategies at various steps of the value chain such as raising revenue or lowering costs (Rasheed, 2009:93). In supporting differentiation structures, the concerned promoter is using an approach where the entrepreneurial ventures aim to develop and market that idea entrepreneurial product for different customers. Promoting the idea uses channels such as the distribution, transaction and communication channels. These channels facilitated with ICT are described below and in Figure 1:

- ICT facilitates distribution channels that facilitate the physical exchange of products and services;
- ICT facilitates transaction channels that enable sales activities between buyers and sellers, this usually done in the form of e-commerce; and
- ICT facilitates communication channels that generate exchanges of information between buyers and sellers. This can include communication that makes sure that access to information and knowledge becomes a pre-requisite to reducing poverty, basic healthcare and education.



**Figure 1: ICT facilitation through the differentiation strategies**

The distribution, transaction and communication channels help entrepreneurs to find different options in making sure that their customers are satisfied (customer satisfaction). They also ensure that easier pathways are used in order for entrepreneurs to function effectively and efficient for greater profit margins. The distribution, transaction and communication channels should be used together because their functions sometimes overlap each other Governments in developing countries (DCs) are keen to stimulate an entrepreneurial culture while at the same time, attempting to deal with other important development issues. In 2008 the world got together to strategise on how best to help developing countries to overcome some developmental issues that were surrounding these countries, these included issues such as poverty, basic healthcare and education. In this meeting the Millennium Development Goals

were determined and the developing countries started to work towards making sure that all those issues describe in that meeting would be settled in the 2010. In a country like South Africa the government had to form frameworks that would make sure that the country can deal with the MDGs and at the same time make sure that the citizens also help in the obtaining of those goals. This was created by creating a framework that would make sure that strategies were put into operation in South Africa, the South African government called this the Medium Term Strategic Framework. In this research, we argue that entrepreneurship can help communities of South Africa to achieve their developmental goals as set out in the Medium Term Strategic Framework (MTSF) as well as the MDGs, as listed in Table 2 (Nepad Secretariat, 2008:5):

<b>MDG goal</b>	<b>What entrepreneurship can offer</b>
Eradicate extreme poverty and hunger	By having these small businesses even a business as small as selling fruits in the streets will make the owner of the business make sure that they provide for themselves and save some money for basic needs for their families;
Achieve universal primary education	Most of the entrepreneurs even if they have not received any form of education will make sure that their siblings receive primary education by providing the money to buy the essentials after government has provided for the basic fees for primary learners;
Promote gender equality and empower women	This means that the opportunity for women to be entrepreneurs will not be constrained because business like catering, sewing, pottery, etc. will make women to be empowered;
Reduce child mortality	Having ICTs to make sure that citizens are knowledgeable about what is happening in the country and making sure that some of entrepreneurs have businesses like the Internet, phone shops that provide for

MDG goal	What entrepreneurship can offer
	quicker access to help mothers during birth;
Improve maternal health	Having more ICTs that will help in the health department like tools of the nature of telemedicine that can enable a diagnosis from doctors who are in other countries;
Combat HIV/Aids, malaria and other diseases	The interaction between ICT and entrepreneurs can encourage more awareness between the business owners and their customers. Information is power, and the people will learn on how to prevent various diseases.
Ensure environmental sustainability	By making sure that citizens are satisfied and making sure that stability is achieved economical, allowing for more stable jobs for the people.
Develop a goal partnership for development	By being committed to good governance and development.

**Table 2: MDGs and Entrepreneurship**

As described above that the government formed the framework in order to make sure that South Africa has a blueprint that it can follow to enable the improvements to the realisation of MTSF and MDGs activities. The improvements to these goals are influenced by the countries' policies. Countries around the world have in place a number of policies in regard to entrepreneurship. However, most governments struggle to successfully implement such policies. In South Africa, the government has two related acts to ensure that their citizens have some form of information and structures that will help them in their entrepreneurial ventures:

- The National Small Business Amendment Act, 2004:2 whose purpose is to create the administrative structures and means to “promote” small business in the Republic.

- Co-operatives Act, 2005:2 provides for the governance structures that will see to the formation and registration of co-operatives

## **Problem Statement**

In facilitation of the policies it would be vital for the citizens to have knowledge of the policy itself and in a case where the policy is not understood by the citizens, a relationship needs to be formed between the carrier of the information and the receiver of the information. This relationship brings forth the communication culture where background is important and when communicating the receiver can then listen and give feedback. Feedback will also be given only if the citizen has developed some form of trust with the giver of information. In making sure that all these goals are attained there needs to be a way that collaboration, learning and facilitation of important activities that will ensure that entrepreneurs are focused and can help themselves to produce the best business and generate profit for themselves.

This research investigates how individuals in the rural areas could use ICTs in facilitating a successful entrepreneurial culture. It should be noted that although this is the aim of the research the aim itself is a problem in the rural areas and specifically in the Kwa-Mhlanga area where the questionnaires were conducted. The thesis therefore aims to firstly, show that there are policies that can be implemented in the facilitation of entrepreneurship using ICTs in South Africa and secondly, feeds from feedback given by the research participants to determine whether those individuals are aware of the policies and whether the policies are used to aid in the process of entrepreneurship. Thirdly, making sure that the necessary goals are attained for collaboration, learning and facilitation of important activities in order to ensure that entrepreneurs are focused and can help themselves to produce the best business and generate profit for themselves.

## Research question

The main question in the research is: How could businesses in the rural areas use ICTs to create an entrepreneurial culture needed for successful business operations?

## Research sub questions

1. Are the entrepreneurs aware of policies and programs in South Africa that help in the entrepreneurship process supported by the government?
2. How can ICTs play a role in enhancing the entrepreneurial culture required for the increase in the economy and development of the country?
3. Where can citizens learn on how to maximise the opportunities for creating and having an increased entrepreneurial culture?
4. From the results how can the facilitation of an ICT-enabled entrepreneurial culture be improved?

Because of scope and time limitations, this research will focus on how ICTs can contribute to supporting an entrepreneurial culture that will enable entrepreneurs to have sustainable small business that produce profits and that can decrease the cost of operations appropriately in a specific rural environment. The study also encourages a way that entrepreneurs can receive more knowledge about an entrepreneurship in SMEs especially the youth of the country.

Apart from this introductory chapter, the mini-dissertation is structured as described in Table 3:

Chapter	Content
2: Literature Review	The chapter contains the literature review which will look at Small Medium

	<p>Enterprises, Entrepreneurship, Information Communication and Technology for Development in a global sense and in terms of South African viewpoint and how these ICTs would effectively and efficiently aid in the facilitation of policy in order to make sure that a culture is created and maintained in a business. The chapter will also look at learning opportunities and how an ICT-enabled environment can be improved.</p>
<p>3: Research Approach</p>	<p>The chapter will show the research approach used in answering the research questions and trying to answer the problem statement.</p>
<p>4: Analysis and Discussion of Findings</p>	<p>The chapter will look at the data received when the research questionnaires were analysed and the comprehensive findings will then be listed and discussed.</p>
<p>5: Conclusion</p>	<p>The chapter will give the conclusion by inference of the whole thesis and suggest any further research that the researcher thinks could still be carried out in this specific area.</p>

**Table 3: Layout of the thesis**

**Chapter 2: Literature Review**



Chapter 1 presented an introduction where the problem statement and research questions were detailed. This chapter reviews the literature on entrepreneurship, including SMEs and on the use of ICT in developing countries in facilitating a better culture of entrepreneurship. Since the study investigates how ICTs can help in the facilitation of policy implementation on entrepreneurship in South Africa with a focus on entrepreneurs in the rural areas it was important to include SMEs because most governments have put emphasis on SMEs as the future activities to assist in development. The case study location is described in chapter 3, the location is Kwa-Mhlanga and it is populated by a lot of SMEs and as was noted in the introductory chapter that most of the participants of the thesis fall under the micro business sector because most of the entrepreneurs and non-entrepreneurs do not make profit in the millions but in the thousands.

## **2.1 Small and Medium Enterprises (SMEs)**

Most of the world's countries, especially the developing countries agree that small business enterprises form a vital part of the country's economic activities. These businesses have to be encouraged to start-up and eventually become entrepreneurial ventures that produce more to the country. According to Venkatasubramiam (2003) there are four factors that play the role in the enhancement and creation of SMEs:

- Personal management and involvement of big organisations and institutions that have start-up capital;
- Role models that can guide entrepreneurs to enhance their SMEs;
- Effective time management to enable the growth of the SMEs to reach a sustainable point rather than a point where it disintegrate to cause liabilities; and
- Support from partners and advisors of the corporate and public sectors because SMEs form a vital percentage of the country's Gross Domestic Product (GDP).

These factors must be adopted by the owners of businesses in order to produce highly rated SMEs. SMEs are dynamic enterprises that can adapt easily to the changes around the environments that they are placed at. It is for this reason that most governments consider SMEs important in helping the countries with their economic power. SME development forms an important part of the South African governments' active strategy to ensure mobility between the first and second economies in order to help alleviate poverty, create profitable opportunities for indigenous entrepreneurs and create wealth for the previously disadvantaged people (Themba et al, 1999:103 & Tustin, 2001:23). In 1995 the White Paper on National Strategy for the development and Promotion of Small Business (SA, 1995) stated that "the real engine of sustainable development and equitable growth in South Africa is through the private sector, with SMEs playing an important role". This meant that government wanted to influence bigger businesses to invest in SMEs so that the economy of the country would increase and sustainability achieved. The sustainability would be achieved because the big businesses will inject empowerment into SMEs and development in the rural and sub-rural areas would improve. To further this, the South African government launched the Small Business Act 102 of 1996 (SA, 1996; Henning, 2003:3) whose aim is to increase entrepreneurial activity in the country, the act also defines small businesses within the South African context as a "distinct business entity, which is managed by an owner or more", and which satisfy the criteria for small businesses. One example of government initiatives to support SME development is training aimed at increasing skills of SME owners which was done by Umsombomvu which has been recently renamed to National Youth Development Agency (NYDA). NYDA enhances youth development through guidance and support to initiatives across sectors of society and different levels of government. NYDA embarks on initiatives that pursue to advance the economic development of young people, grow and manage the execution of the Integrated Youth Development Plan and Strategy for South Africa, (NYDA, 2012)

Most South African SMEs are at the low end of the enterprise size scale and exist as survivalist firms with little capacity for sustained survival or growth (GEM 2007:20). The

employment record of SMEs would progress if, instead of fading, they could be sponsored to reach stable growth path and become entrepreneurial, (Kangasharju, 2000:28). The main difference between an SME and entrepreneurs is that SMEs are created with the intention of assisting the owners and generally have restricted progress desires (Hisrich & Peters, 2002:13, Gundry & Welsch, 2001:453). By contrast, entrepreneurs are more opportunity motivated, innovative, change-oriented, dynamic, formal, skilled and tactical; they usually aim for high potential ventures (Morris et al, 1996: 61, Rwigema & Venter, 2004:6). At the same time SME survival is important in the theory of sustained entrepreneurship because the survival of SMEs, especially in developing countries in periods of economic instability, can lead to sustained job creation (Glancey et al, 1998:250). A significant number of SMEs make their influence by helping people survive when nothing better is available, and thus SMEs are suitable for empowering a large number of people to progress away from the poverty line to an enhanced life (Rogerson, 2001:118). Although SMEs have capabilities to make sure that the decrease of poverty happens, there are disadvantages.

SMEs especially in South Africa have challenges in terms of sustainability and developing into bigger business. The challenges include lack of skills within the people working within them; cost implication towards growing into entrepreneurships; lack of infrastructure; political and social barriers of lacking a one stop shop facility that can aid in the functions of SMEs and the development of the SMEs. Most SMEs when started also do not use any ICT products and in order to introduce them to ICT and ICT cost plays a major role. Clearly if SMEs are to be the vehicle for job creation, they must be created, sustained and developed as according to Gbadamosi, (2002:95) and Clover & Darroch, (2005:239). The key factor facing government is how best to promote the creation of more SMEs with growth potential (Freeman, 2000:373), and at the same time help those SMEs that are starting to survive and become efficient enough to achieve entrepreneurial growth, such that there is net firm creation (i.e. start-up tops closure) and firm growth exceeds reduction of existing SMEs (Clover & Darroch, 2005:324 & Rogerson, 2001:117). Any method that can aid in the successful growing of

SMEs is vital, not only to these SMEs but also to the whole economy of a country (Glancey et al, 1998:18; GEM 2003:13). The introduction of ICT could increase the sustainability of SMEs.

The growing need for ICT in South Africans' small growing businesses is highly important. For example it is important that when these SMEs use ICT there is a certain level of e-skills that can be monitored and used to create the entrepreneurial culture. These skills need to be imparted to the digital deprived individuals and business. In the year 2007, it was noted that when South Africa was benchmarked to other developing countries it came amongst the last countries in terms of its e-Skills level. This was a grave problem that is facing South Africa. The South African government through the Presidency office made recommendation to e-Skilling the Nation. This mandate was tasked to the Department of Communications (DOC), where they formed the e-Skills Institute that would harness ICT by being part of a four-pronged approach. The e-Skills Institute concentrates on the growth of ICT skills and ICT's capabilities and its effect on society and all business sectors. Being e-Skilled in this era includes categories such as e-Literacy (where the society are taught how to work on the basic suites like Microsoft), e-Democracy and e-participation skills, e-Business skills like the buying and selling of goods over the internet, e-Government skills where government departments have portal that will interface with telecentres and make application and service delivery of services more effective and efficient, e-User skills and e-Practitioner skills. In the same spirit this was not the first mandate taken from the President office. In July 2005, the Presidency had a meeting where an agenda presentation was carried out (The Presidency, 2005). In this presentation it clearly shows that the e-readiness in South Africa is decreasing compared to the international benchmarks. In addressing this predicament the presentation details MTSF. In using MTSF there is indication that without adequate e-skills the strategy will not work. The MTSF is an electoral mandate that will bring about global and domestic changes by informing us of a five year strategic plan that will be used by national and the provincial departments to focus on the critical things that will make sure that standards are improved and seen. The five year strategic plan will follow in the section of IT Strategy and Skills Transfer. The meeting held in the Presidency are all to promote successful SMEs and creating an entrepreneurial culture.

This is proofed by the recent meeting where a National Commission was formed. These will be described in latter section of the thesis. To conclude this section it is important to note that the successful operation of SMEs forms entrepreneurship. These operations provide for a broad basis for rapid economic growth. For the increase of the economic growth, governments put in place policies to assist in entrepreneurship. The next session describes entrepreneurship in a broad view.

## 2.2 Entrepreneurship

### 2.2.1 Defining Entrepreneurship

There are many definitions that are used to describe entrepreneurship and an entrepreneur. It has also become clear through the studies that no one definition is termed as appropriate and used as a universal definition. Table 4 below includes definitions that some literature researchers have used.

Source	Definition
<i>Aldrich &amp; Waldinger, 1990:112</i>	<i>“when a collective of resources are combined so that a valuable creation is made”</i>
<i>Ndedi, 2009:464.</i>	<i>“the French have used the word <i>entreprenre</i> as entrepreneurship and the meaning is to commence, to follow opportunities, to accomplish needs and wants through innovation; including opening a business within a reputable organisation”</i>
<i>McDougall &amp; Oviatt, 2000:903</i>	<i>“Entrepreneurship is the process of seizing or creating an opportunity and following it besides the resources that control the situation”</i>
<i>Callaghan &amp; Venter, 2011:30</i>	<i>“Entrepreneurship is the process by which organisations renew themselves and their markets by pioneering, innovation and risk-taking.”</i>

## Table 4: Definitions of entrepreneurship

Table 4 show three dimensions that are an excellent result of the definitions, namely: innovation, proactive behaviour (creativity), and risk-seeking action. Thus entrepreneurship is when ideas are made into effect by means of self-interest and pro-action; in that the creator of the idea would use all resources available to provide for a culture where jobs are created and income is generated. When the income is generated, some form of pressure is decreased, for example families are provided with income that ensures that the family can provide food; diminish poverty; provide for transportation; provide for easier learning chances, etc. Entrepreneurship is more than having a sole entity. In most literature it is described in association with an entrepreneur and the Table 1 below gives four instances of its description.

Source	Definition
<i>Antonites &amp; van Vuuren (2005:255)</i>	<i>“An entrepreneur is an individual with the ability to realise a specific vision from virtually anything”</i>
<i>King (2006:89)</i>	<i>“someone who establishes a new company to offer a new or existing product or service into a new or existing market ”</i>
<i>Oxford Dictionary (Herrington et. al. 2009:11):</i>	<i>“... one who organises manages and assumes risk of a business enterprise.”</i>
<i>Parker &amp; van Praag (2012:32)</i>	<i>“... entrepreneurs to be people who engage in business venturing at their own risk, regardless of whether their mode of entry is to start a brand new firm or to take an existing one.”</i>

## Table 5 Different definitions of Entrepreneur

Table 5 definitions also show that an entrepreneur is an individual, who uses innovative ways and risks liabilities to create a business enterprise as described for entrepreneurship. The factors mentioned in entrepreneurship are innovative, creativity and risk-taking; this means that the entrepreneur also has these factors in his mind.

There are more factors or benefits that relate to entrepreneurship and this is discussed in the following section.

### **2.2.2 The benefits of Entrepreneurship**

The benefits or characteristics noted in entrepreneurs when they are in the business include the following (Action Coach, 2012:5-9):

- Confidence and sense of ownership: An opportunity for the entrepreneur to take control, because the entrepreneur will be in supervision of their own business;
- Optimistic and Leadership: The entrepreneur would be bringing a difference to the community or to the company within which the idea is being generated. The entrepreneur can also be making a difference in the families of the people that they have employed in that there will be some form of income being injected to those family;
- Team player and passionate about learning and skills transfer: Some of the entrepreneurs' think of the ideas from expertise that they have and when they form the business this enables them to transfer the expert skill to their employees;
- Dedicated to their own financial independence: The income that will be generated from the business used effectively would provide financial freedom to the entrepreneur and also create new opportunities for the business to expand;
- Grateful and gregarious to life: The entrepreneur would be able to exercise his decision making skills by making sure that any instructions given out to the employees are followed and that his time management can be managed according to his business needs. In most cases entrepreneurs may have more time on their hands because they do not have a tight schedule because they are not office bound but would be out in the field networking and thinking of new business ventures or partnerships; and

- Ability to communicate, to be system oriented and to be risk free to successes: These characteristics also referred to as democracy relate to the fact that being an entrepreneur does not have colour, gender and age. Anyone with a focused idea that can be communicated and realised can be an entrepreneur and succeeded.

Venkatasubramiam (2003) describes the importance of entrepreneurship in a developing country where economic development is important as a tool that lies in the compression and /or acceleration of the overall process of entrepreneurship in a country. He points out that the acceleration lies in the assistance of three important areas, namely: ideas development, capital and skill procurement and organisational growth. Acceleration reaches a maximum within organisations that are committed to the entrepreneurship process and enhancing the economical coefficient in that specific country for example the economical coefficient in South Africa.

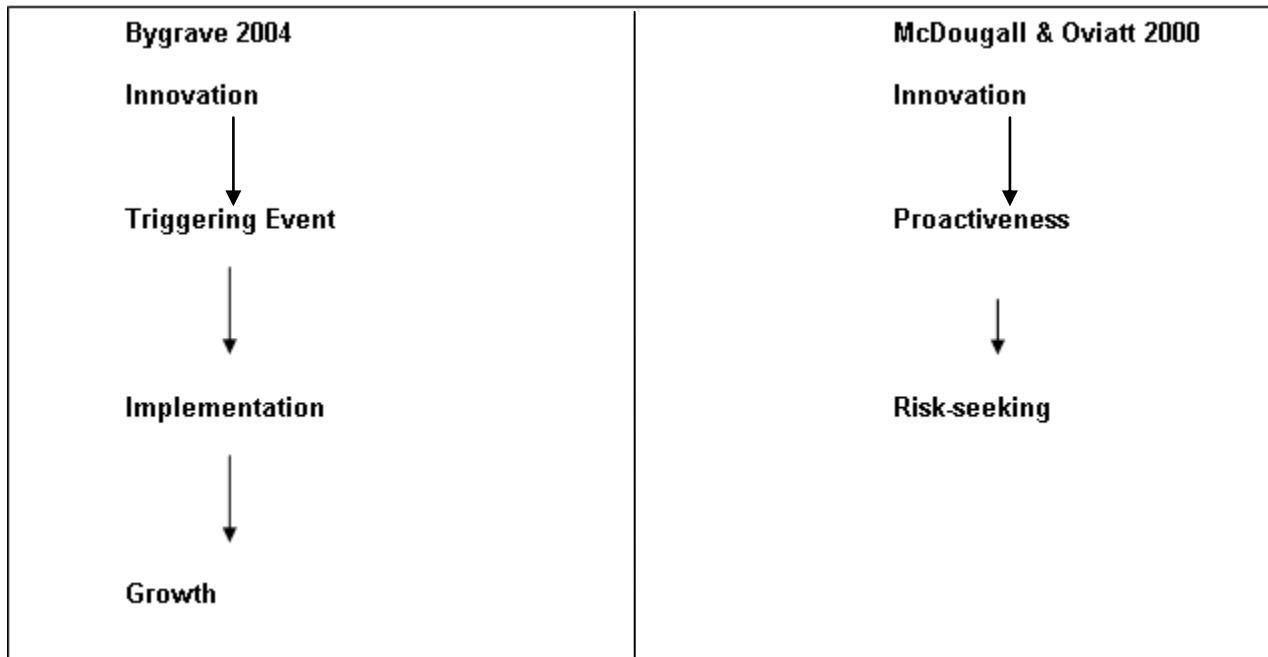
### **2.2.3 The process of Entrepreneurship**

The entrepreneurial process involves all the activities, functions and characteristics associated with recognising opportunities and forming organisations (Bygrave, 2004:2). The process of entrepreneurship has varying underlying stages. McDougall & Oviatt, 2000:903 mentions three stages namely: 1. Innovativeness, perceived as a means of establishing and maintaining competitive advantage; 2. Risk – taking, being able to take the risk of the business not materialise or if any liabilities are encountered the owner of the business will have to take full accountability; and 3. Proactiveness, the entrepreneur will be open to any opportunities that come up for other new ideas or to better the existing business.

Bygrave (2004:3) on the other hand mentions four stages namely: 1. Innovation – where the person gets the ideas and whether or not the idea is pursued would depend on their career prospects, family, friends, role models and the availability of resources; 2. Triggering event –where the starting of the enterprise has to happen. In most cases this

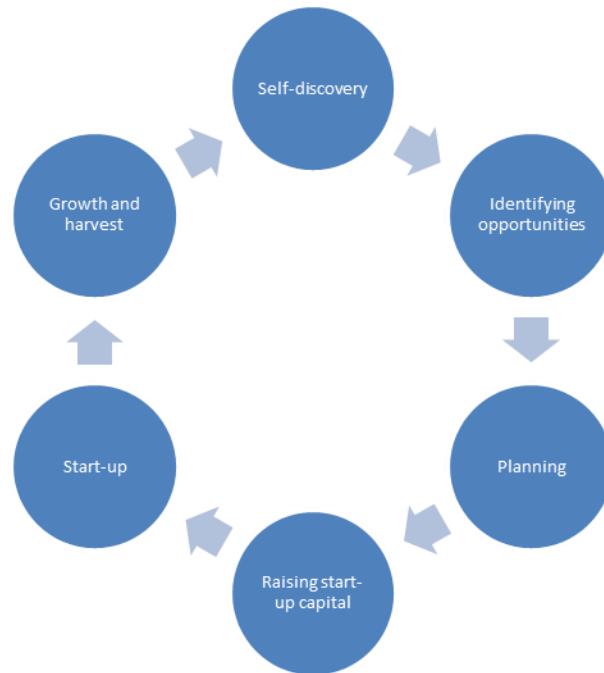


event is influenced by factors like personal, sociological, organisational and environmental; 3: Implementation – what is needed that the enterprise starts, this includes factors like venture start-up capital, availability of resources, customer needs and timing of the business; and 4. Growth – how does one keep the enterprise at its peak, use of a management team or not.



**Figure 2: Bygrave (2004: 2) steps contrasted against McDougall & Oviatt (2000: 903)**

The above stages show that during the entrepreneurship process there are factors that influence what the outcome of the end product is, in these cases they are describe by Bygrave (2003) as personal attributes and environmental factors. The entrepreneurial process cannot be given one defined process and research found that the entrepreneurial process can consist of the following stages that can repeat the stages continuously, in order to make sure that the entrepreneurial process can still be efficient and efficient. Figure 3 shows the repetitive stages:



**Figure 3: Iterative stages of the entrepreneurial process (Bygrave, 2003)**

- Self-discovery, which is when the idea is born. Here the entrepreneur should think innovatively and if possible brainstorm the idea so that the best innovative idea is chosen;
- Identifying opportunities, relating the idea with the available opportunities. It would be important to make comparison with similar opportunities to see where the loopholes are. It is also important because one then makes sure that the opportunity is maximised;
- Generating and evaluating ideas, look at the opportunities available and the innovative idea one has, then realise the idea and evaluate the idea with realistic valued ideas;
- Planning the way ahead into materialising the idea;
- Raising start-up capital, by making the business plan and going to the available resources such as SEDA, NYDA, etc.;

- Start-up, starting the business (idea); and
- Growth; and harvest by making sure the bottom line is always achieved.

The entrepreneurial process can be described using many stages; this is confirmed by the fact that the entrepreneurship process overlaps with the processes of other constructs, such as innovation, change management and strategic management, described by McDougall & Oviatt (2000:902). In overlapping this means that not only the mentioned stages are important but process like change management have to be considered because that will make sure that the business owners know how to strategically manage their business.

According to Kunene, (2008:85) the stages that follow were adapted from Hirsh & Peters and Bygraves' stages into the below stages:

- Innovation, these include the conception, opportunity, identification, information search, feasibility study, etc.
- Triggering event, including making the decision to proceed, business plan, resource acquisition, etc.
- Implementation which consists of infancy, launching of the new venture, managing the venture, etc.
- Growth, consisting of adolescence, harvesting the rewards, organising, controlling, etc.

The innovation, triggering event, implementation and growth stages show that there is an overlap in the process of entrepreneurship, in terms of Figure 2 and Figure 3 shown above, most notably is that of the five stages compared, four of the process has innovation as a step. It is therefore important to note that in order to have a profit maximised enterprise the entrepreneur needs to think outside of the box for his niche idea(s) and be innovate and creative in forming the enterprise. Innovation might need to

be activated in ones' mind by forms of education and training. In the next section, we look at entrepreneurship in South Africa and the means which the South African government has taken to enable informed entrepreneurs so that the economy is enhanced effectively and efficiently.

#### **2.2.4 Entrepreneurship in South Africa**

The state of entrepreneurship in South Africa has decreased. This has been seen from the decrease of South African's Total Entrepreneurial Activity (TEA) by 5 percentage compared to other developing countries (Janse van Rensburg, 2011:1). Entrepreneurship is about people who realise a new opportunity and what to realise the opportunity. SMEs are described as flexible and quickly adaptive to change, therefore seen as key organisations that drive innovation and promote employment, (Admiraal, et. al, 2003:1). Entrepreneurship like in many other government policy framework which include the Reconstruction and Development Programme (RDP) and Growth, Employment and Redistribution (GEAR) has been a priority for government in order to improve the economic state of the country and try to eradicate poverty and unemployment, especially in the rural communities. The South African entrepreneurial environment is marked by a contribution of negative factors including the following:

1. South Africa has the lowest entrepreneurial activity rate of all developing countries (GEM, 2005:7) According to GEM (2010:4) the occurrence of early-stage entrepreneurial activity tends to be relatively low in the ages of 18 - 24 years, the entrepreneurial activity mounts among 25 - 34 year olds, and then declines as age increases. This reflects the interaction between "desire to start a business", which tends to reduce with age, and "perceived skills", which tends to increase with age.
2. South Africans were never taught to aspire to having their own businesses but their minds were stereotyped to be the employees of their bosses. This is a factor that was contributed to by the apartheid years.

3. The highest percentage of black SMEs is in the lowest class called the survivalist class, where returns are very low and limited
4. Most of the South African population remains excluded from the formal economy, as they lack collateral to secure running capital and thus are considered too risky for many financial institutions (GEM, 2003:12)
5. Most black majority are under-educated and therefore lack of skills important for SMEs success.

Evidence show that these criticisms have been presented to the government and through the years the government has worked with a few ways to make sure that the entrepreneurial culture needed is increased. Two ways that have been used are the implementation of policies that guide the introduction of agencies that aid in improving the unemployment rate in South Africa and the introduction of Further Education and Training (FET) Colleges where South African citizens, especially the youth can be developed so that they are not unemployed but also contribute in the creation of opportunities in the forms of jobs and alleviate the poverty statistics in South Africa. Adopting entrepreneurship in societies promotes competitiveness of businesses among entrepreneurs. If real transformation is to occur in South Africa, there must be space for creativity and imagination in overhauled policies. South Africa is faced with a multitude of challenges including the great need for a higher economic growth-rate. There is a growing need to transform innovations and new creations or products or services into something more meaningful. The above transformation will help South Africa decrease the unemployment rate and should be implemented. Many employees are forced into becoming more flexible functionally and opt to become self-employed in areas where they feel they have relevant skills and /or training and education. The creation, awareness and promotion of entrepreneurial thinking and culture action plays a vital part and moves to a very large extent in creating employment, which is needed and desired for masses of unemployed South Africa.

In South Africa, the government has two related acts to ensure that their citizens have some form of information and structures that will help them in their entrepreneurial ventures:

- The National Small Business Amendment Act, 2004:2 whose purpose is to create the administrative structures and means to “promote small business in the Republic. The act brought about the creation of the Small Enterprise Development Agency (SEDA) that helps in fostering an entrepreneurial culture in providing supplementary aid such business skills writing, compiling of the business plan
  
- Co-operatives Act, 2005:2 provides for the governance structures that will see to the formation and registration of co-operatives. The company that works with the governance of matters concerning co-operatives is the Companies and Intellectual Property Commission (CIPC) which is mandated with the following functions (Who is CIPC, 2012):
  - Registration of companies, co-operatives and Intellectual Property Rights (trademarks, patents, design and copyright) and maintenance thereof;
  - Disclosure of information on its business registers;
  - Promotion of compliance with relevant legislation;
  - Efficient and effective enforcement of relevant legislation;
  - Monitoring compliance with and contraventions of financial reporting standards, and making recommendations thereto to Financial Reporting Standards Council (FRSC);
  - Licensing of business rescue practitioners; and
  - Report, research and advice Minister on matters of national policy relating to company and intellectual property law.

In the section that follows the process of entrepreneurship is detailed and factors that influence entrepreneurship, this includes factors such as the success of enterprises.

## 2.2.5 The process of entrepreneurship in South Africa

The government has come up with policies that describe the ways to enable the initiator or entrepreneur to implement their businesses. These include policies such as The National Small Business Amendment Act, which shows that government created an agency called SEDA so that the initiators of business would learn how to start a business and be taught how to write business plans and how they would have to do the feasibility studies which would help them determine whether their business idea would be sustained. Through the policy of Co-operatives Act the government has created a governance structure that would encourage entrepreneurs to make sure that their initiatives are registered and counted as income enablers.

The entrepreneur will create a business with the help of agencies. There is always the path of innovation where people with new ideas will want to start new business and most importantly is that all business creators always have to bear the risk of the business failing and or having the business becoming too big for the creator to manage. The main contributing factors to entrepreneurship in South Africa as reported by GEM (2006:12) are:

- Entrepreneurship is becoming a key focus of government;
- Government regulations such as lower taxation;
- Stable economic conditions;
- Implementation of a central organisation such as Small Enterprise Development Agency;
- Entrepreneurial education encouraged at schools;
- Development of entrepreneurial awareness among young people;
- More role models in entrepreneurship; and

- Unemployment and retrenchment pushes people into self-employment

These factors described in the Global Entrepreneurship Monitor Report (GEM), shows that there is an entrepreneurial culture in South Africa. However, it is not always clear how the process of entrepreneurship happens in South Africa because many entrepreneurs operate without been registered and governments entrepreneurial strategy of having central organisation such as Small Enterprise Development Agency (SEDA) have not been fully implemented. SEDA was formed as an agency of the South African Department of Trade and Industry (DTI). SEDA was formed in 2004 according to this specific act. The mandate of the agency includes the following:

- To implement government's small business strategy;
- To design and implement a standard and common national delivery network for small enterprise development; and
- To integrate government-funded small enterprise support agencies across all levels of government. (SEDA, 2010).

It is therefore SEDA's mission to develop, support and promote small enterprise throughout the country. This will be done to ensure growth and sustainability of the enterprises in coordination and partnership with various role players, including global partners who will make international best practices available to local entrepreneurs. Entrepreneurship and the success of enterprises should be linked together so that the entrepreneurship culture implemented is informed. In the next paragraph we look at the success of enterprises.

### **2.2.5.1 Success of enterprises**

The success of enterprises have been argued to be a function of a combination of both external and internal factors (Markman & Baron, 2003:282; & Guzman & Santos, 2001:218) The external factors are outside the control and guidance of the manager and his team or their actions, and cover a number of issues, depending on the distinctive environment of the community in which the business functions, Simpson,



Tuck & Bellamy, (2004:484).. Internal factors are firm-based and cover private and behavioural factors. These internal factors are thus possibly controllable since they involve the choices, conduct and activities of the entrepreneurs and his or her team (Kangusharju, 2000:28; & Ligthelm & Cant, 2002:4). Table 6 below tabulates these factors.

<b>Exogenous/external factors</b>	<b>Endogenous/internal factors</b>
<p><b>Macro-economic factors</b></p> <ol style="list-style-type: none"> <li>1.Geographic area &amp; region</li> <li>2.Density</li> <li>3.Inflation &amp; interest rates</li> <li>4.Unemployment</li> <li>5.Exchange rates</li> <li>6.Economic change</li> </ol>	<p><b>Company demographics factors</b></p> <ol style="list-style-type: none"> <li>1.Size of firm</li> <li>2.Age of firm</li> <li>3.Organisational structure</li> <li>4.Community networks</li> </ol>
<p><b>Political-Institutional factors</b></p> <ol style="list-style-type: none"> <li>1.Macro-economic policies</li> <li>2.The business environment</li> <li>3.The judiciary</li> <li>4.Bureaucracy</li> <li>5.Cost of compliance</li> <li>6.Public support</li> </ol>	<p><b>Human demographics factors</b></p> <ol style="list-style-type: none"> <li>1.Age</li> <li>2.Gender</li> <li>3.Family background</li> <li>4.Exposure to role models</li> </ol>
<p><b>Socio-cultural factors</b></p> <ol style="list-style-type: none"> <li>1.Access to public infrastructure</li> <li>2.Access to money/capital</li> <li>3.Access to technology</li> <li>4.Access to labour</li> <li>5.Access to other resources</li> <li>6.Crime</li> <li>7.Health</li> </ol>	<p><b>Previous experience factors</b></p> <ol style="list-style-type: none"> <li>1.Education</li> <li>2.Training</li> <li>3.Work experience</li> <li>4.Business ownership</li> <li>5.Industry specific</li> </ol>

Exogenous/external factors	Endogenous/internal factors
8.Culture 9.Role models	
<b>Market opportunity factors</b> 1.Demand for supply 2.Competition 3.Access to markets 4.Locations	<b>Human capital factors</b> 1.Personal characteristics 2.Capabilities, abilities and skills

**Table 6: Summary of the factors that influence enterprise success (Kunene, 2009:80)**

These factors show that there are influences in making sure that an enterprise is successful. When one looks at this research case study in Kwa-Mhlanga these factors should be considered. Specific care will be with the previous experience factors because in order to have an ICT enabled entrepreneurship the entrepreneurs need to have some form of training and education. In terms of training and education it is believed that the exact form of creating the entrepreneurial culture is introducing entrepreneurial education at stages as low as primary school. In South Africa this has not happened yet and entrepreneurship education is properly introduced in tertiary institutions. In the thesis one also reports on entrepreneurship education in Further Education and Training (FETs) Colleges in the section of IT Strategy and Skills Development.

### **2.3 ICT for Development (ICT4D)**

ICT4D research is based on the belief that ICT has, potentially, the capacity to contribute to the improvement of various aspects of life, from alleviating poverty to strengthening the democratic state, Avegrou, (2010:5). ICT4D includes the teaching of computer literacy to all ages in order to have the level of illiteracy decreased and more

computer literate individuals. The sections to follow describe the definition of ICT4D; the role of ICT4D; the process of ICT4D; ICT4D in South Africa and ICT4D initiative in South Africa.

### 2.3.1 Defining ICT for Development

The influence of new ICTs has filled virtually all sectors of society and it is of vital significance that DCs embrace a common vision and strategy for an information (or knowledge)-based society that not only identifies ICT as an instrument for economic innovation but also as a podium for socio-economic development. Information Communication Technologies (ICTs) are not an end to themselves, but are permitting tools that help communities in making their basic needs self-sufficient. ICTs include tools like the Internet, email, instant messaging, etc. These tools are used to aid an environment for easier access to information. The access to information enables people in communities to have opportunities and these enables the communities to better themselves and develop their skills and economies. ICT does not only contribute to the economy of the country but also performances as a unique chance for enabling social upliftment, job creation and empowerment. In a developing country like South Africa ICTs are essential for development, a concept referred to as ICT4D or ICT for development. Table 7 below tabulates different perspectives that researches have on ICT4D.

Source	Perspective
<i>Avegrou (2010:5)</i>	<i>“ICTD research is based on the belief that ICT has, potentially, the capacity to contribute to the improvement of various aspects of life, from alleviating poverty to strengthening the democratic polity.”</i>
<i>van Reijswoud (2009:2)</i>	<i>“ICT4D is based on the premise that ICT is able to bridge the digital divide between the developed</i>

	<i>and developing countries and thereby contribute to equal distribution of wealth.”</i>
<i>Unwin (2009)</i>	<i>“European notions of development have long held that it is about progress and growth towards a greater good, be this economic, social or political. In such a context, ICT4D is therefore often interpreted as being the use of ICTs to deliver such benefits.”</i>
<i>Donner &amp; Kentaro (2009:1)</i>	<i>““Information and communication technologies for development” (ICT4D) is the name given to a range of activity which considers how electronic technologies can be used towards socio-economic development of developing communities worldwide.”</i>
<i>Fourie &amp; Krauss (2010:108)</i>	<i>“.... Information Communications Technology for Development (ICT for Development or ICT4D) may offer a research focus that can help to deepen understanding of how to teach ICT and information literacy skills to teachers.”</i>

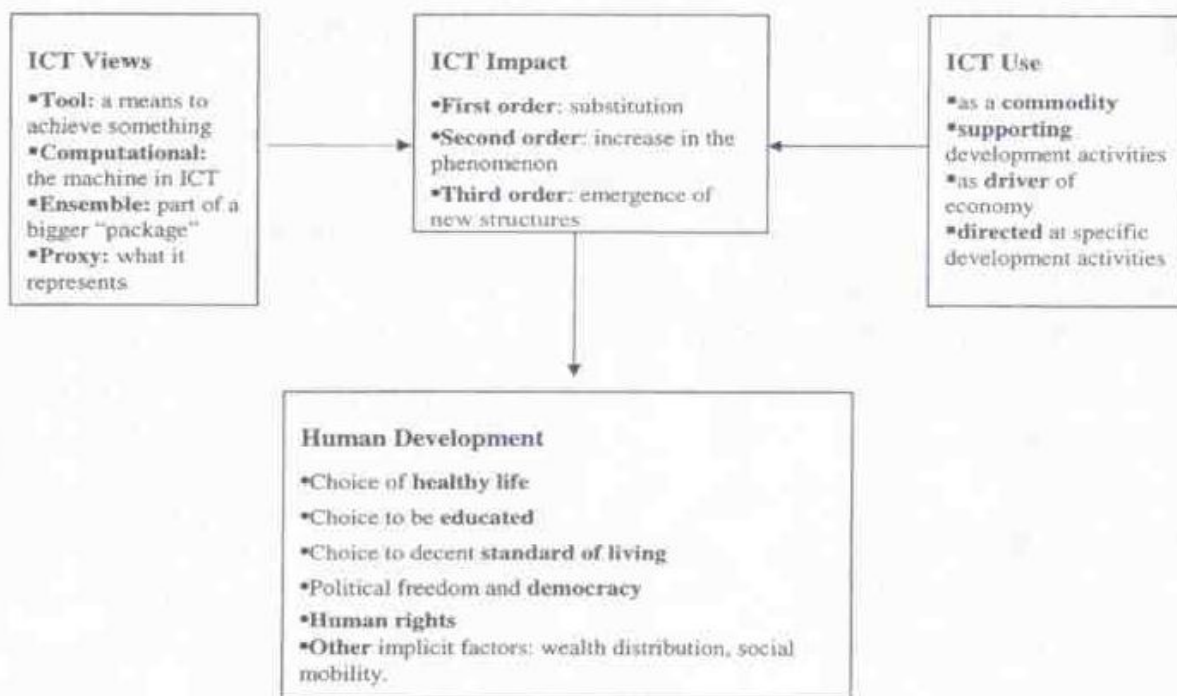
**Table 7: Perspectives of ICT4D**

Prakash & De’ (2007:265) look at development as a capacity builder. When one looks at ICT as a technology enabler plus development as capacity builder these viewpoints together mount to a technology capacity builder. In the above sections we make it clear that ICTs are not a means to an end and development cannot be achieved in its entirety, both these concepts are being centred on people and that is an important factor. This is supported by Sen (2000) where the economist describes development as a concern relating to the human well-being and human freedom. In the book “Development as Freedom” Sen chooses to describe poverty as “a deprivation of basic capabilities rather than merely low income” and argues in favour of improvement of practical freedoms, which provide an individual with the capabilities to choose a life that one can see value in, and it becomes the chief objective and principal reason for development either personal development or economic development. The economist also highlights that the prominence of political freedoms, economic facilities, social

opportunities, transparency guaranteed and protective security in the overall freedom that are prerequisite for people, to live the way they would prefer to live.

### 2.3.2 The role of ICT in Development

Over the years ICT projects in development have failed or succeeded due to different reasons. Researchers around the ICT development topic such as the likes of Avegrou, (1998) and Madons (2005) have investigated the success and failures and suggest that the enablement of development by ICT is dependent on how the national and provincial and local government departments and agents including other important stakeholders conceptualise ICT and development. In conceptualising ICT and development, Sein and Harindranath (2004:20) summarise this in Figure 4 below.



**Figure 4: Integrative framework of ICT in development (Sein and Harindranath, 2004:20)**

In Figure 4 the researchers present three different conceptualisations namely: ICT views, ICT impact and ICT use. This thesis will concentrate on the ICT impact where they describe that any introduction of ICT to society will have the following three different effects:

- First order (Primary effect): substitution, in this case the new technology will take over whatever the society was using before implementation;
- Second order (Secondary effect): increase in the phenomenon, in this case the ICT enables increase in the productivity of the implementation and the state or living condition of the society will be enhanced; and
- Third order (Tertiary effect); emergence of new structures, in this case creation of governmental agencies that will change how society conducts its business for development using ICT.

The authors argue that society needs to move from an artefactual view to a phase where knowledge is created and the use of ICTs in ICT initiatives increases the development of the society. In so doing encouraging stakeholders to step into the tertiary effect where more understanding of how ICTs can influence national development which is in context human development. This conceptualisation of ICT and development does not ask questions in terms of who are the actors in the process of ICT and the development process, who benefits and who acts and who encourages the implementation of ICT and the development of society. In a later article, (Sein, 2005) proposes these four paradigms as for ICT for development:

1. Functionalism: modernisation perspective of development and neutral view of ICT, where the main actors are foreign experts from donor agencies who are the main drivers of the ICT intervention;
2. Social relativism: modernisation perspective of development and situated view of ICT, where the main actors are still from outside but are termed more as facilitators than as consultants;

3. Radical structuralism: alternative perspective of development and neutral view of ICT, where the main actors can either be inside or outside the host country in the form of activists or partisans for the “exploited” class; and
4. Neo-humanism: alternative perspective of development and situated view of ICT, where the main actors come from within the host country in the form of activists whose aim is emancipation.

Neo-humanism approach best describes the situation that the study SMEs are categorised under. The SMEs are influenced by ICTs which are enablers to an outcome where business reach maximum profit and improvement in the country’s economy and a decrease in the rate of unemployment which cause confidence in entrepreneurs and more business initiatives are formed and the surrounding communities benefit in the maximisation of profits. There are other researchers that mention ICTs advantages and disadvantages. The advantages and disadvantages are listed below. According to Lebel, (2005:18) he mentions the following as advantages of using ICTs:

- Greater ability to influence and participate in decision making, these refer to instances where ICT is used to bring together management and decisions are taken. Some the managers maybe doing the decision making through teleconferences and the decisions do not wait for them but decisions are taken efficiently not considering any time constraints;
- Access to opportunities, greater chances of researching and doing a requirements analysis of the opportunities that come to head;
- Greater ability to learn, using ICT media such as e-learning, the internet and e-business courses on the web that can increase the knowledge and skills of the entrepreneur;
- Greater environmental awareness through pamphlets and through website notifications;
- Transaction processing, where people can use ICT to buy groceries at the comfort of their homes using e-commerce; and

- Improved trade, by using ICTs to make sure that all global news are read and heard as they happening through televisions and electronic media such as newspapers on the internet.

Hilson (2003:1) indicates disadvantages of SMEs not adapting to ICTs as:

- The cost, some entrepreneurs do not have the skill and cash to implement a ICT system that can benefit their business;
- Lack of time and expertise, the entrepreneurs do not have the expertise and are afraid to get experts help because they think that the experts might take them off radar to the ideas that they had and are materialising ;
- Most of the IT skills being picked up by the large firms, large companies give job opportunities to the skilled and in most areas the skilled do not come back to the disadvantage communities to feedback the knowledge and skills that they have acquired. This is also seen that most corporate companies have want they call social investment but all they do is impart knowledge to the neighbouring communities which are in the sub urban levels and already have most of the skills that are imparted and therefore forming a greater gap between the urban and the rural areas ;
- Lack of readily available financial resources, the banking institutions are sceptical of lending money to upcoming entrepreneurs because they do not believe that those initiatives will succeeded and they will have to bear the liability of losing the borrowed money plus interest; and
- Lack of internal expertise, expertise are important and if an entrepreneur provides job opportunity for more than two people it is important that one is skilled so that transfer of skills can take place but as mentioned above that the bigger firms already have plans for that skill, therefore creating no internal expertise.



According to Kapurubandara & Lawson (2007:492) these barriers which SMEs face when adopting ICT, are also divided into internal and external barriers and listed in Table 8:

<b>Internal Barriers</b>	<b>External Barriers</b>
1.Lack of skills	1.Cultural barriers
2.Security concerns	2.Lack of infrastructure
3.e-Commerce not financially viable	3.Political and social barriers, which include a lack of a one-shop facility
	4.Access to reliable experts
	5.Legal barrier

**Table 8: Internal and External Barriers for SMEs adopting ICTs**

With all these disadvantages, we need to make sure that the South African policies and initiatives learn from global initiatives on how best to maintain an ICT entrepreneurial culture in SMEs in the country. We should adopt a neo-humanism approach where all the agencies that government has established, like NYDA and bank institute programmes that promote entrepreneurship not forgetting institution like the Meraka Institute at the CSIR, will bring the ICT element along and more entrepreneurial ICT cultured companies.

### **2.3.4 The process of ICT for Development**

Development can be described as an improvement brought where there was none. The process of ICT development was seen by Amartya Sen as a process of expanding freedoms (Ismail, 2005:377). These freedoms include ethnicity, gender, infrastructure, etc. When the freedoms are expanded more opportunities are given which then leads to

development. This development leads to a beneficial socio-economic effect on humans. Rational trade, capacity building, balanced rules and good governance are four elements of the development dimensions in the multilateral trading system. The trading system has adopted electronic commerce as a way of development and making sure that SMEs improvement can also occur using electronic commerce. This electronic commerce over the Internet is globally affecting trade and finance; it is also opening new markets and changing the ways business is conducted, Mambula & Agwamba (2009:172).

ICT has transformed companies' profitability; it has also become very essential and cost effective for communication, commerce and education. In Africa and other developing regions the trend of growth of ICT access and use is continuing at a slow pace. This slow pace is attributed to the western world and world organisations money that was channelled as aid through the governments in Africa for economic development being misused, poor administration of the money, corruption and the political instability of African countries, Mambula & Agwamba, (2009:178). In South Africa one sees that there is poor administration especially in the recording of the number of SMEs that exist in the country. This lack of information is caused by the lack of SMEs being registered for VAT or even as little as having the SMEs name not registered at the CIPC, where all companies should register. Companies like SEDA need to make sure that the weaknesses that they encounter in the rural areas of South Africa are reported.

### **2.3.5 ICT for Development in South Africa**

The IST-Africa Consortium looked at the progress of ICT in developing countries in Africa and a version 2.2 of the progress was published. In the publication it was noted that in South Africa a vision 2015 was formulated and it is stated as follows:

*“South Africa is an inclusive information society where ICT-based innovation flourishes. Entrepreneurs from historically disadvantaged population groups, rural communities and the knowledge-intensive industry benefit and contribute to the well-being and quality of life of our citizens. South Africa has a strong national ICT brand that captures the vibrancy of an industry and research community striving for excellence, characterised by innovative approaches to local and global challenges, and recognised for its contribution to the economic growth and well-being of our people and region.” IST-Africa Consortium (2012:94).*

The above vision confirms the fact that ICT is known to be an enabler for opportunities like empowerment, job creation and social upliftment. In South Africa although the government and other stakeholders are positive towards having the best ICT society there are still challenges. These challenges lie in education, training and integrating the larger proportion of the population that was previously disadvantaged. That is the reason that the government has put forth structures like the Universal Services Agency (USA) that were there to make sure that infrastructure in South Africa is built, so that the citizens can be able to communicate and use the technology. This agency was responsible for the building of Multipurpose Centres around the country. These centres were to be used like mini government centres where the citizen could come acquire information from the public administrators that would have been placed in those areas. There would also be computers provided for that centre so that the citizens would be able to use Internet services and also be taught on how to use these technologies. The government has also encouraged South Africans to create their own business so that more income generation is made and the pressures of poverty and unemployment are lowered. In the next section an initiative in an area called Siyabuswa is described. This initiative is described because it falls in the same region called Nkangala region although SEIDET described is in the Dr J.S. Moroka municipality. It should be noted that these places were all situated in the former KwaNdebele homeland and therefore the description of the initiative.

### **2.3.6 ICT Initiative in South Africa**

The process for ICT development in South Africa was embraced by a few entrepreneurs in the country. These entrepreneurs are mentioned in a few studies such as these: In Siyabuswa, a long-term community-based development project called SEIDET (– Siyabuswa Educational Improvement and Development Trust) in the small town of Siyabuswa in South Africa where the focus will be on the ICT-based interventions. After 8 years of continued, albeit slow, growth, the project and what it stands for has become an accepted fact within the Siyabuswa community. SDI (Sustainable Development Initiatives) projects were created but failed. "While some success was achieved, mainly in the sense that an awareness of computers, the Internet and what ICTs could mean for a community had been created, the project failed to reach its main objectives, namely, to build human capacity and to establish development hubs in communities". Reasons for failures:

- It is very difficult to establish a sustainable facility in communities that are so poor that people cannot afford to pay for ICT training, which was the case for this community.
- The importance of developing a relationship of trust between the community and the "outside" developers cannot be overstated.
- A final reason pertains to the failure to align the project with regional and governmental activities.

It was noted that this project was created by a key leader in Siyabuswa for the community of Siyabuswa. The project in Siyabuswa maintained an institutional stability over time because of involvements of material resources like the University of Pretoria in aiding in the project being self-supported. For the SDI the symbolism of ownership was never created because the initiators and trainers of the projects were outsiders whose motives were often suspected.

The Kwa-Mhlanga case study shows that ICTs are very important, but they show that there are many other factors that enable the ICTs to work to the initiative success. ICT

initiatives in the developing countries are also a clear indication that governments, especially the South African government should make changes from operating most of their activities manually and start putting more efforts to functioning and improving services and their activities using electronically oriented tools. These tools include e-government where all levels of government must have portals that make sure that citizens are able to obtain information on those portals. The appropriate implementation of e-government has the following minimum potentials (eSecretariat, 2001:10):

- Improving dissemination of relevant information to citizens, and all others who need to engage within government, this includes citizens that do not have proper infrastructure and proper connectivity;
- Radically enhancing the internal processes, and service delivery of government, to make sure that unnecessary violence does not occur between government and its citizens;
- Improving the efficiency and transparency of procuring goods and services, in making sure that all government transactions are transparent and accountability for the transactions are accurate; and
- Enabling consistent and easy access to government services, by building more infrastructures around the communities in the rural areas of the country.

The successes of ICTs in developing communities and the implementation of e-government for better government services and more economical value will also help in creating the entrepreneurial culture that is important to decreasing the degrees of unemployment and poverty in South Africa. It is important that all citizens are involved, whether they are in the urban or rural areas. This actually talks to the fact that all rural area people have this perception that the best success in terms of having the best entrepreneurial culture and the best profit maximisation the initiator of the business needs to be in the urban areas. In using the government policies and making sure that the rural area people are aware and can implement these policies, there needs to be awareness programs and more infrastructures for ICTs to enable success. The successes of ICTs in most of the small business organisations being it non-profit

organisations (NPO) or profit making organisations occur by a socially responsible approach to business development.

## **2.4 ICT for Entrepreneurship**

In its fullness one would conclude and say that ICT for entrepreneurship is when SMEs have been established and are using ICT to create an entrepreneurial culture that encourages and brings a bottom line that entrepreneurs can live by and enhance the economic activity of the country. The thesis looks at policies as a means of ensuring that an entrepreneurial culture is achieved.

### **2.4.1 Policies**

Reynolds et al, 2000: 45 – 46 mentions the following as policy implications associated with entrepreneurial activity:

1. The promotion of entrepreneurship, its role in society and the opportunities it presents for personal gain play an important part in facilitating economic growth: government at all levels should introduce people to entrepreneurial opportunities;
2. Building awareness of and ensuring access to entrepreneurship among people of all demographic profiles;
3. Policies geared towards enhancing the entrepreneurial capacity of societies: for example creating policies that promote skills and motivation towards pursuing opportunities and enhancing the impact and level of entrepreneurial activity;
4. Increasing the participation of women in entrepreneurship is critical to the long-term economic prosperity;

5. For the greatest long-term impact, policies should be adopted that encourage the involvement of people younger than 25 and older than 44 in the entrepreneurial process;
6. Any government committed to sustained economic progress must ensure that all the aspects of its economic system are conducive to and supportive of increased levels of entrepreneurial activity; and
7. Policies should encourage the development of formal capital and create incentives for private individuals to invest in early-stage business.

In facilitation of the policies it would be vital for the citizens to have knowledge of the policy itself and in a case where the policy is not understood by the citizens, a relationship needs to be formed between the carrier of the information and the receiver of the information. This relationship brings forth the communication culture where background is important and when communicating the receiver can then listen and give feedback. Feedback will also be given only if the citizen has developed some form of trust with the giver of information. In making sure that all these goals are attained there needs to be a way that collaboration, learning and facilitation of important activities that will ensure that entrepreneurs are focused and can help themselves to produce the best business and generate profit for themselves.

## **2.5 Towards an ICT entrepreneurial Culture**

The thesis looks at factors that will influence the introduction of the entrepreneurial culture by looking at the following contributors described in the following section.

### **2.5.1 Entrepreneurial Channel Structures**

As in Figure 1, ICT creates “entrepreneurial” value by supporting differentiation strategies at various steps in the value chain by raising revenue or lowering costs,

(Rasheed, 2009:93). The distribution, transaction and communication channel structures must not be seen as independent but can be used together to formulate an approach that enables a competitive advantage and the examples used show the advantage:

- Distribution channels facilitates the physical exchange of products and services, (ICT can play a role e.g. tracking of commodities, tracking prices, etc.).
- Transaction channels enable sales activities between buyers and sellers, this usually done in the form of e-commerce, (for example, Mpesa of Kenya).
- Communication channels generate exchanges of information between buyers and sellers, (for example social media such as facebook).

The above supporting strategies are very important to businesses in revenue creation, for example the creation of an e-commerce business where the distribution and communication of information from the buyer and seller is important. The transaction channels will also be important in terms of the exchange of confidential information through the Internet and this will bring about trust and security from the side of the seller. These entrepreneurship securities must be enabled by the business and the businesses with a valued revenue generation would be seen as a more trustworthy business than other non-valued business. Rasheed, (2009:91) brings an understanding of organisations relating them to these two types: “Pure plays” (new ventures) and “brick & clicks” (incumbents). “Pure plays” would describe new ventures that use the Internet exclusively for new entry and would include the very SMEs describe in this thesis, “bricks and clicks” would be a hybrid arrangement in which incumbent firms use Internet-based electronic commerce as a technology media for branching out their distribution channel. These are well establishment business that may see Internet as a disruptive technology because of their infrastructure.

## **2.5.2 Entrepreneurial Performance**



With all business ventures there needs to be evaluation processes to make sure that the ventures are making a profit and that the owners are benefiting from the business and also contributing to the development of the country by contributing to the economy of the country. Most entrepreneurs go about looking for advice from different organisations for example SEDA. It would be important that an examination of the use of business advice by the entrepreneurs; and what the impact of the business advice is to business performance should be investigated. It was however noted that business owner's that take more decisions have a greater influence to the performance of their business, (Dyer & Ross, 2008:134). It is unfortunate that there are more reason that make entrepreneurial performance to be lower than expected and the following reason attribute to that:

- Some of these owners lack managerial skills or knowledge of the business and this causes their business to fail.
- Failure of small businesses has stimulated the marketing of business advising and these have become professional services. These professional services are provided by government, public and private sectors, advisory services including universities, community organisations, banks and associations of small businesses. Services provided in this area are predicted on the assumption that first, owners will take up the service and secondly that the outcome of the service will improve business performance. At times it was noted that the owners did not go for professional services because of the following reasons: The owners believe in the 'my own way approach', where all decisions are made by the owner of the business whether the decision is an informed one or not; dependency and feeling, that the advisors will think that the owners do not have knowledge about the area, therefore not really trusting the gut feel to go for consultation; difficulty in identifying assistance sources, determining which advisor agencies are the best for ones' type of business; difficulty in working with the source and their staff members; and the slow response times on the part of the source.

- In South Africa business agent research is still under researched; predictors of small business advice seeking and extent to which the use of advisors has an impact on business performance. There are mixed results when it comes to enquiry of advisors and how that relates to the business performance. Some relate the interaction of the entrepreneur with the external environment as positively correlated with financial performance.
- General market conditions, firm size, age and export orientations were associated with increased business performance. Growth is primarily stimulated by competitive market conditions, and that the use of advice may be related to these specific market or environmental conditions.
- Most researchers think that explanations for business performance had to be searched in the characteristics of the owners, but it would be better to look at the characteristics of the environment (Dyer & Roos, 2008:136). The characteristics of the environment are termed environmental dynamism. This means that although there may be little planning, there may be great attention paid to the external environment especially since for small firms with limited resources, a rapidly changing environment can be particularly threatening. The tendency therefore will be for small business owners to seek information and advice pertaining to the marketplace to ensure the survival and prosperity of the enterprise. Information seeking behaviour is directly related to perceived opportunities and threats. In these environment it was released there is a positive correlation between dynamic environment and innovation.

The conclusion that can be taken from these reasons is that the owner of a small firm, when faced with a rapidly changing environment, must pay increasing attention to the marketplace, focussing in particular on the behaviour of competitors and in the preference of customers.

### **2.5.3 IT Strategy and Skills Development**

Strategic planning and skills availability within SMEs are two of the most important aspects when one begins to investigate the adoption of ICT, and this could be for two reasons (Steyn, 2010:24):

1. One has to realise where they want their business to go within the ICT environment to ensure effective management and cost-effective solutions.
2. One can adapt the best systems in the world, but if you or your employees do not know how and what to do with these systems, one will surely waste money for ICT.

An interesting and important factor to consider is that of Pati & Desai (2005:283) where they say that an organisations' competitive advantage is not gained through infrastructure or skills but rather in engaging outsourcing as an alternative strategy in order to gain a competitive advantage. Infrastructure can be replicated and thus cannot be a guarantee for being the business competitive leverage. Sandberg & Vinberg (2000:221) noted that for SMEs to survive and grow in the future, it becomes a matter of strategic importance to adopt ICT. This is done by 'learning by doing', which is considered to be the best way or strategy to acquire new skills, as learning goes hand in hand with context. A person can only be taught certain aspects of ICT but not how the business and ICT work together, as this person would need to experience the business' needs. There are ways in which business needs (skills development) can be linked to an ICT entrepreneurial culture. For example, before an entrepreneur has an innovative idea it would be best if that person has some form of education and experience elements in order to create a successful venture that can provide the bottom line and increase the economic activity of the country. When we look at the present situation in South Africa you will notice that most of the time when skills development activities happen it is usually in a form of a business workshop where business orientated individuals are requested to empower a certain group with various business operations and ways of ensuring that their business are successful.

The highly rated resource in the rural areas is mostly formed from unskilled workers and in the SMEs but since skilled workers is not a high priority for SMEs. Training tends to fall behind (Jackson & Sloane, 2009:71). In ICT entrepreneurial skills development it is important that the government and all stakeholders concerned make sure that when skills are transferred from one individual to the next the skill knowledge is embedded tacitly and not only explicitly.

## **Further Education and Training (FETs)**

FET colleges find themselves being a hub for young people willing and able to be taught new skills thus contributing positively to Small Medium Enterprises (SME) development and skills development in South Africa. Statistics South Africa defines the potential working population as those aged between 15 and 64 years, there is also indication that that unemployment has affected primarily women and the youth and more importantly, the respondents aged between 20 and 35 years made up three-quarters of the total unemployed. FET graduates are trained in technical skills as it is the primary obligation of FET colleges in South Africa. Skills that are taught by graduates place them in a good position to start sustainable businesses. FETs show that the focus among others is on developing work place exposure and no focus is drawn to developing entrepreneurship at FET colleges. FET colleges in their very nature are aimed at developing and up-skilling of technical skills such as plumbing, boiler-making, diesel mechanics, electrical engineering, and computer engineering to name but a few. Business management, which has components of entrepreneurship-related content, has always been one of the courses offered, however as an independent course and not as an integrated module into technical courses such as plumbing, electrical engineering etc. Business management courses were never intended to develop entrepreneurship as a construct or developing entrepreneurs, but rather to teach one how to become an effective manager in a business. In recent working papers arguments have been in favour of diversified and revitalised FET sector that provides for self-employment, small business, entrepreneurial and community development. It also promotes the need for the

development of intermediate to high-level skills, which are required in the manufacturing sector. Therefore all students who qualify for any of the courses offered by FET colleges have critical skills that can potentially make an impact on the economy whether at local or national level; however these skills need to be harnessed to have the desirable entrepreneurial impact. Entrepreneurial intentions of students remain critical in order to increase early-stage entrepreneurship among FET students and particularly in the manufacturing sector. These factors that are attained at FETs are vital and should be encouraged and entrepreneurial competitions and benefits should be provided for the best entrepreneurial students or graduates.

### **Medium Term Strategic Framework (MTSF)**

In July 2005, the Presidency had a meeting where an agenda presentation was carried out (The Presidency, 2005) where is shown that. e-readiness in South Africa is decreasing compared to the international benchmarks. In addressing this predicament the presentation details the MTSF (Medium Term Strategic Framework). In using MTSF there is indication that without adequate e-skills the strategy will not work.

The MTSF is an electoral mandate that will bring about global and domestic changes by informing South Africa the five year strategic plan that will be used by national and the provincial departments focus on the critical things that will make sure that standards are improved and seen. During the five years the government will look at ten strategic priorities which will strengthen the strategic direction of government. The priorities are listed in the Table 9 below:

<b>Strategic Priority No.</b>	<b>Description of Strategic Priority</b>
1.	Speeding up growth and transforming the economy to create decent work and sustainable livelihoods.
2.	Massive programme to build economic and social infrastructure.

<b>Strategic Priority No.</b>	<b>Description of Strategic Priority</b>
3.	Comprehensive rural development strategy linked to land and agrarian reform and food security.
4.	Strengthen the skills and human resource base.
5.	Improve the health profile of all South Africans.
6.	Intensify the fight against crime and corruption.
7.	Build cohesive, caring and sustainable communities.
8.	Pursuing African advancement and enhanced international co-operation.
9.	Sustainable Resource Management and use.
10.	Building a development state including improvements of public services and strengthening democratic institutions'

**Table 9: Strategic Priorities of the MTSF (2009 – 2014), (The Presidency, 2005)**

In November 2011, a national commission was selected to look at a National Plan that would make South Africa look towards 2030 in terms of making sure that the poverty and inequality in the country is decrease and more developmental ways are envisaged. The national development plan suggests a motion towards revitalisation and increasing the economic opportunity through investment in infrastructure, more invention ideas, investments through the private sector and entrepreneurialism. The commission has named the following ingredients as key for the success of Vision 2030 where all South Africans live to their desires' needs:

- The active efforts of all South Africans; meaning that although the trust in the country is at a low level, South Africans must make sure that we bind together our minds with the private, public and the government so that all efforts are maximised;
- Growth, investment and employment; South Africans should be encouraged to take their own initiatives in creating an increase in development and improvements in the human capital that would be received from the government agencies and private institutions such as banks. That will definitely mean that more South Africans are given the opportunity to work or own business and a decrease in the unemployment rates will be achieved;
- Rising standards of education and a healthy population; making sure that our education syllabi changes are directed towards an entrepreneurial culture from the ECD phase through to the tertiary phase;
- An effective and capable government; that provides all the necessary policies and commissions that will make sure that the South Africa government can deliver services for all areas, especially rural areas and avoid the many protest that the country is going through in the present moment;

- Collaboration between private and public sectors; therefore creating organisations which are supported by the institutions that can create and eliminate causes that decrease frustrations for small business. The relationship between the two sectors will form a culture where the highly-skilled individuals transfer their skills to the low-skilled individuals; and
- Leadership from all sectors of society; a nation with leaders that are willing to make sure that the citizens within the country benefit from all improvements that the country puts into operation such as the introduction of government supported by private agencies that make sure that the infrastructure in rural areas is improved and that the broadband width of ICT can reach everybody in the country which creates easier access between concerned parties. Also good leadership from all sections will work towards a South Africa that is safe and which has less corruption by implementation of security measures that will guide against and a process of monitoring and evaluation can take place.



These strategies will address the organisational challenges and will enhance the creation of decent work opportunities in a very large scale and therefore also helping South Africa improve from the worldwide recess that course mayhem in a lot of developing countries. Although the Presidency is not directly involved with all these strategies but as in line with its mandate, the Presidency will lead, manage, plan, ensure co-ordination, facilitate, oversee, as well as monitor and evaluate the successful implementation of the strategies (The Presidency, 2005). When considering all the ten strategic priorities even through the main focus to government should be number one in making sure that decent jobs are created, strategy number four is more concerned with skills development and this is where we need to find alternatives. As the strategy four objectives is to focus on skills and the education system towards the delivery of quality outcomes. It is important that amongst others learner outcomes, early childhood development (ECD), improving schools management and monitoring and evaluation (M & E) systems and assisting and evolving a high quality teaching profession. ECD can be best achieved by starting at the grass root levels by implanting an entrepreneurial mind in children as early as Grade R and have syllabi outcomes that will be achieved until a learner gets to their matriculation level. When the learner becomes an applicant of any tertiary institution especially what the government has started to do in FETs, the student should be able to do practical entrepreneurial skills in order for them not to look up to government for jobs but to have innovative minds and start their own business ventures. It is also important that not only government must strive to improve the economy of the country but also private stakeholders must make an effort to support government initiatives and produce more of innovative business. The Global entrepreneurship monitor by Minniti et. al. (2006:42 -43) describes an excellent stakeholder that was created by three businessmen in a form of a college for bright, unemployed young people from disadvantaged backgrounds. The college which is situated in the CBD of Johannesburg is called The Community and Individual Development Association (CIDA) and has won several national and international awards for their innovate creation and maintaining of an entrepreneurial culture within their syllabi, by offering an accredited four-year business administration degree with a strong emphasis on entrepreneurship.

## **2.6 Summary**

The literature review above brings specific elements from literature. For example, ICT for entrepreneurs is going to work if the uses of the transactional channels are used and entrepreneurship classes are introduced not only at tertiary institutions but as early as the primary school. When learners become students then the focus can be on training. The literature review also shows that entrepreneurship is not a process that was started recently and has been around the research fields for a while. It shows that many researchers have tried to come up with a universal definition that describes what the process is. The South African government has also taken the pledge to ensure that the process is implemented in the country. There have been policies enacted by the government that have been amended in the plight of improving the entrepreneurship culture in the country. The thesis also shows that although there have been means by the government to improve the entrepreneurship there have been no clear indication of whether the use of the policies is achieved in the country. That is why the aim of the thesis was to investigate whether the citizens are making use of the policies and whether the use of ICTs by the citizens would help in the implementation and facilitating of the policies. ICT4D also comes up very clearly that SMEs need to adopt using ICTs in order to develop and enable greater economic activity. It is important that South Africans use what is available for them to create an entrepreneurial culture and the literature approve suggests that the ideal place will be for educational syllabi to be changed and create a social freedom where entrepreneurship and ICT4D education is started at an early age as Grade R and is implemented right through to tertiary. It is vital to also note if there is a need for workshops to improve the skills of individuals that did not obtain the culture in the education system but still has an entrepreneurial ideas.

The next chapter will show the research method and research approach used to investigate whether the government policies are been used by entrepreneurs or any other South African who thinks of having a business.

## Chapter 3: Research Approach

Chapter 1 and 2 discussed the introduction of the thesis and the literature content of entrepreneurship and ICT4D globally and in terms of the South Africa. This chapter sets out to describe the means of inquiry used to investigate how ICT could facilitate policy implementation on entrepreneurship in South Africa with a particular emphasis on rural areas. The main question in the research is: Do businesses in the rural areas use ICTs to facilitate in the entrepreneurial culture needed for successful business operations?

The sub questions are:

- Are the entrepreneurs aware of policies and programs in South Africa that help in the entrepreneurship process supported by the government?
- How can ICTs play a role in enhancing the entrepreneurial culture required for the increase in the economy and development of the country?
- How can citizens learn to maximise the opportunities for creating and having an increased entrepreneurial culture?
- How can the facilitation of an ICT-enabled entrepreneurial culture be improved, considering the results of the research?

### 3.1 Research paradigms

There are three predominant research paradigms; positivist, interpretive and critical. The positivist research paradigm is based on the notion that the world's existence is not dependent on human beings and any investigation ought to be carried out by identifying and collecting objective information. Researchers adopting this paradigm focus on identifying objective and factual aspects of the subject matter that will paint a clear picture of the area of interest independent of the researcher's perceptions. This may include hypothetical solving where a fact is put under scrutiny and the hypothesis proofed to be wrong or right. Information systems are built for people by people. It is important to identify how humans interact with information systems. The human element

and perception is an important feature of information systems and an important feature of information systems research.

Interpretive research is used to address the contextual and human limitation of the positivist research. The interpretive approach presumes that people form a fundamental part of information systems research. People's experiences form opinions and those affect how they interact with information systems. The interpretive studies are based on the notion that subjective meanings of people should be associated to information systems and hence form part of information systems research. The interpretive studies aim to understand that interaction and/or relationship between humans and technology, allowing the researcher to bring in their perceptions or subjectiveness in order to make meaning of the research. Interpretive research does not only focus on the relations between humans and technology, they also explore the settings of the contact. Myers (2009:38) states that interpretive research also assumes that knowledge is gained or reality is accessed by the use of social structures such as language and shared meanings. Myers proceeds, to state that to understand the feedback given by the participants, the researcher has to understand the context of a phenomenon, since the context is what defines the situation and what makes it what it is (Myers, 2009:39).

Critical studies take a different approach to that of interpretive and positivist studies. Critical research aims to identify features that assess the status quo on subject areas. For the researcher adopting this approach, their role is to critically analyse and challenge aspects of the research area. The notion of critical studies is based on the fact that certain subject matters result in inequalities in the society and should be explored and revealed.

In investigating the aim of the thesis the researcher adopted the interpretive way of doing the research. Interpretive research is stated as "concerned with understanding the social context of an information system: the social processes by which it is developed and construed by people and through which it influences, and is influenced by its social setting". It is also considered to be based on the assumption that access to reality is

only through social constructions such as language, consciousness and shared meanings. This is also based on the fact that interpretative research concerns itself with gaining an understanding of the social perspectives of an information system. Hence, this means that interpretive studies in this research will attempt to gain an understanding of the phenomena through the meanings that people assign to them.

### **3.2 Research method**

According to Baxter & Jack (2008:544) qualitative case study research is an approach that facilitates the investigation of an occurrence within its environment using a variety of data sources. This ensured that the issue under investigation is not seen through a single lens but rather through multiplicity of lenses. This also allows for several aspects of events to be revealed and understood. Case study research is seen to belong under the constructivist paradigm which claims that truth is comparative and that truth is reliant on ones' viewpoint, Baxter & Jack, (2008:545). The paradigm also looks at the biasness and fairness that human understanding can relate truth to. The paradigm is also constructed upon the foundation of a public production, for example how the researcher and the participant can collaborate so that each participant has their story brought out making the researcher to understand the participant story in depth.

Yin (2003) in Baxter & Jack (2008: 545) emphasises that a researcher uses the case study design when:

- The centre of the study is to answer “how” and “why” questions;
- One cannot influence the behaviour of those involved in the study;
- One wants to cover background surroundings because you believe they are significant to the condition under study; and
- The limitations are not clear between the location and the background.

The researcher continues to suggest that the researcher using the case study approach should learn not to be too general and must be able to place boundaries such as time and place; time and activity and definition and context.

The research method adopted in this thesis is based on qualitative case study approach. The environment where the participants operate within is Kwa-Mhlanga a rural area in Mpumalanga, South Africa. Table 10 below indicates how one organised the case study in order to be able to interpret the results given:

<b>Limit</b>	<b>How it was achieved</b>
Time and place	Participants are from one chosen area where there is economic activity.
Time and activity	The surrounding is not limited to one entrepreneurial activity.
Definition and context	The research topic was summarised to the participants and it was limited to SMEs.

**Table 10: Case study limits**

### **3.2.1 Case Study: SMEs in Kwa-Mhlanga**

Kwa-Mhlanga is in the Thembisile Municipality in the Nkangala region in Mpumalanga. This area is about 60km away from the Capital City Tshwane. The people living in Kwa-Mhlanga travel by their own transport or public transport to two nearest towns being Bronkhorstspuit and Tshwane. Bronkhorstspuit is a smaller town than Tshwane; it does not have the entire infrastructure that Tshwane has so more of the population would go to Tshwane. The working class of the area would wake up in the early hours to catch public transport to Tshwane and mostly would catch the 3:00 am buses because after their days work would like to come back to their families. Some of the people in the place stay in Tshwane and only come back home over the weekends or at the end of the month.

Kwa-Mhlanga has a shopping complex and surrounding the complex are about 50 small business which include businesses like motor parts, hardware, dry cleaners, salons, restaurants, sewing and curtains, internet cafes, etc. The small enterprises there mostly employ less than ten people but the shops at the mall especially the franchised stores would have more than ten people. These people are usually not skilled to do more the everyday selling and cleaning of the businesses.

People living in Kwa-Mhlanga and the surrounding areas have always looked at the place as a township of the former KwaNdebele. That is why there has been so much development in the area. This was also caused by a lot of people moving to Kwa-Mhlanga because the parliamentary buildings of the homeland where moved from Siyabuswa to Kwa-Mhlanga. Many of the people had to find accommodation there or in the surrounding areas. Although the people in the area work in Pretoria most of the population is the working class that still works at the parliamentary buildings because the area has become a regional office situation and all the departments of the Province of Mpumalanga would have offices in Kwa-Mhlanga.

### **3.3 Research techniques**

The researcher gathered data by interviewing 32 Entrepreneurs and ordinary people in the rural community of Mpumalanga, (Appendix 1: Interview questions). The interviews involved people and their businesses, it is important that as a researcher you provide participants with the following rights:

- To not participate;
- To withdraw from the interview;
- To anonymity, confidentiality; and
- To give an informed consent to the participant by the employer (university)

### **3.4 Role of the researcher**

The role of the researcher was to gather qualitative data, which was by means of interviewing the participants. Myers & Newman (2007:19) also mention that as a researcher the following guidelines must be followed:

- The researcher must create a relationship between themselves and the interviewer by familiarise the interviewer with the idea of the research and familiarise themselves with who the interviewer is, (Situating the researcher);
- The researcher must enable total comfortability to gain most information from the participants, (Minimize social dissonance);
- The researcher must avoid being bias by interviewing top management but must interview everyone because most of the time the end users in business are the ones with more information, (Represent various voices);
- The researcher must be able to understand the interviewees' perceptions because each one will have a different interpretation, (Everyone is an interpreter);
- The researcher must use open ended questions and be able to mirror the answers as appropriately as when they were received, (Use mirroring in Q&A);
- The researcher must be flexible, when the interviewer explains answer than the researcher should be able to mirror the feedback, (Flexibility); and
- The researcher must always make sure that the interviewers know that the content provided by them will be kept confidential, (Confidentiality of disclosures).
- The questionnaires were gathered and the answers to the questionnaires were recorded and summarised

### **3.5 Analysis approach**

The data collected was analysed guided by Klein and Myers (1999:67) guidelines for evaluating and interpreting interpretive studies. These are:

1. The Fundamental Principle of the Hermeneutic Circle that is the whole and its parts: Based on this principle, in order to understand a concept, we need to



understand aspects of the concepts as well as the common relationships between those concepts. It is often better to provide a bigger picture of the research rather than giving the audiences information on disconnected aspects and not just pieces that do not fit together. This research will take a similar approach.

2. The Principle of Contextualisation which looks at the interpretation of the researcher and the participants; in interpretive research in Information Systems, it is important to outline the context in which the research is being carried. Contextualizing the research allows the researcher to give meaning to the research as well as aspects relating to the research. This requires that the researcher relate the subject matter to social and historical background and show how the situation has changed.
3. The Principle of Interaction between the Researcher and the Subjects; this research is positioned on the participants and their views. Interaction with the participants will be required in order to make inferences relating to the aim of the investigation. Based on the principle of interaction between the researcher and the subjects, it is vital that the researcher uses the concept of interaction with the research participants and determine what their views are on Entrepreneurship. The responses, views, historical experiences and perceptions of the participants will help the researcher draw conclusion on the research.
4. The Principle of Abstraction and Generalisation;
5. The Principle of Dialogical Reasoning, which explains that what the researcher would like to achieve in the study will not always be what the data shows. The researcher will compare their initial views before the research against the views obtained after the research. This will all allow the researcher to draw conclusions on the research done and more importantly, allow the researcher clearly determine the outcome and objectives of the research. This will also enable the audience to grasp the researcher's intentions through the research.

6. The Principle of Multiple Interpretations where the researcher and the subjects of the research will take meaning to something and have many interpretation of that meaning. In analysing and drawing conclusions from the research, the researcher will integrate numerous perceptions brought forward by different participants. Based on this principle, the researcher will investigate the effect of social contexts and differing perceptions of entrepreneurship and ICTs. The researcher will assess her viewpoints against those of the participants to help draw conclusions. (Klein & Myers, 1999)
7. The Principle of Suspicion, which is when the subjects of the research are resistant to helping out with the research because they are in doubt or fear that the research might bring about negative results which may harm them and their interests.

This approach is a circle approach because all the seven disciplines are interrelated to each other. These principles will help in the interpretation of the information that was received during the interviews.

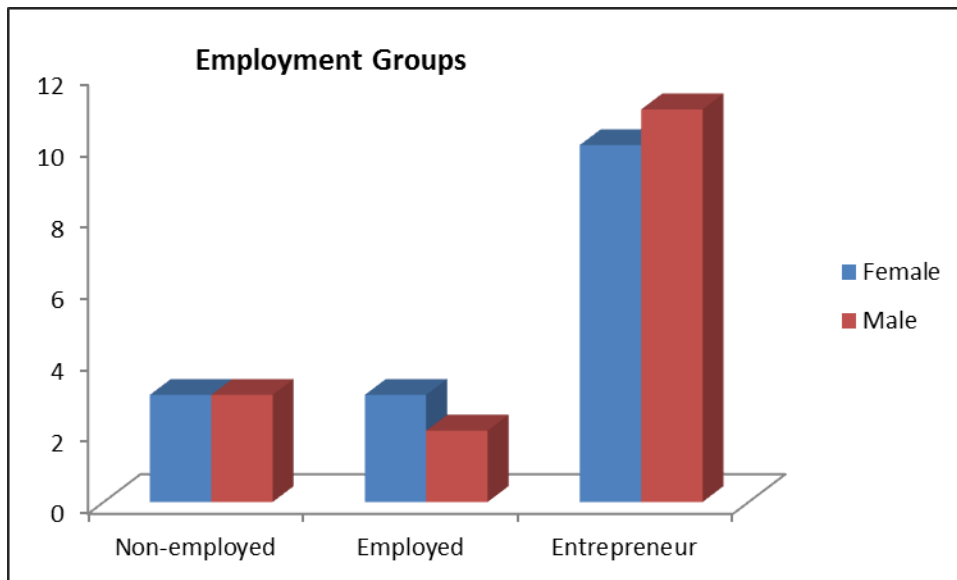
Chapter 4 will show the results from the interview questions and the findings will be discussed.

## **Chapter 4: Analysis & Discussion of Findings**

Chapter 3 was describing the research approach adopted in the thesis and Chapter 4 will present the data from the interview questions and discussion of the findings. The interview was initially planned with 40 people who included 20 entrepreneurs and 20 non-entrepreneurs whether they were employed or not. There were 40 initial interviews planned only 32 interviews were done and this presents 80% of the initial interviews intended. Table 11 shows the results of the interviews.

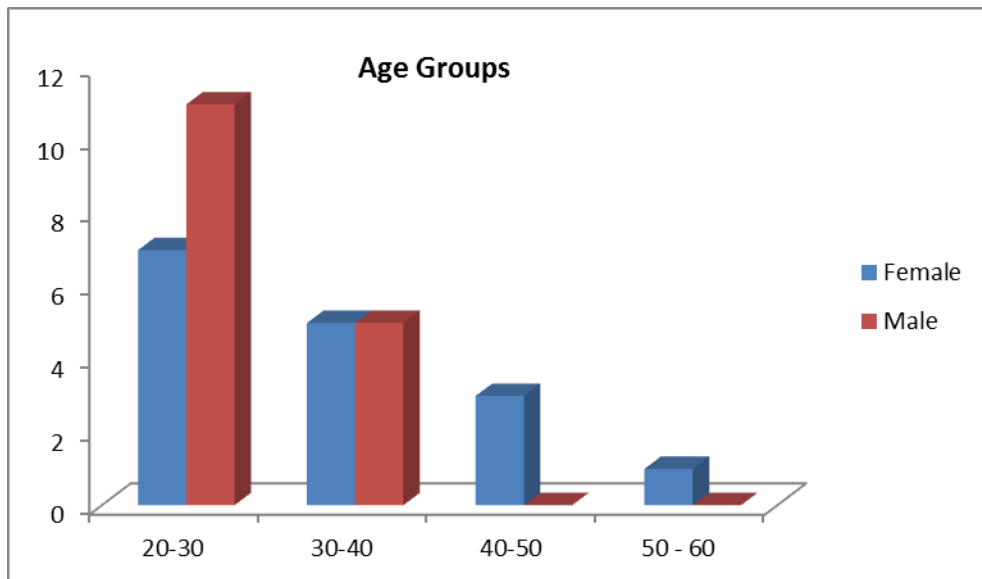
Analysis Statistics	Percentage
Completed	80
Female	50
Male	50
Age group 20 - 30	56
Age group 30 - 40	31
Age group 40 - 50	9
Age group 50 - 60	3
People who know about SEDA	38
Understanding of the term ICT	50
Entrepreneurs	66
Employed	16
Non-employed	19

**Table 11: Analysis Statistics**



**Figure 5: Employment Groups**

Figure 5 above shows that of the population tested there is high percentage of entrepreneurs; this is supported by the fact that at the intersection of the area a new development was built. This enables the entrepreneurs to make some income. It is vital though to note that there income received is influenced by external factors like the geographic area that the businesses are located, the economic change that is brought to the area by the success of the businesses and internal factors like the age and gender relating to the entrepreneurs found in this specific community, (Kunene, 2008:80). The presence of entrepreneurs in the area was brought about by the creation of a mall that enabled the opening of new business, which were established and some were small business such as entrepreneurs selling shoes, selling clothing etc. The entrepreneurs influenced the economic activity in the area, especially because the entrepreneurs would have a staff of about two to three individuals.



**Figure 6: Age Groups**

The Global Entrepreneurship Monitor (GEM) reports have emphasised that it is vital that an entrepreneurial activity must be promoted amongst the youth generation. During the interviews one noticed that although there was a high percentage of youth between the ages of 20-30 years old, most of these youth did not have a sustainable business. The factors that are causing this are also considered as external and internal barriers, Kapurubandara & Lawson (2007:492). The internal barriers include lack of skills: most of the entrepreneurs did not have ICTs that would help with the facilitation of their business because they did not own any of ICTs and because they did not know how to use them. It also includes security concerns for example if their businesses had ICTs they needed to be protected against thieves. The fact that businesses cannot even trade over the Internet also causes barriers because the products being sold or serviced will always be of one kind and if e-Commerce was being actively used there would be interchange of goods and services.

The external barriers that surround the non-sustainability of businesses include: cultural barriers where one finds that only the younger generation is willing to use or learn how to use ICTs; lack of infrastructure is an African challenge because you find that although one owns some ICTs the connectivity and structures used in the community causes slow connection and the only way to get faster connection will be costly. Although organisations such as SEDA and NYDA are considered to be one stop facilities where citizens can get help with information for businesses, there are always political and social barriers that hinder their functional success. For instance having these facilities situated in the urban areas and having no branches in the rural areas being clearly located so that when aid is needed there are accessible.

<b>Interview Questions</b>	<b>Participants' Feedback</b>
Do you know what SEDA	38% of the interviewers know that acronym SEDA stood for Small Enterprise Development Agency

Interview Questions	Participants' Feedback
means?	<p>After the researcher explained what SEDA meant the rest of the interviewers admitted that they have heard the name from the radio stations.</p> <p>Thus the 62% of interviewers did not know what SEDA meant until the meaning was given to them</p>
Do you know what SEDA does?	<ul style="list-style-type: none"> <li>• Business and certificates</li> <li>• Provides information on how to run or start a business.</li> <li>• Fund small business</li> <li>• It assists with information on how to run and grow their business.</li> <li>• Financing and Development</li> <li>• It helps people draft business plans.</li> <li>• They help to draft a business profile.</li> <li>• Helping people when they want to start business and those who are in business in marketing developments and business opportunities.</li> <li>• Assist the government to implement business strategy for small or emerging enterprises.</li> <li>• Promote and support small enterprises.</li> <li>• Assist small enterprises to implement best business practices and ethics.</li> </ul>

Interview Questions	Participants' Feedback
	<ul style="list-style-type: none"> <li>• Assist small enterprises to manage their financial affairs.</li> </ul>
Have you ever tried using SEDA services?:	<p>81% of the respondents have never used SEDA services.</p> <p>19% of the respondents have tried to use the SEDA services.</p>
If a participant has never used SEDA, which other services have their used.	<ul style="list-style-type: none"> <li>• Umsombuvu</li> <li>• Financial Banks</li> <li>• Municipality</li> <li>• Department of Trade and Industry</li> <li>• South African Revenue Services</li> </ul>
Is your business registered?	<p>66 % respondents have registered businesses</p> <p>6 % have not registered their businesses</p> <p>28 % do not have businesses.</p>
If businesses are not registered, why is the business not registered?	<p>The two respondents that had not registered their business thought that their businesses were too small to be registered.</p>
Is your business registered for VAT?	<p>50 % of the respondents businesses are registered for VAT.</p>

<b>Interview Questions</b>	<b>Participants' Feedback</b>
Why is your business not registered for VAT?	<p>The VAT certificate has expired.</p> <p>Business does not make the annual turnover that requires one to be registered for VAT.</p>
What is your understanding of the term ICT?	<p>16 respondents had an understanding of the term ICT and their responses varied to among the following:</p> <ul style="list-style-type: none"> <li>- The technological devices that are used to communicate information easily and appropriately.</li> <li>- Communication through lots of devices such as Internet, radio and television.</li> <li>- I think it is the utilisation of technology to exchange information.</li> <li>- Communicating with the other people through technological devices.</li> <li>- Integrated Communication Technology includes emails and websites.</li> <li>- Basically it means searching information by going through Internet,, visiting direct places, communicating with people who have information television and radios.</li> <li>- Information Communication Technologies (Telephone systems (Telkom &amp; Neotel), Cellular Networks (Vodacom, Virgin Mobile, Heita, MTN), and the Internet)</li> <li>- Information Communications Technology, and is concerned with the storage, manipulation, transmission or receipt of</li> </ul>



Interview Questions	Participants' Feedback
	digital data.
Which ICT tools do you have and use in your business?	<p>23 respondents are using the following ICT tools:</p> <ul style="list-style-type: none"> <li>- Use Intranet for JD Company.</li> <li>- Couple of systems in our computers and Internet.</li> <li>- Email for communication and teaching staff on using computer.</li> <li>- Computer, cell phones, television, photocopy, radio.</li> <li>- Computer, fax, photocopy, binding machine, radio, television and cell phones.</li> <li>- Software</li> <li>- Computer Systems e.g. Pastel, GroupWise</li> <li>- Computers, Internet, telephone, e-mail, social networking (mxit, facebook and Skype)</li> <li>- Internet Services</li> </ul>
In conclusion what do you think would help you as an entrepreneur to facilitate and implement the policies that government has	<p>The respondents have the following factors as factors that can help in the implementation of policies that government has for its citizens:</p> <p><b>1. Access to Capital</b></p> <ul style="list-style-type: none"> <li>- Getting bursaries and better jobs. Financing start-up capital.</li> </ul> <p><b>2. Communication – keeping in touch</b></p> <ul style="list-style-type: none"> <li>- Liaise with us from time to time.</li> </ul>

<b>Interview Questions</b>	<b>Participants' Feedback</b>
put forth for you?	<ul style="list-style-type: none"><li>- Send people to inform us of their agencies from time to time and leave their contacts.</li><li>- They lack follow-up.</li><li>- They must use our contacts details and meet with us.</li><li>- By making themselves available to the people.</li><li>- Outreach programmes.</li><li>- Youth education.</li><li>- Localising of support and offices.</li><li>- Community services involvement.</li><li>- Supervision of programmes in place, if useful or productive or actual reach desired target.</li><li>- Advertisement through radio, television, cell phones and sms.</li><li>- In newspapers and the radio there is always information about SEDA.</li><li>- Exposure to the services provided e.g. more invitations from the agency to provide individuals with information and guidelines on how to effectively take advantage of the services.</li><li>- Small businesses or enterprises must be consulted at an early stage of the inception of the policy so that they can be able to voice out their opinions.</li></ul>

Interview Questions	Participants' Feedback
	<p data-bbox="448 348 1036 380"><b>3.Communication – new developments</b></p> <ul data-bbox="496 428 1430 1360" style="list-style-type: none"><li data-bbox="496 428 1235 459">- Inform us of their new development programmes.</li><li data-bbox="496 512 1430 648">- They have to visit our stores so that they assist on development of our business plans and funding does not reach us.</li><li data-bbox="496 701 1349 785">- If government can call us into workshops so that they can teach us of these things.</li><li data-bbox="496 837 1325 869">- Advertisement by sending sms through our cell phones.</li><li data-bbox="496 921 1349 1005">- Government must tell people which organisation to go for business... etc .</li><li data-bbox="496 1058 1382 1089">- Must know which advertisement to use to reach this people.</li><li data-bbox="496 1142 1325 1226">- Government does the work but sees a problem with the individuals that have the information.</li><li data-bbox="496 1278 1390 1362">- The offices should be established nearby people within their communities so that information should be known by us.</li></ul> <p data-bbox="448 1415 906 1446"><b>4.Communication - awareness</b></p> <ul data-bbox="496 1495 1414 1881" style="list-style-type: none"><li data-bbox="496 1495 837 1526">- Awareness of SEDA.</li><li data-bbox="496 1579 1357 1663">- Be able to reach SEDA, so they must have offices around people, so that people know about their services.</li><li data-bbox="496 1715 1414 1799">- All business entrepreneurs must be informed and SEDA must advertise their services to them.</li><li data-bbox="496 1852 1422 1883">- When government may have ways of informing businesses on</li></ul>

Interview Questions	Participants' Feedback
	<p>their policies and have ways of delivering information into people's stores, offices and businesses.</p> <ul style="list-style-type: none"> <li>- Youth education.</li> <li>- More knowledge about running business in a right way for business entrepreneurs.</li> <li>- In newspapers and the radio there is always information about SEDA.</li> <li>- SEDA must be in the environment so that when she has a problem she can consult.</li> <li>- What will help me is to gather more information about the policies and the government should provide training to small businesses on how to implement the policies.</li> <li>- The government has to play an important role by informing us as of where, how and who are the agencies.</li> <li>- Small businesses or enterprises must be consulted at an early stage of the inception of the policy so that they can be able to voice out their opinions.</li> <li>- Small businesses need to be having workshops so that they are clear with policies.</li> </ul>

**Table 12: Summary of feedback from interview questions**

The following characteristics were found to be social factors that were common amongst the respondents during the interviews

#### **4.1 Need for trust**

The researcher was not able to conduct all the interviews because when approaching the entrepreneurs most of them were not prepared to spend the time being interviewed and preferred that the researcher leave the research questions and they would answer them. It was also noted that most of the other interviews conducted with the non-entrepreneurs most of them were very uncomfortable and preferred to not finish the interview or not be interviewed at all. It is clear that people need to be informed in full about the research, so that they feel comfortable about the information and know exactly what is expected of them. It is therefore noted that the researcher needs to be fully participative with the subjects in order to create the trust between her and the subjects and the subjects will then be willing to give out what they know.

#### **4.2 Communication - Keeping in touch**

ICT can be used as a key tool to assist people in rural areas to keep in touch. It is important that tools like kiosks are also implemented in the areas for example at the malls, near post offices, community halls and churches. The structures of the kiosks should be very strong and unbreakable to avoid any theft and vandalism. This will enable the citizens availability of the kiosk twenty four seven.

#### **4.3 Communication – Awareness**

The participants show that they are willing to know about the structures that government has put for them. It also showed that more offices were needed near the citizens and those offices needed to be visible and proactive in getting the information

out there to the citizens, because entrepreneurial has become a priority in the present government.

#### **4.4 Communication – New developments**

Government has put up structures like MPCCs, living labs instituted by the Department of Science and Technology, the Meraka Institute, etc. There are too many structures and there is less information feed out to the citizens on what these structures do and how these structures can be reached. It is time that the government and its workers get the entrepreneurship process formalised and put out there for the youth to experiment on in order to bring out new developments of successful businesses.

#### **4.5 Lack of knowledge of Entrepreneurship support services**

As previously mentioned, although government has created organisation like SEDA to champion the entrepreneurial culture in South Africa the investigation shows that the South Africans living in the area of Kwa-Mhlanga do not know what the agency is and what they are mandated to do for the citizens. These services need to be distributed through all the necessary channels and the citizens should be able to use them to the better of their society and developing their skills so that skills transfer can occur.

#### **4.6 Expectations to an ICT-Entrepreneurial future**

It is clear from the above discussion that there needs to be better links between the community organisation and government organisations that cater for training. This is to enable the skills that are gained by the citizens to be visible. This visibility will be seen by the amount of entrepreneurial opportunities created by the people and the integration

of ICT within the opportunities. This is supported when these five best practise principles in the use of ICT to generate employment opportunities are as follows:

1. Promoting youth entrepreneurship, using structures such as CIDA where youth are taught business related courses;
2. Promoting public-private partnerships, the partnership ensures that companies like financial institution do not lean behind because they know that the majority of African South Africans will have no surety and the money that is sponsored to the entrepreneurs will probably never be reinvested into the companies;
3. Targeting vulnerable young people, it is important that all necessary information in terms of the agency that South Africa has for example SEDA, NYDA are visible and available for the young people. It is also important that the education as said must start at the ECD levels so that they youth do not even get to the specified stage where they are influenced by staff like drugs and bad peer pressure ;
4. Bridging the gap between the digital economy and the informal sector, we have not discussed the bridging of the digital gap in the thesis but it is evident that it is important as a country to look at bridging the gap between the people that have ICTs and people that do not have ICTs. In concentrating on minimising the percentage between the two more economically activities can be introduced with willing South Africans; and
5. Putting young people in charge, by encouraging the leaders of tomorrow we make sure that the South African population does not only depend on the government for decreasing the poverty levels and the other MDGs but can also initiate their own SMEs and make sure that their families are proved for..

Characteristics	Internal or External factors concerned
Need for trust	Human demographic factor

	Socio-cultural factor External barrier
Communication - Keeping in touch	Socio-cultural factor Previous experience factor External barrier
Communication – <i>Awareness</i>	Socio-cultural factor Previous experience factor External barrier
Communication – New developments	Socio-cultural factor Previous experience factor Market opportunity factor Internal and external barrier
Lack of knowledge of Entrepreneurship support services	Political Institutional factor Macro-economic factor Internal and external barrier
<i>Expectations to an ICT-Entrepreneurial future</i>	Previous capital factor Human capital factor Internal and external barrier

**Table 13: Characteristics classified as internal or external factor or barrier (Factors listed in Table 6 and barriers listed in Table 8)**



The characteristics of the findings show that there is indeed a need for an improved socio-cultural attitude that has to be encouraged in the community and that other institutions such as the banking institutions and the government agencies like NYDA should make the entrepreneurial culture a priority in their organisations because lending money to entrepreneurs will just mean that there are planting to the economy and making sure that South African can accomplish the Vision mandates that the Office of the President has put forth. It is also important to note that most the characteristics found to be barriers are both from the internal and the external barriers, therefore it is clear that South African policies should emphasise the following:

- Where there is lack of skills, the change of the curriculum syllabi is implemented and more youth is encouraged to bring up innovative ideas that can change the environment of South Africa and make sure the Millennium Development Goals can be eradicated;
- Political issues of entrepreneurship should be made available in policies that are clear and understandable to the communities and the entrepreneurs in order for them to make use of the hubs and agencies such as SEDA and e-Skills Institute to increase the rate or degree or e-readiness in South Africa; and
- It would be vital that all the factors either external or internal be combined and a strategy be developed that would guide South Africa to the future and that when the ICT entrepreneurial activity in the country is benchmarked we would have improved drastically from previous standings.

These expectations can be practised by using education, for example training in the requisite skills for converting a market opportunity into a commercial enterprise. This training can be by means of online training tutorials, workshops conducted by the experts of entrepreneurship. Most importantly it would be vital to also have a curriculum in the education system that introduces the entrepreneurial culture as early as in the foundation phases of the life cycle of education.

The chapter took a realistic view of investigation whether the mandates of SEDA in a community like Kwa-Mhlanga were being practised and whether the community members either entrepreneurs or non-entrepreneurs were using any ICTs to help them

in their businesses. The South African government has created and amended acts that were supposed to help communities like the one in Kwa-Mhlanga to participate in the entrepreneurial culture. The one stop shop facilities that need to be helping SMEs growth and become entrepreneurship business are not succeeding in doing so. There are barriers and factors that cause them to fail in their mandates. It also looks promising with all the new developments coming in the first half of 2013 and we can keep on encouraging the will of the youth to keep creating jobs for other individuals. The chapter concludes the thesis and suggests any further research that may be taken in the future.

## Chapter 5: Conclusion

The thesis was constituted by the main question and sub-question. It is in this chapter that I will conclude and answer the research questions. According to Prakash & De' (2007:264), they suggests that according to the modernisation theory, developing countries such as South Africa do not have the capability to break out of old-fashioned and outdated styles of manufacturing because they lack knowledge or resources (either be funds or human resources) to do so. One would want to agree to disagree with the two authors; firstly to show ones' disagreement one looks in terms of the questions that the thesis was investigating. One would start with the sub questions of the thesis:

- Are the entrepreneurs aware of policies and programs in South Africa that help in the entrepreneurship process supported by the government?
  - The case study clearly shows that in the community investigated, a few of the participants knew of government policies such as SEDA, the Co-operative Act, NYDA, etc. that could help them as entrepreneurs or start up entrepreneurs to achieve their will or outcome.
  - It is also clear that this is caused by offices and infrastructure that cannot be easily seen. These offices are put by government to encourage the people in the rural areas.
  
- How can ICTs play a role in enhancing the entrepreneurial culture required for the increase in the economy and development of the country?
  - The most important factor of the existence of ICTs is the creation of more infrastructures in rural areas for example the government can create more MPCCs and they should not be isolated from the new developments such as malls that rural areas have.
  - After the infrastructure is created there should be computer literacy classes provided at the MPCCs by skilled people from the community, as

in the case of SEIDET where the skilled teaches the unskilled and therefore creating a community of more skilled persons.

- How can citizens learn to maximise the opportunities for creating and having an increased entrepreneurial culture?
  - Maximisation is best achieved by having workshops, syllabi that encourages the teaching of an ICT entrepreneurial culture.
  - The encouragement of bigger business to not only porch the skilled human resource from the rural areas but to also feedback their finances to the rural areas where most of the staff members come from.
  - Creating mindsets in South African that encourages individuals creating job opportunities for other South Africans in order to reduce poverty levels and create knowledge to also decrease the high levels of death due to HIV and the ignorance of the epidemic.
  
- How can the facilitation of an ICT-enabled entrepreneurial culture be improved, considering the results of the research?
  - The creating of awareness of process that can help with the increase of creation of ICT-enabled entrepreneurial cultured SMEs that will stabilise to bigger companies that produce profits in the rural areas.
  - The use of these kinds of businesses to stop crime and corruption because the more that the people learn the greater the skilled products and better understanding of what needs to be done.
  - The creation of more FETs in rural areas that will make sure the technical experts of business are toughed and practised.

It would also be important that bigger business especially financial institutions could increase the number of lenders that they allow for the rural areas.

The main question in the research is: How could businesses in the rural areas use ICTs to create an entrepreneurial culture needed for successful business operations?

There is still a great lack of use of ICT in businesses in the rural area, this is clearly described by the Honourable Minister of Communications, Ms Dina Pule in Mpumalanga at the Nkangala District Municipality Women's Summit on the Growing Local Development to Women on the 04 October 2012

The Minister describes the need of ICTs by letting South Africans know that the country is switching from the analogue broadcasting to digital broadcasting. This will make sure that jobs are created in the process of digitalisation and in areas sure as building of the infrastructures that will make sure that the process takes place effectively. This will also make sure that communication cost decrease and she emphasises that her department will make sure that ISACA conducts a study that will give government an indication for which direction towards strengthening its regulation or not.

It is therefore evident that this will be followed by the completion of the electronic mandate of the MTSF where the priority strategies make sure that our government achieves vision 2015 and as we look forward to Vision 2015 and Vision 2030 we will attack all the elements of the mandates with a broader view and at an expert skilled view.

From the investigation, the thesis found that communication is a critical issue in stimulating entrepreneurship. ICT can therefore be used as a channel for this – especially where mobile penetration is high. The thesis findings show that communication can be used by the mandated structures to make sure that communities can always keep in touch with them and be able to see the community projects that started as SMEs to growth into entrepreneurship ventures. These growths of these ventures create higher economic growth, more developments, economic upliftment and poverty eradication which is one of the MDG goals to be successfully eradicated. Keeping in touch can also be aided by communication through awareness. Awareness is therefore vital in the sense that when communities are aware of what structures are there to help, these communities make sure that word of mouth is done. Having awareness communicated from one community to the next brings development and

exchange of skills because people from the other communities will come and transfer or gain skills that are not available in their communities. Recording, documentation and monitoring of the progress of SMEs – Entrepreneurships – Large Ventures is important because the government can make sure that new developments are created to cater for the needs of the learning communities out in the rural areas. It is also vital that the people that are brought forth in communities have people that come from that community so that the people can trust that whatever government introduces into the communities it is of their interest not a political venture.

Channels and expectations for a brighter future were mentioned in Chapter 4 and it is of the researchers' opinion that those expectations need to be implemented into all business structures. This will enable businesses to have more internship programmes and that will create an increase in the economy. One has concluded that successful entrepreneurship is facilitated by the existence of SMEs and the implementation of ICTs in those businesses. As was discovered in the thesis that structures that government have mandated to improve the entrepreneurial culture progression is going at a slow pace, it would be important that there are more studies related to finding a solution of making sure that all SMEs in the country are registered so that the government has proper statistics. This will make it easier for the government to put the right number of one stop shop facilities around rural areas that can help with the facilitation and implementation of ICTs in the rural area.

The above conclusions are based on the outcomes of the case study interviews; however one feels that for future research purposes, the study of necessity entrepreneurship versus opportunity entrepreneurship should be analysed and detailed. Many authors have come to the realisation that necessity entrepreneurship has no effect on the economic development while opportunity entrepreneurship has a positive and significant effect. This effect can be encouraged by all the initiatives that the government in the form of our department of communications and the department of trade and industry are introducing to the communities of South Africa, especially the youth and women.

## References

Action Coach. 2012. 12 Essential Characteristics of an Entrepreneur. Available [http://www.action.com/\\_downloads/whitepaper-FranchiseRep5.pdf](http://www.action.com/_downloads/whitepaper-FranchiseRep5.pdf) accessed 21 December 2011.

Address by the Honourable Minister of Communications, Ms Dina Pule in Mpumalanga at the Nkangala District Municipality Women's Summit on the Growing Local Development to Women. 04 October 2012. Available at <http://www.gcis.gov.za> accessed on the 25 October 2012.

Admiraal, W., de Laat, M., Rubens, W., & Lally, V. 2003. ICT support for workplace learning; eLearning in Small and Medium Enterprises (SMEs). *Paper presented on the ECER 2003 Hamburg. Working and Learning 'e'resources: issues for research, policy and practice, pp 1 -9.*

Aldrich, H.E. & Waldinger, R. 1990. Ethnicity and Entrepreneurship. *Annual Review of Sociology, Vol. 16, pp. 111 – 135.*

Antonites, A. J. & van Vuuren, J. J. 2005. Inducing Entrepreneurial creativity, innovation and opportunity – Finding Skills. *SAJEMS NS Vol. 8, No. 3, pp 255 – 271.*

Avgerou, C. 1998. How can IT enable economic growth in developing countries? *Information Technology for Development, Vol. 8, No. 1, pp 15-28.*

Avegrou, C. 2010. Discourses on ICT and Development. *Information Technologies and International Development, Vol. 6. No. 3, pp 1 – 18.*

Baxter, P. & Jack, Susan. 2008. Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, Vol. 13, No. 4, pp. 544 – 559.

Bygrave, W.D. 2004. The entrepreneurial process. In W.D. Bygrave & A. Zacharakis (Eds). *The Portable MBA in Entrepreneurship*, Hoboken NJ: John Wiley & Sons

Bygrave, W. 2003 “Financing Entrepreneurs and their Ventures” in Reynolds, P., W. Bygrave and E. Autio (eds.) *Global Entrepreneurship Monitor 2003 Global Report*, Kansas City: Kauffman Center for Entrepreneurial Leadership at the Ewing Mario Kauffman Foundation.

Callaghan, C. & Venter, R. 2011. An investigation of the entrepreneurial orientation, context and entrepreneurial performance of inner-city Johannesburg street traders. *Southern African Business Review*, Vol. 15, No. 1, pp. 28 – 48.

Darroch, M.A.G. & Clover. T.A. 2005. The effects of entrepreneurial quality on the success of small, medium, and micro agribusinesses in KwaZulu-Natal, South Africa. *Agrekon*, Vol. 44, No. 2, pp. 238 – 263.

Donner, J. & Kentaro, T. 2009. Persistent themes in ICT4D Research: priorities for inter-methodological exchange. Pre-presentation to be presented at the 57<sup>th</sup> Session of the International Statistics Institute, Durban, South Africa, pp 1 – 10.

Dyer, L.M. & Ross, C.A. 2008. Seeking advice in a dynamic and complex business environment: Impact on the success of small firms. *Journal of Developmental Entrepreneurship*, Vol. 13, No. 2, pp 133-149.



eSecretariat. 2001. Proposal for Tanzania's ICT Policy Formulation Framework. *Final Version*, pp 1-36.

Fourie, I. & Krauss, K. 2010. Information literacy training for teachers in a developing South African context: suggesting for a multi-disciplinary planning approach. *Innovation*, No. 41, pp 107 – 122.

Freeman, S. 2000. Partnerships between small and medium enterprises and universities that add value. *Education and Training*, Vol. 42, No. 6, pp. 372 – 377.

Gbadamosi, G. 2002. Entrepreneurial behaviour: research issues and agenda in Africa. An article in "Entrepreneurship Africa: the Road to freedom" 1<sup>st</sup> International Conference, Pretoria. October 3 – 4, pp. 95 – 101.

GEM. 2003. Foxcroft, M.L., Wood, E., Kew, J., Herrington, M. & Segal, N. Global Entrepreneurship Monitor (GEM) South African executive report, The Graduate Business School University of Cape Town, Cape Town. Available online at <http://www.gemconsortium.org> accessed 2012-09-12.

GEM. 2005. Von Broembsen, M., Wood & Herrington, M. Global Entrepreneurship Monitor. The South African Report. UCT Centre for Innovation and Entrepreneurship. Available online at <http://www.gemconsortium.org> accessed 2012-09-12.

GEM. 2007. Autio, E. Global Entrepreneurship Monitor. Global Report on High Growth entrepreneurship. Babson College and London Business School. Available online at <http://www.gemconsortium.org> accessed 2012-09-12.

GEM. 2010. Foxcroft, M.L., Wood, E., Kew, J., Herrington, M. & Segal, N. Global Entrepreneurship Monitor (GEM) South African executive report, The Graduate

Business School University of Cape Town, Cape Town. Available online at <http://www.gemconsortium.org> accessed 2012-09-12.

Glancey, K., Greig, M. & Pettigrew, M. 1998. Entrepreneurial dynamics in small business service firms. *International Journal of Entrepreneurial Behaviour and Research*, Vol. 4, No. 3, pp. 249 – 268.

Government Gazette. 1996. National Small Business Act, No 102, pp 1 – 14.

Government Gazette. 2004. National Small Business Act, No 29, pp 1 – 12.

Government Gazette. 2005. Co-operatives Act, No 14, pp 1 – 14.

Gundry, L.K. & Welsch, H.P. 2001. The Ambitious Entrepreneur: High growth strategies for women-owned enterprises. *Journal of business venturing*, Vol. 16, No. 5, pp. 453 – 470.

Guzman, J. & Santos, F.J. 2001. The Booster Function and the Entrepreneurial Quality: An Application to the Province of Seville. *Entrepreneurship and Regional Development*, Vol. 13, No. 3, pp. 211 – 228.

Harindranath, G. & Sein, M.K. 2007. Revisiting the Role of ICT in Development. Proceedings of the 9<sup>th</sup> International Conference on Social Implications of Computers in Developing Countries, Sao Paulo, Brazil.

Henning, J.J. 2003. Optimising the closely held corporation to enhance commercial participation and development: The Southern African experience in comparative perspective. *Journal for Juridical Science*, Vol. 28, No. 2, pp. 1 – 32.

Herrington, M., Kew, J., & Kew, P. 2009. Tracking Entrepreneurship in South Africa: A GEM Perspective. *Global Enterprise Monitor South Africa*.

Hisrich, R.D. & Peters, M.P. 2002. *Entrepreneurship. International* 5<sup>th</sup> ed. McGraw Hill/Irvin; Higher Education.

Ismail, F. 2005. A development perspective on the WTO July 2004. General Council Decision. *Journal of International Economic Law*, Vol. 8, No. 2, pp. 377 – 404.

IST-Africa Consortium. 2012. *Guide to ICT Policy in IST-Africa Partner Countries. Version 2.2*, pp. 1 – 146.

Jackson, M, & Sloane, A. 2009. Organisation profiling and the adoption of ICT:e-Commerce in the UK construction industry. *The Electronic Journal Information Systems Evaluation*, Vol. 12, No.. 1, pp. 67 – 74.

Janse van Rensburg, Y. 2011. *The State of Entrepreneurship in South Africa. Entrepreneurs Thinking Big: Business resources, tips, success stories, interviews and business ideas.* Available at <http://www.ideate.co.za/2011/05/24/the-state-of-entrepreneurship-in-south-africa/> accessed on 10 November 2011.

Kangasharju, A. 2000. Growth of the smallest: Determinants of small of small firm growth during strong macroeconomic fluctuations. *International Small Business Journal*, Vol. 19, No. 1, pp. 28 – 43.

Kapurubandara, M. & Lawns, R. 2007. SMEs in developing countries need support to address the challenges of adopting e-commerce technologies. *Proceedings of the 20<sup>th</sup> Bled eConference eMergence: Merging and emerging technologies, processes and institutions*, 4 – 6 June, pp 485 -498.

King, R. 2006. Entrepreneurial hearts and minds. *Business Strategy Review*. Winter 2006.

Klein, H.K. & Myers, M.D. 1999. A set of principles for conducting and evaluating interpretive field studies in information systems. *MIS Quarterly*, Vol. 23, No. 1, pp 67 – 88.

Kunene, T.R. 2008. A critical analysis of entrepreneurial and business skills in SMEs in the textile and clothing industry in Johannesburg, South Africa. *Philosophiae Doctor Entrepreneurship*. University of Pretoria.

Madon, S. 2005. Evaluating the developmental impact of e-Governance: an exploratory framework. *The Electronic Journal of Information Systems in Developing Countries*, Vol. 20, No. 5, pp. 1-13.

Mambula, C.J. & Agwamba, I.C. 2009. A theoretical and practical model for global business, entrepreneurship and education. *African Journal of Marketing Management*, Vol. 1, No. 7, pp 172 – 183.

Markman, G. & Baron, R. 2003. Person-entrepreneurship fit: why some people are more successful as entrepreneurs than others. *Human Resource Management Review*, Vol. 13, No. 2, pp. 281 – 301.

McDougall, P.P., & Oviatt, B.M. 2000. International Entrepreneurship: The Intersection of Two Research Paths. *The Academy of Management Journal*, Vol. 43, No. 5, pp 902 – 906.

Minniti, M. Bygrave, W.D. & Autio, E. 2006. Global entrepreneurship monitor 2005 executive report. Babson College and London School of Business.

Morris, M.H., Pitt, L.F. & Berthon, P. 1996. Entrepreneurial activity in the Third World informal sector. The view from Khayelitsha. *International Journal of Entrepreneurial Behaviour & Research*, Vol. 2, No. 1, pp. 59 – 76.

Myers, M.D. & Newman, M. 2007. The qualitative interview in IS research: Examining the craft. *Information and Organization*, No. 17, pp 2 -26.

Myers, M.D. 2009. *Qualitative research in business and management*. London EC1Y 1SP, SAGE Publications Ltd.

Ndedi, A. A. 2009. Entrepreneurship Training and Job Creation in South Africa: Are Tertiary Institutions Filling the Gap. *Journal of Contemporary Management*, Vol. 6, pp 463 – 470.

Nepad Secretariat. 2008. Boosting Economic Growth and Poverty Reduction: Information and Communication Technology (ICT). Paper presented at the 10<sup>th</sup> Meeting of African Partnership Forum (APF), Tokyo, Japan, pp 1 - 28.

Parker, S.C., & van Praag, C.M. 2012. The entrepreneur's mode of entry: Business takeover or new venture start?

Pati, N., & Desai, MS. 2005. Conceptualizing strategic issues in information technology outsourcing. *Information Management & Computer Security*, Vol. 13, No. 4, pp. 281 – 296.

Rasheed, H.S. 2009. Contrasting E-Commerce Business Models: Performance Implications for Small Enterprises. *Journal of Developmental Entrepreneurship*, Vol. 14, No. 1, pp 89 – 101.

Reynolds, P. D., Hay, M., Bygrave, W. D., Camp, S. M. & Autio, E. 2000. *Global Entrepreneurship Monitor: 2000 Executive Report*.

Rogerson, C.M. 2001. In search of the African miracle: debates on successful small enterprise in Africa. *Habitat International*, Vol. 25, No. 1, pp. 115 – 142.

Roode, D., Speight, H. Pollock, M. & Webber, R. 2004. It's not the digital divide, it's the socio-technical divide! In the Proceedings of the 12<sup>th</sup> European Conference on Information Systems, Turku, Finland.

Rwigema, H. & Venter, R. 2004. Advanced entrepreneurship. Oxford University Press, Oxford.

Sandberg K.W. & Vinberg, S. 2000. Informaion technology and learning strategies in small enterprises. Behaviour and Technology, Vo. 19, No. 3, pp. 221 – 227.

Scheepers, M.J. 2008. Entrepreneurial mindset of information and communication technology firms. *Peer Reviewed Article, InterWord Communications, Vol. 10, No. 4, pp. 1 – 21.*

Sein, M.K. & Harindranath, G. 2004. Conceptualising the ICT artefact: Towards understanding the role of ICT in national development. *The Information Society, Vol. 20, No. 1, pp.15-24.*

Sein, M.K. 2005. Paradigms of ICT-in-Development. *Proceedings of IFIP9.4 Conference, Abuja Nigeria.*

Sen, A. 2000. Development as Freedom, Oxford University Press, New Delhi.

Simpson, M., Tuck, N. & Bellamy, S. 2004. Small business success facts: the role of education and training. Education and Training, Vol. 46, No. 8/9, pp. 481- - 491.

Small Enterprise Development Agency. Available at <http://www.seda.org.za> accessed on 7 December 2010.

Steyn, AA. 2010. A conceptual framework for guiding SMEs in application of IT from a South African point of view. Submission of Masters Commerci (Informatics), Department of Informatics, University of Pretoria.

Tebelius, U. 2006. Evaluation of the Yo-pro project. Lulea University of Technology, pp 1 – 14.

Themba, G., Chamme, M., Phambuka, C.A., & Makgosa, R. 1999. Impact of macro-environmental factors on entrepreneurship development in developing countries. In African Entrepreneurship and Small Business Development, L Kinunda-Rutashoby and DR Olomi (eds.), pp. 103 -119. University of Dar-Es-Salaam.

The National Commission: The National Development Plan. November 2011.

The Presidency, 2005. <http://www.gcis.gov.za>

Tustin, D.H. 2001. Economic growth prospects for SMEs in the Greater Johannesburg research. UNISA: Bureau of market research. Research report no. 284. Faculty of economic and management science.

University of Pretoria. The Entrepreneurship Process. Chapter 3, pp 82 -116. [www.up.ac.za](http://www.up.ac.za) accessed on 7 January 2010

Ure, J. 2005. ICT Sector Development in Five Central Asian Economies: A Policy Framework for Effective Investment Promotion and Facilitation. *A Paper for UNESCAP*.

Unwin, T. 2009. ICT4D: Information Communication Technology for Development. Cambridge University Press. 1<sup>st</sup> Edition.

van Reijswoud, V. 2009. Appropriate ICT as a tool to increase effectiveness in ICT4D: Theoretical considerations and illustrating cases. The Electronic Journal on Information Systems in Developing Countries (EJISDC), Vol. 38, No. 9, pp 1-18.

van Rensburg, J.R., Veldsman, A., & Jenkins, M. 2008. From Technologists to Social Enterprise Developers: Our Journey as “ICT for Development” Practitioners in Southern Africa. View From Practice. *Journal of Information Technology for Development*, Vol. 14, No. 1, pp 76-89.

Venkatasubramaniam, S. 2003. Economic Development through Entrepreneurship in India. Partial fulfilment of the requirements for the Degree of Master of Science in Management of Technology. Alfred P. Sloan School of Management.

*Who is CIPC, 2012. <http://www.gcis.gov.za> accessed on 25 October 2012*

## **Appendixes**

### ***Appendix 1 Interview Questions***

Gender:.....

Type of Business:.....



Do you know what SEDA means?:.....

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Do you know what SEDA does?:.....

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Have you ever tried using SEDA services?:.....

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If not, what services have you used:.....

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Is your business registered?:.....



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What is your understanding of the term ICT?.....

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Which ICT tools do you have and use in your business?.....

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In conclusion what do you think would help you as an entrepreneur to facilitate and implement the policies that government has put forth for you?.....

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