ASHESI UNIVERSITY COLLEGE

ENTREPRENEURSHIP, YOUNG PEOPLE AND GHANA'S DEVELOPMENT:

A CASE STUDY OF THE ICT SECTOR

By

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Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

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I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by Ashesi University College.

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ABSTRACT

The underdevelopment of the Ghanaian economy can conceivably account for the socio-economic and other challenges confronting Ghana's youthful population. Ghana hopes to use the ICT4AD policy to create a conducive environment to take advantage of enormous benefits that come from the usage of Information and Communications Technology. Using the ICT sector as a case study, this paper discusses how entrepreneurial traits were promoted and or undermined as Ghana's young entrepreneurs' setup and run their businesses. The central finding for this work was that entrepreneurial capacity was undermined by the general corporate and cultural environment in Ghana.

For economic development to take place there is the need to put in place institutions and mechanisms to cater for the entrepreneurial potentials of young people within the country. In other words, institutions must be created and an enabling environment constructed to nurture, support and develop the entrepreneurial capacity of the youth.

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CHAPTER 1
INTRODUCTION

The youth of Africa can be described as one of the most unproductive portion of their population compared to their fellow counterparts in advanced economies. This is because they have been denied the means to develop their capacities such as quality basic education, healthcare and a condusive social environment in which to nurture their abilities. If foreign aid has not assisted the continent in achieving its potential, is there a viable alternative path to development? Perhaps the Information and Communications Technology (ICT) sector may be such an alternative. This paper discusses how entrepreneurial traits were promoted and or undermined as Ghana's young entrepreneurs' setup and run their businesses. It also looks at how condusive Ghana's environment fosters its desire to use ICT as a means to attain development focusing on the Information and Communication Technology for Accelerated Development (ICT4AD) policy.

1.1 BACKGROUND TO THE STUDY

The emergence of the term "global village" can be attributed to the ICT revolution of the last half of the 20th century. Information and Communications Technology is a term that includes all technologies critical for the manipulation and communication of information. The world thrives on access to information communicated mainly through technology. And one can say individuals, organizations and even countries that are privileged

to have had access to and taking advantage of ICT are the ones that have achieved significant growth and development. It is important to note that the ICT revolution was led by curious and adventurous young men: the likes of Bill Gates of Microsoft, Steve Jobs of Apple and Mo Ibrahim among others. Their entrepreneurial spirits drove them to explore and invent information technology tools for solving some of the world's most profound problems and drove development in almost every sector of their countries.

However, this cannot be said about African countries of which Ghana is no exception. The weakness of indigenous entrepreneurship has stifled development because it rests in unskilled hands. Creative imagination, innovation, maintenance and management of existing enterprises are therefore undermined.

The African continent of which Ghana is part is made up of mainly third world countries overwhelmed by poverty, disease, poor leadership, political instability, civil wars among others. These have greatly impeded the development process in most countries on the continent. Ghana is faced with some of these problems. It currently hopes to make amends to cause a significant improvement in the standard of living of her citizens. The ten regions of Ghana reflect very high variation in the level of development which is visible across these regions. Generally, the southern sector of Ghana is quite developed compared to the northern sector. The southern

sector boasts of the country's most proactive business, educational and governmental institutions. Most importantly, it plays host to the best of the country's social and economic infrastructure with relative improvements in the standard of living of the people. Ghana has a relatively low literacy rate of 76% (UNICEF, 2004) plus inadequate infrastructure coupled with other developmental issues such as ownership and management of her own natural resources and businesses. The need to ensure the discharge of developmental policies by all stakeholders becomes a matter of concern to policy makers.

ICTs, even if available, most often are outside the reach of the poor and uneducated populace that forms the majority within Ghana. However, it has become increasing important to focus on building the capacity of youth to access and benefit from ICT development. The ongoing globalization promises to be more of an ordeal than a chance if Ghana does not strive to develop its ICT sector.

1.1.1 ICT FOR ACCELERATED DEVELOPMENT (ICT4AD) POLICY

The National ICT Policy and Plan Development Committee was set up by the Government of Ghana in 2003 and tasked to develop an ICT policy for socio-economic development. Referred to as the ICT for Accelerated Development (ICT4AD), it seeks to emphasize on an ICT driven socio-economic plan capable of turning Ghana into an information based

society. This is intended to move the nation towards development within the shortest possible time (National ICT policy, 2003). Key stakeholders are the government, private sector and civil service. The objectives of the policy include creating the enabling environment to facilitate the deployment, utilization and exploitation of ICT in the economy. In doing so, the government hopes to develop the human resource capacity as well as the nation's research and development capabilities to meet the changing demands of the economy.

1.1.2 GHANA'S YOUTHFUL POPULATION

For the purpose of this study, the term youth refers to people within the age bracket of 25 years and below.

AGE DISTIBUTION OF POPULATION	Percentage (%)
Below 15 years	43.5
15 to 24 years	17.4
25 to 39 years	17.6
40 to 54 years	11.9
55 to 64 years	4.5
65 and above	5.0
Total Population	100

Source: Ghana Statistical Service, 2004

Table 1. Age distribution of population

This means that the youth constitute 61% of the total population. The relative youthfulness of Ghana's population poses a great challenge to its social and economic development. What are the implications? The youthful

nature of the population presents a pool of human resources to be trained as human capital to facilitate the socio-economic agenda of Ghana and this requires higher expenditure to provide education and training (Dzidonu, 2003). However, the above possibilities have been hampered due to lack of resources which translates into high unskilled labour force and unemployment within the country.

The youth have demonstrated great dynamism and the will to play a key role in the ICT sector in Ghana by enrolling in educational institutions to pursue ICT related courses in the country. However many prefer to travel outside where they believe their talents can be duly nurtured and marketed. The concept of entrepreneurship plays a crucial role if adopted by the youth in most developing countries. In making future aspirations among the various professional options, they are often constrained by the choice between unemployment and hard to obtain public sector jobs. Those who aspire for more must be willing to think creatively and take risks.

Most importantly, the power to shape one's own future and to become a change maker gives entrepreneurship an undeniable attraction. Innovators are always trying to solve the problems of their communities and seek novel solutions. The ICT sector can be used to unravel the opportunities associated with the developmental challenges of a youthful population (Dzidonu, 2003).

1.2 OBJECTIVES

The study seeks to assess the viability of the central goal of Ghana's ICT policy: accelerating socio-economic development. This is pursued in this study by examining how entrepreneurial traits were undermined or promoted in the Ghanaian business environment focusing on the ICT sector. Therefore, the essence of this study is to find out how the traits of entrepreneurship were promoted and/or undermined as Ghana's young entrepreneurs' setup and run their businesses. Their efforts contribute towards development of the country. The study also assesses how condusive Ghana's environment fosters its desire to use ICT as a means to attain development.

The ICT4AD policy aims at creating the necessary environment to propel Ghana into a knowledge-based economy. The study addresses how entrepreneurship can be used to develop the disadvantaged youth as assets for Ghana's development. Recommendations are made to address the loop holes and avenues to ensure the successful implementation of the policy.

1.3 PROBLEM STATEMENT

Development is empowerment. It is about individuals and communities identifying their problems, expressing their own demands and finding their own solutions to these particular problems. Economic development can simply be described as qualitative change and restructuring in a country's economy leading to technological and social progress. Ghana is developing its ICT sector to address the challenges it is facing in the information era. Having a relatively large youthful population, the question that arises is how to transform them into assets for development. The ICT policy hopes to use public-private partnerships to create the needed infrastructure to move Ghana into the information era. The challenge in many developing countries is to provide young people with enabling environments where proper institutions can foster the culture of innovation. This is where entrepreneurship plays a major role.

Entrepreneurship is of central importance because it is the entrepreneurs through the private sector who craft new ideas, develop new products, respond to the needs of the market and ultimately bring about development (Shikwati, 2008). Entrepreneurship must be used as a strategic tool for young people as it involves them in problem solving of a given community. And we need to encourage more and more of such efforts. We want to look at the youth as people who contribute to society.

Therefore, the essence of this study will be to find out how the traits of entrepreneurship were promoted and or undermined as Ghana's young entrepreneurs' setup their businesses. This will assess how condusive Ghana's environment fosters its desire to use ICT as a means to attain national development.

1.4 MODE OF DATA COLLECTION

Data used includes both primary and secondary data. Data was collected from 11 entrepreneurs and IT experts within the selected ICT companies located within the Greater Accra Region. This involves semi structured interviews with the heads or brainchild behind each of the selected companies. Data was collected from the online resources, appropriate agencies and persons who can duly assist in providing the necessary information for the topic under study.

1.5 SCOPE AND LIMITATIONS

The ICT sector has several players including telecommunication companies, software solution companies, regulators and consumers.

The study is limited to software solution companies established by individuals considered as entrepreneurs. This is to enable the study relate accurately to the concepts of entrepreneurship and development. For example, an individual who exhibits traits of personal resourcefulness, strategic vision and innovativeness is assessed and evaluated as to how

these traits were promoted or undermined as he or she set up and run the ICT firm.

Companies selected for study are located within the Greater Accra region hence restricting the scope. The region serves as the capital city of the country likewise serving as the hub of several prominent business quarters including the selected companies. This is to create convenience in information gathering within the limited time.

The availability of information of ICT companies was limited and had to rely on suggestions from other entrepreneurs within the industry. This caused delays as several companies had to be sorted to arrive at the selected respondents that met all three selection criterion. Again, I encountered difficulties in meeting with respondents due to their busy schedules especially as they served in the capacities of Chief Executives. Time schedules for interviews were most often limited. Lastly, access to relevant information on the research topic focusing mainly on developing countries to enhance literature review was limited. Therefore strategies were improvised to aid the completion of the study. The bias of interviewees was also another limitation. This was however responded to by cross checking respondents' information with other documentary sources.

1.6 ORGANIZATION OF STUDY

The study is organized in five chapters.

Chapter One covers the introduction and provides general information about the area of study and links to the specific research agenda which looks at the relationship between entrepreneurship, young people and the development of Ghana with specific reference to the ICT sector. The chapter also covers the objectives, research questions and mode of data collection. It elaborates the extent or scope of the study and looks at its limitations as well.

Chapter Two The literature review explores the thoughts of practitioners, academia and other commentators in the area of study.

Chapter Three describes the selected approaches and measures used in collecting and analyzing the data collected for the study. It describes the basis on which the entrepreneurs or companies were selected, sampling and data collection processes.

Chapter Four analyzes the collected data, discusses the issues arising from the data and other research questions.

Finally Chapter Five draws conclusions from the findings of the study. Recommendations are made in respect of the findings which can be used to make well informed policy decisions.

CHAPTER 2

LITERATURE REVIEW

With a rapidly increasing youthful population across the African continent who are disadvantaged due to lack of quality education and skill training, many governments sought ways to improve this situation. Information and Communications Technologies was seen as the next thing to revolutionize countries socio-economically and lead them into the new era of the knowledge based economy. The knowledge based economy refers to the focus on the role of information, technology and learning in economic performance. Knowledge intensive sectors like education, communications and information are growing at a faster rate (OCED, 1996). New innovations through ICT continue to emerge every second meant to tackle and solve problems to better the lives of people. Several studies have been conducted to show how developing and the developed countries are utilizing ICT.

2.1 USAGE AND ROLE OF ICT IN DEVELOPMENT

Studies have shown that ICT adoption and usage in developing countries including Ghana is at an infancy stage. Policy initiatives in developing countries have pretty much been copied or influenced by the approaches of the developed economies. Records show a vast differential between the impact of ICTs on urban modern societies and rural societies (Anyimadu, 2004). Anyimadu is of the view that there is a high adoption of ICT in the modern centers which accounts for a lesser proportion of Ghana's total

settlements. I believe this raises concerns as majority of the society will not be affected by the benefits of ICT development.

Anyimadu (2000) in his research found that the telecommunication centers in Ghana were run by local entrepreneurs with very basic equipment in the rural areas. Anyimadu considers their efforts contribute to the development of infrastructure and the business environment. He however expresses optimism about development and the use of ICTs in Africa as regulatory reforms in some countries had stimulated growth in telecom services and privatization. Anyimadu cites the opportunities that the World Wide Web offers: providing low cost communication and information dissemination thereby promoting cultural and economic development.

Research has show that ICT diffusion and adoption of advanced technology are associated with higher productivity and large business sizes (Batelman et al, 1996; Baldwin and Daverty, 1995; Gretton et al, 2002), both of which are very low in Ghana. Uganda is one country that managed to catch up with the rest through effective policies to spearhead development. ICT initiatives within the past 8 years have yielded impressive results. In a study of Uganda's ICT sector by Ssewanyana, Busler (2007), it was evident that ICT had contributed to increased savings, efficiency of processes, lower transaction costs, and improvement in service delivery as well as improved its market performance (Ssewanyana and Busler, 2007).

The study makes a profound statement that the adoption and usage of ICT in developing countries follow the same pattern but differ in terms of levels of usage in respect of businesses, individuals and other users. I believe the same applies in Ghana.

According to Bretschneider (1990), there is insufficient evidence to suggest a direct link between ICT and development. Danziger (2006) argues to the contrary that recent studies have revealed a positive correlation between investments in ICT's and economic growth in developed countries. He however asserts that evidence for developing countries is not as extensive (Rwangoga and Baryayetunga, 2000). Anyimadu shares a similar view that there had not been many published researches on IT and telecommunication in Africa. I however believe this is changing in recent times since ICT is being recognized as the strategic tool to attain development through alleviating poverty.

2.1.2 THE VULNERABILITY OF A YOUTHFUL POPULATION

The vulnerable nature of the youth of Ghana is accounted for by poor quality education and training (Braimah and King, 2006). Hence, this makes it difficult for them to accurately identify their career options and get gainful employment. Braimah and King proposed the need to strengthen the link between regulatory bodies and stakeholders to develop the ICT sector to create job opportunities for the youth. The study identified an inequality

between the growth rate in youth population and efforts to increase educational and job avenues. The challenge posed is that the idleness of a vulnerable youthful population translates into a state of crime and political agitation. Development can be understood in terms of investments made to build the human capital of a country's population for sustainable growth and development. The youth must be regarded as an asset for development in the short and long run.

However, the educational and employment prospects of the Ghanaian youth are dim as the economy is not growing fast (at 4-7%) enough to cope with the population growth rate of 2.7% per annum (Ghana Census, 2000). Ghana's economy is not able to generate decent jobs, reasonable income and job security for its citizens especially the youth (Braimah and King, 2006). Braimah and King's research outlined problems faced within the ICT sector as emanating from what it identified as a weak regulator: the National Communication Authority (NCA). The NCA did not generate enough revenue for the government and failed to respond to poor service delivery to consumers. ICT companies folded up due to their inability to meet targets after having paid huge costs for operating licenses. Western Telecommunications (Westel) is a case in point. It folded up and therefore closed off potential job opportunities for the sizable portion of graduates coming out of the nation's universities. It could have provided exposure and professional training to students as well.

2.1.3 50 YEARS OF INDEPENDENCE: CHALLENGES AND PROSPECTS OF GHANA'S ICT SECTOR.

As Ghana marked 50 years of independence in 2007, key stakeholders and players within the ICT sector met at the Cyber Series Forum to discuss the ICT sector and its future prospects in Ghana. The National Communications Authority (NCA) again was blamed for being ineffective in discharging its duties. The stakeholders also claimed that government hindered collaboration between industry players. The conclusion was that Ghana's ICT policy had failed to create the necessary environment to promote the utilization of ICT for Ghana's socio-economic transformation. According to Professor Nii Quaynor who served as chairman of National Communication Secretariat, Ghana can boast of an effective ICT policy framework when the NCA manages to prevent mistrust between companies within the ICT sector and actively and consistently avoids discrimination towards or preferences for some companies (IICD, 2007). Mr. Chinnery-Hesse who is the Executive Chairman of SoftTribe argued that the successful realization of the key objectives of the ICT policy for Ghana faced huge challenges. He stresses on the fact that there was no effective collaboration between policy makers and the industry players within the private sector. I believe policies must reflect actual conditions and provide pragmatic solutions to improve the situation in Ghana.

2.1.4 USING ICT TO ACHIEVE MILLENNIUM DEVELOPMENT GOALS

A vibrant ICT sector can assist in achieving the Millennium Development Goals of eradicating extreme poverty, tackling infectious diseases among others thereby improving the life of Ghanaians. Developing an ICT policy for Africa presented obstacles that necessitated countries to draw country specific policies that adequately caters for and creates the environment to promote ICT in governance, education, trade, etc (Oquaye, 2006). Ghana's ICT4AD policy shows its preparedness to tackle these issues and spur the country towards development while enjoying the enormous benefits of using ICT.

Ghana's telecom policy was revised to create a competitive landscape meant to attract ICT investment into the country. According to Prof. Oquaye former Minister of Communications of the erstwhile Kufuor administration, government had also put in place a legal framework to create an enabling environment for ICT operators. This is to ensure players conduct operations fairly and in a competitive manner under the rule of law (Oquaye, 2006).

Prof. Oquaye presenting the study outlined efforts by the Government of Ghana to support ICT. The government had invested $30 million to support the national fiber optic backbone project to improve Ghana's ICT infrastructure base. Linking ICT to education will provide adequate solutions and equip students with the prerequisite skills to build core competencies. In

this area the sector faces some challenges and will need more participants to come on board. Ghana currently boasts of the Ghana Telecommunications University College and the Ghana-India Kofi Annan Centre of Excellence both of which seek to develop ICT competencies of Ghana's workforce.

These examples reflect enthusiasm for ICT wealth creation initiatives pursued by the government to achieve development. The World Bank provided funds to support e-government projects which are meant to improve ICT infrastructure within the country (Oquaye, 2006). The contributions of private sector initiatives and or training institutions have been very helpful.

2.1.5 ROLE OF THE ENTREPRENUER AND ENTREPRENEURSHIP IN DEVELOPMENT

To fully appreciate and understand the role of entrepreneurs in developing an economy it is important to understand the concept (Petrin, 1992). Entrepreneurship is the process of using initiative to develop a business concept into a new venture with potential high growth prospects (UNDP, 1999). Entrepreneurship is the process of creating value by pulling together a unique package of resources to exploit an opportunity (Stevenson, 1985). The role of entrepreneurship in economic growth is linked to Alfred Marshall in his acclaimed *Principles of Economics* (1890). Marshall acknowledges entrepreneurship as a critical factor in organization. Nevertheless it is essential for entrepreneurs to be knowledgeable in their field of operations.

Marshall, (1994) proposes that entrepreneurs ought to be natural leaders who must have the ability to foresee and forecast without complete information. I agree with this view as individuals who possess such abilities are rare but can be taught to be entrepreneurs. Marshall presents the importance of the environment or economic conditions in shaping such individuals.

According to Storey (1994, 1999) and Ez (1999), the role and influence of economic policies cannot be overlooked. With regards to this, designed programs and policies can be a source of promoting as well creating the necessary supporting institutions for capable individuals.

In support of the above mentioned point Sherief (2000) is of the view that economic and social progress in rural areas remain low compared to the urban areas. The urban areas enjoy access to capital, communication and infrastructure while these are nonexistent in the rural areas. His research studied the role of entrepreneurship and how governing institutions can foster it through policies. Sherief is of the view that these policies will explore, identify, develop and manage indigenous talents. As a result of this, entrepreneurship in these areas is community based and possesses strong ties to the extended family. However, this is gradually changing in recent years as entrepreneurs in Ghana tend to undertake businesses single handedly with some assistance thereafter.

For economists' entrepreneurship is the fourth factor of production in

addition to land, labour and capital (Arnold, 1996). Economists also agree that entrepreneurship is critical for economic growth but debate over its actual role in ensuring growth (Swoboda, 1983). For example, an entrepreneur is willing to take chances to venture into a new business when he foresees profit thereafter. This represents one school of thought. The modern school of thought on the other hand regards the entrepreneur as an innovator and as such must explore through "incidental or not deliberate learning" (Kirzer, 1985).

However, I believe the latter school of thought is relative as this does not apply to all the developing countries. In the less developed countries, brand new products are hardly produced but rather copied from existing inventions of the developed countries (Burnett, 2000). According to the Global Entrepreneurship Report (2000), the entrepreneurial capabilities of an area represent its economic performance. Building a critical mass of first generation entrepreneurs is needed to accelerate economic growth. (Petrin, 1992) This therefore outlines the relationship between entrepreneurship and development.

2.1.6 ENTREPRENEURIAL TRAITS

The concept of entrepreneurship can be viewed as a phenomenon in contemporary times if traits are used to identify the personality type of an entrepreneur (Gartner 1988). The key traits of entrepreneurs identified in

the literature include Personal Resourcefulness, Achievement Orientation, Strategic Vision, Opportunity Seeking and Innovativeness (Do Bato, 2006).

The term entrepreneurship stems from the noun "entrepreneur", who was assigned as a crucial role coordinator (Do Bato, 2006). Building a population with entrepreneurial capabilities is crucial for the development process in especially developing countries. However, it is important to research into the processes through which entrepreneurs are created and the sustainability of such processes for the development of a country like Ghana.

2.1.7 CREATING A CONDUSIVE ENVIRONMENT TO UNEARTH TALENTS.

Global integration presents several opportunities for the youth which requires them to have the necessary skills and qualifications. Upgrading of skills was found to be key at all levels of the economy especially in the indigenous micro-enterprises found in most developing countries. Policies are being formulated that are focusing on creating that enabling environment that fosters entrepreneurial activity that generates sustainable employment. Substantial resources and energy are increasingly being directed towards youth programs that are to assist in providing access to credit, offer training, and secure prolonged business development services such as mentorship.

Interventions designed to support young workers in sub-Saharan Africa and help them integrate into the labour market tend to focus on entrepreneurship and skills development (World Bank, 2008). Partnerships with the private sector are essential to overcome public financial and resource constraints to execute policies on education and training. Partnerships are also important to obtain feedback on labour market needs and assess the quality of the education a young worker has obtained before entering the job market. The round table discussion by the members of the Evian Group outlined some successful business models that can be used to enhance development of some developing African countries (Evian Group, 2008). The group met at a capacity building workshop to discuss the challenges of the youth in the 21st century Africa aimed at creating opportunities through entrepreneurship and education.

A major challenge towards entrepreneurship was reaching a larger scale of youth through extension of capabilities. The discussion made a very salient point that market development can only be realized if government policies of any kind address the real issues on the ground than mere drafting of policies. Paramount in the discussion was the issue of preparing the youth for the regional and global markets where they will be protected and talents duly identified and managed. I believe in doing so, innovative ideas can be developed to solve the numerous issues facing the continent.

2.2 CONCEPTUAL FRAMEWORK

Research indicates that there exists is a relationship between youth, entrepreneurship and development.
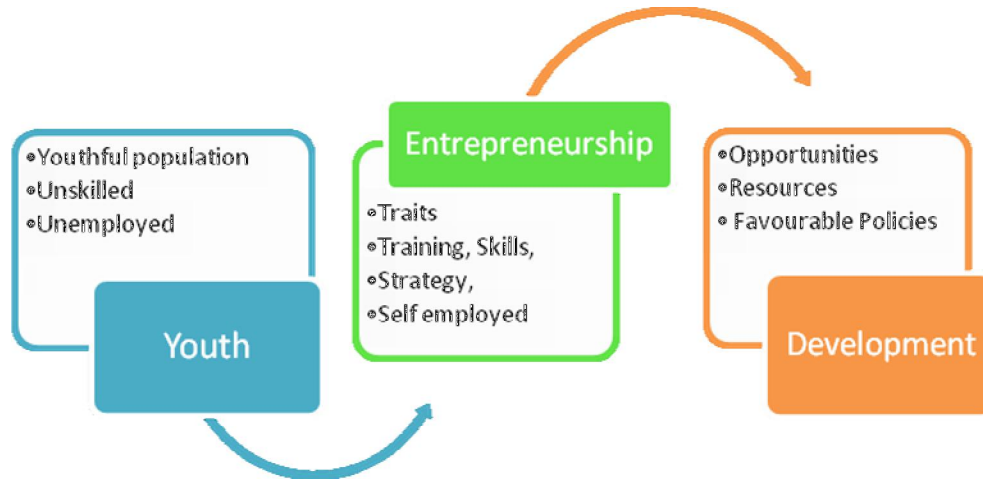
Figure1. Cognitive map showing the relationship between youth, entrepreneurship and development

Entrepreneurship refers to the practice of setting up a business or reviving an existing one to make the most out of new opportunities (Shukia, 2009). The entrepreneur is the one who incorporates ideas in a business establishment and responsible for its development. Entrepreneurs come up with new ideas notwithstanding risk to create job opportunities and ultimately increase productivity. Studies have shown that some individuals pride and gain outmost satisfaction by doing entrepreneurial work (Shukia, 2009).

It is believed that entrepreneurs have traits that distinguished them from others. They are a different set of people who notice what others cannot see: opportunities to succeed and be in control. The key traits include personal resourcefulness, strategic vision, opportunity seeking, innovativeness and achievement motivation. With the increasing awareness of the opportunities entrepreneurship presents, individuals are making efforts to set up and own businesses which provides job security, wealth accumulation and financial stability.

For the purpose of this study, the term youth refers to people within the age bracket of 25 years and below. The youth represents 61% of the total population in Ghana raising concerns for the future with respect to their skills and employability. Therefore, the essence of this study will be to find out and discuss how the traits of entrepreneurship were promoted and or undermined as Ghana's young entrepreneurs' setup their businesses. This will assess how condusive Ghana's environment fosters its desire to use ICT as a means to attain national development. The study addresses how entrepreneurship can be used to develop the disadvantaged youth as assets for Ghana's development. Based on the literature review this work develops the cognitive map (above) as the theoretical framework to guide this research.

CHAPTER 3:

ANALYSIS OF PROJECT RESEARCH METHODS

RESEARCH METHODOLOGY

INTRODUCTION

This chapter discusses the tools and methods used for data collection for the purpose of this research study. This section covers data sources, criteria for company selection, sample size, questionnaire structure or design and administration.

3.1 TYPE AND SOURCES OF DATA

The research to a large extent is qualitative in nature. The data collected is essentially primary data with some collated secondary data as well. The qualitative aspect on the research involves personal interviews with the entrepreneurs and IT expert. Semi structured interviews were used to administer an outlined set of questions in the form of a questionnaire. This method was chosen because it serves as a highly appropriate method capable of generating and gathering the necessary information for the purpose of the study. The respondent or interviewee is the brainchild behind the establishment of the selected company or a staff in management and IT experts who can duly provide the necessary information.

Again, personal interviews were conducted with people of expertise in the field of ICT and policy making to solicit their opinions on the research topic. The secondary data used include online news articles, research studies and publications which provided specific and relevant information on the

concepts of entrepreneurship and development through ICT. The sources from which the data is gathered would provide credible basis from which the objectives of the research can be enlightened, understood and from which meaningful conclusions can be drawn.

3.2 SAMPLING METHOD

The units of analysis for this study are mainly entrepreneurs within the ICT industry, IT experts or advisors. Purposive and convenience sampling which are non probability techniques are used in the selection of the companies for the research. Purposive sampling is used because it assumes similarity in roles of respondents. The units that will be interviewed represent a specific group or population serving a particular purpose from which the appropriate information can be elicited from. The third criterion presents a distribution of companies from which some companies were randomly chosen. Convenience sampling is also used to facilitate the collection of the data within a limited time frame and again is inexpensive.

3.3 SELECTION OF ENTREPRENUERS

In order to duly satisfy the objectives of the study, some specific companies were selected from the ICT sector in Ghana. Selected entrepreneurs were chosen from ICT companies that satisfied three main conditions. Firstly, the company was setup by an entrepreneur. Secondly, the companies operate in the Greater Accra region offering a variety of ICT services ranging from software programming, IT solutions and education. Thirdly, the company is

an up and coming company or a newly established company.

3.3.1 POPULATION AND SAMPLE SIZE

In all 11 entrepreneurs and IT experts from 10 ICT companies and institutions were selected. Interviews were conducted with the owners (entrepreneurs) or management staff or IT expert of the selected company based on an outlined set of questions. All things being equal, a company was selected if it met the three (3) main conditions. The study makes use of a small sample size of 11 including entrepreneurs and IT experts from ICT companies within the Greater Accra Region. The population and sample size most likely gives a realistic representation of the ICT industry. Hence, the collated data can be analyzed to give meaning information that satisfies the objectives of the study.

3.4 DATA COLLECTION

The data is collected through personal interviews with selected entrepreneurs and IT experts. The semi structured interviews followed a set of structured questions in a form of a questionnaire. This style of interview presents the best method to get answers to specific questions as well as the opportunity to find out other relevant issues omitted in the questionnaire. Prior to the interview, letters of introductions will be sent to the selected persons indicating intentions to hold an interview relating to the research topic. Confirmation to participate will therefore lead to time scheduling for the interview or discussion. The collated data is then analyzed and

discussed to arrive at the final results.

3.4.1 QUESTIONNAIRE

The semi structured interviews involved an outlined set of questions with the respondents to ensure consistency across the study. The respondents included the entrepreneurs or management staff of the selected companies. The questionnaire captured the relevant questions relating to youth, entrepreneurship and development. It also covers the reactions and outlook on the ICT4AD policy, operating environment and youth development in the sector and Ghana as a whole. Due to the qualitative nature of the study, the questionnaire captured questions in such a manner.

3.5 DATA ANALYSIS

The collated data is discussed relating to the concepts of entrepreneurship and development. The discussion focuses on bringing to light the factors and issues that promoted and or undermined their quest to unearth their entrepreneurial talents. Microsoft Excel and cognitive maps were used to show the relationships and illustrate data collated. The general outlook of the industry and its potentials will be assessed relating to provisions made in the ICT policy and interactions with the implementing and regulatory institutions. Conclusions and recommendations are based on the analysis and interpretations of the data.

CHAPTER 4

SUMMARY ANALYSIS AND BROAD DISCUSSION OF RESULTS

4.1 DATA ANALYSIS

The essence of the study is to find how the entrepreneurial traits were promoted and or undermined as Ghana's entrepreneurs set and run their businesses. The data collected is discussed showing the linkage between youth and entrepreneurship leading to development. The discussion is based on the interviews with the selected entrepreneurs and IT experts within the ICT industry. It also discusses the ICT4AD policy and its desire to transform the economy into a knowledge based economy through ICT development.

4.2 THE SITUATION ON GROUND

Over the past decade ICT has been the force driving developmental policies in many developing countries of which Ghana is one. Ghana currently is relying on technologies to tackle a wide range of problems to achieve the Millennium Development Goals. Government's own contribution of mitigating the high unemployment and underdevelopment is through planned programmes that seeks the involvement and contribution of both the public and private sectors in Ghana.

4.2.1 WHAT THE ICT4AD POLICY MEANS TO THE ICT INDUSTRY

The ICT4AD policy is one of such programmes being used by the government of Ghana to achieve development within the shortest possible

time. Respondents agreed there have been drastic changes and recognition of the vital role of ICT in Ghana. However, there were concerns that cumbersome government requirements pose serious obstacles to business development in Ghana. Commenting on the Ghanaian business environment, Mr. Davies, an entrepreneur was quick to state that the Ghanaian business environment was extremely unfavourable to young entrepreneurs hence the very few number in the country.

The nonexistent or inadequate state of statistics poses problems for entrepreneurs as this could assist them cut costs. They assess that the available data is not reliable in serving and carrying out any meaningful business intention. This often led to the collapse of quite a number of businesses within the industry.

However, the usage of ICT is very low in Ghana as a developing country. They agreed that Ghana is now recognizing the role of ICT and gradually will grow to fit into the lifestyles of most Ghanaians. Ghanaian entrepreneurship has been mainly based on the ideas of others. For ICT to yield results that solve problems they must be innovative and captivating.

4.2.2 WHAT OPPORTUNITIES DOES ICT PRESENT FOR GHANA'S YOUTH?

Knowledge makes one productive and useful. Knowledge through information develops one personally, contributes to his or her society, organization and country. A general point made by all (11) interviewed

outlined the vital role of ICT in virtually every aspect of the economy. ICT is used in education, trade and commerce, health care and governance. Its role in solving and generating vast wealth for individuals and economies cannot be overlooked.

4.3 ENTREPRENEURSHIP

Setting up a business in Ghana in this part of the world was and is certainly not for the meek. From the discussions with the entrepreneurs, they were quick to comment that the concept of entrepreneurship was entirely nonexistent a decade or two ago. The new millennium and thereafter, attention is gradually being shifted towards educating people of its enormous opportunities especially in the wake of the ICT evolution. One entrepreneur (C.E.O) stated he did not recognize himself as an entrepreneur and felt his actions were solely to setup and manage his own business. But as time went on, these actions translated into traits that describe an entrepreneur.

Intelligence counts to succeed but the best entrepreneur must have a blend of all. What was key to him was having the guts, luck and being smart. Mr. Osiakwan says "Entrepreneurs feel they are in a better position by setting up and running their own businesses than being employed". He supports this by explaining that those who are employed feel that it is less risky because they do not have to suffer consequences due to the ineffectiveness of employees in the event of the collapse of the business.

4.4 ENTREPRENEURIAL TRAITS
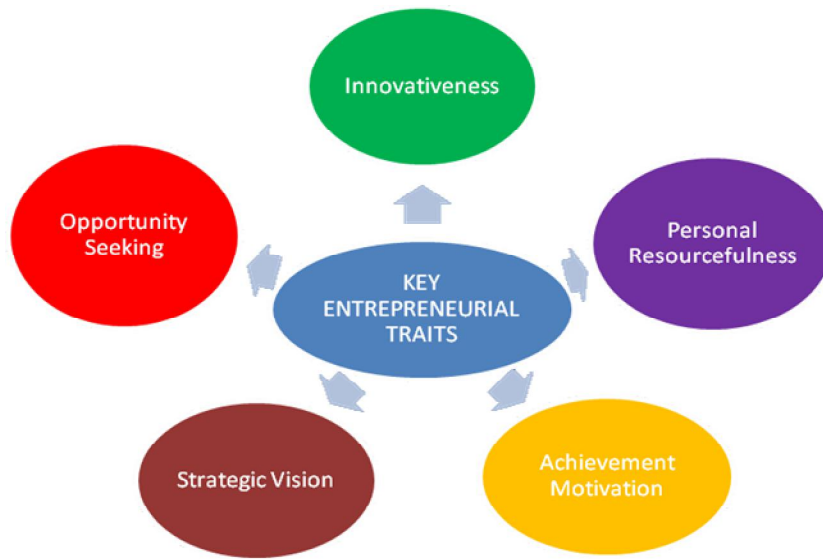
Figure 2. Diagram of key entrepreneurial traits

All respondents did agree with my choice of the five key traits selected. They agree that all of the factors had and continue to play crucial roles in the setting up and running of their businesses. One or more traits had assisted them at a point in time to tackle issues and made their dreams possible.

4.4.1 PERSONAL RESOURCEFULNESS

Many entrepreneurs do not have ample resources like capital and staff at the initial setup of the business. Some entrepreneurs interviewed stated that even though they were sure their business would succeed they lacked the resources to start. Their lack of resources did not prevent them from pursuing their dreams of owning a business. The C.E.O of Sci-fi Web Services shares his experiences as having to work part time aside his job in a financial institution having graduated barely a month from Ashesi University College.

He initial worked alone until he got a partner. He currently has two contract workers who run the business while he works outside to gain insight into the broader corporate environment. He used part of his income from the bank to assist the operations of Sci-FI Web Services since the company was new in the business. Sci-Fi Web Services was set up in July 2009. According to C.E.O., Sci-Fi is now self –sustaining and from his projections will be making some profitable returns by the end of 2010.

4.4.2 ACHIEVEMENT MOTIVATION

The urge to achieve is probably the most important trait of a successful entrepreneur. For a business to be successful, it is vital for management to set business goals and objectives which are benchmarked and measurable by achievements. Similarly, for Sci-Fi Web Services to measure growth or its lack thereof, they have had to set targets. They had made some achievements so young in the industry because they tried their best to meet clients' demands without comprising on quality service. "This helps entrepreneurs make assessments about their operations and relations, recognize strengths and weaknesses, failures and successes" says Mr. Quaye-Foli.

In finding out achievements made by these some of these entrepreneurs in the course of their existence and operations, some of the responses were not so forth coming. For some their ability to service their clients and through that getting loyal customer base is worth an achievement. They also

pointed out each one of the ICT companies served at particular set of clients or customers and at times made efforts to diversify into others areas. For instance, Busy Lab is a software development wing under Busy Internet. Motivation to achieve can be sustained through recognition of efforts or awards. Internet Research was awarded Company of the Month of March, 2009 from KLM Club Africa. According to the C.E.O, "this motivates my group and urges us to remain competitive within the industry".

However, some entrepreneurs (5) were of the view this trait could be acquired through training and recognition of individuals' efforts. Training programmes can instill in the youth skills that makes them capable of undertaking projects that explore and take on risk and help find novel solutions to society's problems. All entrepreneurs interviewed acknowledged that there are bound to be failures along the path. This phenomenon is very peculiar in Ghana. These mishaps can be overcome by determination and perseverance.

4.4.3 STRATEGIC VISION

The Information Technology industry is quite a dynamic one that tends to change very quickly compared to many other professional fields such as law, banking, and medicine and so on. This means that for an IT company to be successful, it needs to be able to predict future trends and strategically position itself to exploit coming opportunities to the fullest. For this reason, it is critical for them to observe trends within the industry placing significant

emphasis on its key players, client demand for services, technical innovations and so on.

Reliable strategies must be put in place on timely basis and revised continuously to suit changes in their businesses. The global village phenomenon is extremely difficult to cope and stay abreast with especially when communication technologies are continuously being upgraded. High cost of internet connectivity and the influx of poor computer equipment pose challenges for ICT companies in Ghana. Due to the economic and financial instability that the country experiences, it seems quite impossible for individuals and/or entrepreneurs to make long term plans even if the business idea is absolutely flawless.

I was surprised to find out from these experts that the continent receives low quality computer and hardware accessories which affect performance hence low productivity. The equipment performs its function all right but one cannot predict its lifespan. This then necessitates replacements costs which could have invariably been used for expansion projects in their businesses. Requesting or placing high quality equipment therefore requires huge capital investments which most entrepreneurs fall short of in the country. According to Mr. Sampson, one has to be persistent in implementing his visions when he is sure it will succeed but must give room for redirection where need be.

4.4.4 OPPORTUNITY SEEKING

Putting in place strategic moves presents opportunities to stay ahead of the

game within the industry. Adequate preparation, accidental timing, dedication creates opportunities for entrepreneurs to succeed. According to Mr. Osiakwan, an entrepreneur, there are at times facts from books, analytical skills and managerial expertise do not work out the magic. It requires common sense, intuition and some level of emotional intelligence to opens doors to make breakthroughs.

According to the C.E.O. of Kilo Solutions, "It is a self-fulfilling feeling knowing that more lies ahead". Opportunity seeking requires adequate information that is reliable and up to date statistics. Sadly enough the Ghanaian business environment is poorly supported with such details. This they believe have led to the collapse of some promising businesses or totally deterred some individuals from carrying out their ideas. But some pointed out to me that they are now better entrepreneurs because their initial ideas changed along the way, which is far different from what they had expected from the onset.

According to Mr. Osiakwan, he did some amount of planning to arrive at a viable business idea, tested and revised the strategies and tactics from time to time. He finally had to change his business model to what Kilo Research currently uses. I found it interesting to hear to word luck being used by one entrepreneur. He enquired from me what I thought gave one an edge over a similarly competent competitor in seeking a deal in the corporate world. When one predicts a future occurrence, it is called luck. He candidly added

succeeding also required building the right relations and making the right connections. As one gains insight and understanding into the business or corporate world and entrepreneurship, probability of succeeding is high.

4.4.5 INNOVATIVENESS

Notwithstanding that fact that innovation is to a large extent nonexistent or rare in Ghana, the ICT industry is being used as a tool to change this phenomenon in recent years. Creativity is also important to generate new ideas. Creativity is a process that can be developed and improved (DeBono, 1992).

According to Mr. Sam, C.E.O of Avron Solutions Limited, entrepreneurs with originality are highly motivated to succeed in implementing their ideas that brings about radical change. For example, creative ideas ought to be able to withstand peoples' criticisms to prove there are worthwhile in the end. Innovation and creativity have been what has kept these entrepreneurs ahead of their game in the industry. "Being noted as the best translated into innovation as a hallmark" says Mr. Sam.

All interviewees' pointed out that entrepreneurial development in Ghana has been generally low over the past two decades. However, they lauded efforts by businesses and governmental institutions to encourage and improve conditions to foster creativity and talent development, financing and management. The respondents indicated that issues of work ethics,

corruption, education, information flow and nepotism as some of the challenges they have had to face and overcome in order to stay in business. In summary, these entrepreneurial traits were most often undermined rather than promoted in the Ghanaian environment. This raises serious concerns and answers partly the underdeveloped state of the youth and Ghana as a whole.

Due to a lack of any major experience in running a company, the young entrepreneurs had to learn about managing a company every day from what was going on around them. According to Mr. Foli, an entrepreneur, he constantly does research to find out facts and issues about finance, legal implications and contracts, technical procedures, bidding for projects, outsourcing jobs, hiring people and so on. In general, they are of the view that there is not much to differentiate Ghana from almost others countries in other parts of the world. Irrespective of the inequality and support available the principles to succeed remain the same across board.

4.5 FACTORS THAT AFFECT ENTREPRENEURSHIP

According to Bridges (2002), four main factors affect entrepreneurial activity and the same applies in the context of Ghana. The factors are legal and regulatory framework of a country, state of infrastructure, financial support and social perception. The factors discuss how they affected personal behavior and business operations of the entrepreneurs and the ICT

industry as a whole.

4.5.1 LEGAL AND REGULATORY FRAMEWORK

The entrepreneurs expressed disappointment in the legal and regulatory framework in Ghana. This they stated has resulted in a number of cases and dissatisfaction in the system. One C.E.O., Mr. Adjei made mention of the fact that the National Communication Authority had failed to allow effective deliberation between all stakeholders. Likewise some were of the view that the NCA in some instances showed a partial stance for some telecommunication companies. The effects of some directives and interventions directly and indirectly affected their entrepreneurial spirit. (See appendix 2, figure 4.5.1)   This is because they most at times relied on already existing IT companies for support services at the initial business setup.

Mr. Sam has two main areas which he believes the NCA must address because they both impede Ghana's growth and development.

- Internet fraud has reduced the pace of Ghana's development on online banking and shipping.
- Poor regulatory framework for the use of the Ghana's fibre optic network.

4.5.2 INFRASTRUCTURE

Through the research infrastructure was found to pose hindrances that undermined all selected entrepreneurial traits (See appendix 2, figure 4.5.2). The Respondents outlined several problems regarding the state of the

nation's infrastructure. Paramount among them are:

- Unstable supply of electricity affects daily operations,

- Poor internet facility leading to poor but expensive service provision.

4.5.3 FINANCIAL ASSISTANCE/SUPPORT

Financial assistance posed serious problems for personal resourcefulness, achievement motivation and opportunity seeking. (See appendix 2, figure 4.5.3) Seeking financial assistance from financial institutions required cumbersome requirements and documentations. A concern raised is the high interest rates charged on loans which take the chunk of profits that could have been used to upgrade or undertake expansion projects. This situation is also worsened by the high inflation and import duty charges of equipment and machinery used for operations.

Mr. Osiakwan cited instances where financial institutions have provided capital to so called entrepreneurs only to be wasted. He believes the misuse of capital on projects were because beneficiaries lacked the entrepreneurial capacities and capabilities absent in Ghanaian environment. This poses challenge in raising capital since most funds or capital were at times sourced from external investment funds as well as expertise on the part of government in undertaking ICT projects in Ghana.

Again, raising capital for business setup is regarded as a fallacy. Narrating a brief history of entrepreneurship in Ghana, Mr. Asamoah (an entrepreneur/ C.E.O.) recounts entrepreneurs have been ridiculed as having overambitious

ideas which may not materialize in the future. While family members and friends rarely were supportive of financing their ideas, some on the other hand preferred them use the capital to support family obligations. However, the younger entrepreneurs received much interest and encouragement to setup their business as it had become a lucrative venture in recent years.

4.5.4 SOCIAL PERCEPTION

Culture stifles entrepreneurial spirit and poses as a major weakness to promoting entrepreneurship in Ghana (See appendix 2, figure 4.5.4). Great businesses that have survived are the ones that have challenged the status quo by taking on risk. Factors that retard youth ingenuity stem from the mentality that children cannot come up with better ideas than the elderly and again the adults are always right. This greatly stifles brilliant ideas that could have tackled some societal problems and generate income to improve standard of living. Challenging the status quo sometimes translates into one being branded as a deviant. Risk is to be avoided and not surprising that all interviewed were males. This shows a lack of interest of females in the industry.

According to Saeed (2009), the youth now leave with the notion that it is the sole responsibility of the government to employ them as well as provide their economic needs. This is very much the situation in Ghana.

In terms of education, entrepreneurship and leadership principles are lacking (Saeed, 2009). Students are undoubtedly not abreast with modern

trends and lack management skills needed for business survival. The educational system is not producing job creators but solely job seekers with non corresponding investments to create job avenues. Again, they believe some cultures could be effective in promoting entrepreneurship than others. For instance, a culture that reinforces personal development and self initiative could very much change the situation. Sadly enough, Ghana's situation has been highly disappointing and negatively affecting entrepreneurial qualities. I believe a nation that finds the right answers to its problems is the one that asks the hard questions.

4.6 EDUCATIONAL SYSTEM AND INFRASTRUCTURE INADEQUATE TO PROMOTE ENTREPRENEURSHIP

The issue of educational infrastructure not being adequate highlights the plight of the youth in trying to make something worthwhile in his or her blissful years. Would there be the motivation to pursue dreams, financial assistance to startup and would his plans be shattered or recognized by any? These are questions that have come up while unraveling the potentials of youth entrepreneurship in Ghana. These questions led me to interview an ICT expert and lecturer about the challenges of Ghana's educational system and infrastructure.

Dr. Amanquah, head of the Computer Science department of Ashesi University was quick to bring to my attention the nonexistence of a single government programme or policy currently providing specific assistance to young entrepreneurs. He added there are vast differences in the state of

most IT educational facilities across the country providing computer literacy courses and training. The good facilities are undoubtedly expensive limiting youth interests in this area. The educational syllabuses in the country's universities are rarely revised and lecturers or educators have had to make use of existing equipment to train students.

Sharing his opinion on developing youth entrepreneurship in Ghana, Dr. Amanquah thinks making something worthwhile depends on venturing into an area of interest. He believes the youth's inability to develop, setup, manage and sustain a business sometimes stems from the fact of a loss of interest and determination to make things work. People are always looking for quick avenues to make profits without setting the foundation right for continuity of business.

He also believes business incubators could be setup in educational facilities from which ideas can be sort and developed through financial assistance from venture capital companies. However, I support that the ideas must be acknowledged as the intellectual property of such individuals.

4.7 ENTREPRENEURSHIP, YOUNG PEOPLE AND GHANA'S DEVELOPMENT

Addressing the research topic, respondents were all of the view that the youth have shown keen interests in acquiring the needed technical and theoretical knowledge in the field in recent years. According to the C.E.O. OF Sci-Fi Services, "the market did not give them the relevant experience needed to apply those skills to solve real life problems". Again, one must be

knowledgeable in a field in order to develop passion to implement dreams of owning and managing a business. A point of concern raised was that businesses have failed to employ and make full use of these young vibrant people's potentials to optimize their business processes. This is because; they usually prefer to stick to the traditional way of doing things. This stifles creativity and innovation. However, some outlined an operational policy within their businesses encouraging and rewarding staff to bring creative ideas on board.

4.8 FUTURE PROSPECTS OF ICT IN GHANA

In discussing the prospects of ICT in Ghana, the entrepreneurs were highly optimistic the future was bright. They are of the view that with the gradual increase of internet connectivity especially on mobile devices; there will be a high demand for applications in the very near future. Also with a lot of businesses investing more and more in automating their processes, they remain optimistic that business will begin to grow rapidly very soon. This will increase efficiency and minimize wastage thereby increasing productivity while staying abreast with the outside world. This creates competition. Markets will be efficient in a knowledge based economy, these and many more leading to development. Mr. Sam's greatest dream is for Ghana to build a National Data Center of citizenry and other national and international records.

Appendix 2a provides demographic details of all respondents.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 FINDINGS

The concept of entrepreneurship is a relatively new idea in the country where entrepreneurial traits were to a large extent undermined as against promoted. With the environment lacking the needed capacities to promote entrepreneurship, these entrepreneurs within the ICT industry have had to make their way through the inadequate infrastructural base, nonexistent financial support, cumbersome legal system and the social mockery about their ambitious dreams. Their ideas to setup and run a business presented risk as well opportunities to either succeed or fail if not strategically handled. Their perseverance, knowledge, experience and exposure to other systems coupled with innovative ideas and resourceful workforce enabled them to pull through and succeed. The industry is however male dominated indicating a low interest of females within the ICT industry.

The nonexistence of a policy focusing on youth development or entrepreneurship respondents believe is hampering the development pace in Ghana. Youth empowerment means personal and national development which can be achieved rapidly through ICT. Respondents believe the ICT4AD policy looks promising but will require the consensus and support of all stakeholders as Ghanaians gradually adapt to the role and usage of ICTs. However, entrepreneurship cannot be the cause of economic development.

For economic development to take place there is the need to put in place certain institutions and mechanisms to absorb the entrepreneurial potentials of the youth within the country.

This research faced a variety of limitations. The availability of information on ICT companies was limited and the researcher had to rely on suggestions from other entrepreneurs within the industry. This caused delays as several companies had to be sorted to arrive at the selected respondents that met all three selection criterion. Time schedules for interviews were most often limited due to the busy schedules of respondents who served in the capacities of chief executives. The bias of interviewees was also another limitation. This was however responded to by cross checking respondents' information with other documentary sources.

5.2 RECOMMENDATIONS AND CONCLUSION

Efforts must be directed towards putting in place certain institutions and mechanisms to absorb the entrepreneurial potentials of Ghana's youth. Formulating a concise plan that tackles areas to encourage, improve and develop the concept of entrepreneurship and ICT for youth and economic development is important.

5.2.1 WHAT DOES IT TAKE FOR GHANA TO PRODUCE MORE ENTERPRENEURS?

Figure 2. Cognitive map of how to produce more entrepreneurs in Ghana.
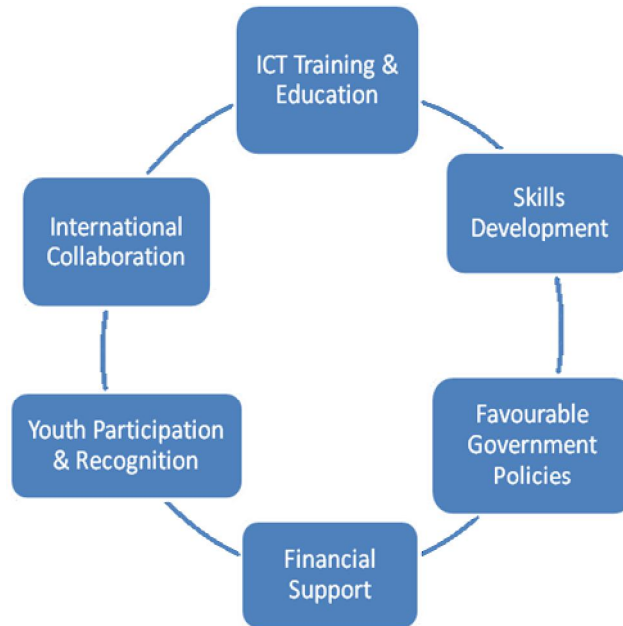
ICT TRAINING AND EDUCATION

The ICT4AD policy is a national social enlightenment programme which can be enhanced in collaboration with entrepreneurship development among the youth of the country. For entrepreneurship to develop there must be an appreciation of the role of entrepreneurs in development. This can be effectively done by creating awareness or educating the youth on its enormous opportunities. This must be marketed as an attractive option where the youth stand to benefit from the use of information and resource mobilization to implement their visions.

SKILLS DEVELOPMENT

A comprehensive approach to promote entrepreneurship must cut across three groups namely individuals, firms and the society. The youth must acquire or upgrade skills to gain mastery in a field with knowledge acquired. Managerial and leadership skills are crucial to ensure sustainability of the business. Ghana can unleash the potential of universities and research centers to provide key services to communities and create business opportunities through technology commercialization and knowledge diffusion. Ghana can also stimulate the private sector to provide entrepreneurial talent and investment in R&D and start-ups. Educational institutions, social groups and businesses can incorporate entrepreneurial concepts as part of their missions where they can imbibe in the youth and the elderly such traits and skills. Skills development need not only concentrate on the ICT sector but those that can be absorbed in the various sectors of the economy to bring about radical changes capable of eradicating some of Ghana's socio-economic problems.

FAVOURABLE GOVERNMENT POLICIES

Knowledge acquired through up to date information, qualified personnel and institutions in the midst of favourable and sustainable investments in economic infrastructure can undoubtedly bring about economic growth. Most importantly, there is the need to develop youth programmes focusing on youth talents that seek to identify, develop and manage interests leading

to sound career choices. A youth policy that incorporates entrepreneurship will show the government's commitment to promote the concept. The policy must make provisions to create opportunities for the youth to develop their ideas. For example, appropriate intellectual property regime are essential to protecting knowledge, safeguarding inventors' R&D efforts and balancing public and private interests.

FINIANCIAL SUPPORT

Business incubators can serve as important means through which shrewd ideas can be financed and managed by venture capital companies and other financial institutions to create sustainable jobs for the youth. This will provide them with income to further upgrade their skills, as well as bring about improvements in standard of living. Government agencies and educational institutions can recruit young entrepreneurs to venture into the various sectors of the economy. This can be effectively and efficiently carried out using ICT as a strategic tool thereby enjoying the full benefits that come with it. This will foster business entrepreneurship needed to absorb the numerous unemployed youth in Ghana.

YOUTH PARTICIPATION AND RECOGNITION

Thereafter youth participation and recognition ought to be prioritized. It is about the youth or individuals and communities identifying their problems, expressing their own demands and finding their own solutions to these particular problems.

INTERNATIONAL COLLABORATION

There is the need to encourage international collaboration to facilitate the knowledge sharing process. Ghana does not have the all the technology and expertise to achieve its desire of a knowledge based economy. Partnership will provide Ghana with existing technologies from other regions to solve some of its youth and economic problems.

In conclusion, Ghana faces many challenges that can be effectively and efficiently addressed by harnessing the potential of entrepreneurship and innovation to transform ideas and technologies into new or improved products, processes and businesses that will lead to development. Again, a culture that reinforces personal development and self initiative as well as upgrading infrastructure are needed to change the situation.

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APPENDICES:

1. Questionnaire

Sample Questions for discussions with respondents.

Entrepreneurship, Young people and Ghana's Development:
A case-study of the ICT sector.

1. Brief history about the company

   a. Founder(s) (qualifications, year established, location, etc.)

   b. What personality traits the founder exhibits?

2. Focusing on the following 5 key entrepreneurial traits namely;

   o Personal resourcefulness

   o Achievement orientation

   o Strategic vision

   o Opportunity seeking

   o Innovativeness

Were these traits promoted or undermined as he/she tried to set up and run the business? Are such traits important/how important are such traits when it comes to setting up and running an ICT business in Ghana?

3. Achievements recorded over the years in operation.

   a. Recognized rewards (name and year)

4. How would you describe Ghana's ICT sector?

   a. When setting up the company

   b. Running the company

   c. Currently

5. What are some of the challenges faced by the company and within the industry?

      a. Future prospects of the business or company.

6. Thoughts on potential avenues to be explored in respect of the ICT sector in Ghana.

7. Address the topic of Entrepreneurship, Young People and Ghana's development through the ICT sector.

8. Views on the Information and Communications Technology for Accelerated Development policy. (ICT4AD)

ICT4AD policy seeks to emphasize on an ICT driven socio-economic plan capable of turning Ghana into an information based society. The objectives of the policy include creating the enabling environment to facilitate the deployment, utilization and exploitation of ICT in the economy.

- Is the policy Commendable or needs Restructuring?

What areas should the ICT4AD be looking at if restructuring is called for to make the ICT sector attractive to young entrepreneurs?

9. Comment on the state of the following as to how it affects your business.

- Infrastructure
- Legal and regulatory framework
- Financial assistance
- Social awareness and perception towards entrepreneurship

10. Remarks ....

Thank you

2. CODING AND GRAPHS

GRADE CODE	TRAITS CODE
1= does not affect	PERSONAL RESOURCEFULNESS=RESOURCE
2=moderately affects	ACHIEVEMENT MOTIVATION= MOTIVATION
3=highly affects	STRATEGIC VISION= VISION
4=extremely affects	OPPORTUNITY SEEKING= OPPORTUNITY
	INNOVATIVENESS= INNOVATIVENESS

Table 2 Coding: Grade points scale and entrepreneurial traits

FACTORS	RESOURCE	MOTIVATION	VISION	OPPORTUNITY	INNOVATIVENESS
Infrastructure	3	3	3	3	3
Social perception	4	4	3	2	4
Legal & Regulatory framework	3	4	2	4	3
Financial support	4	4	3	4	3
TOTAL	14	15	11	13	13

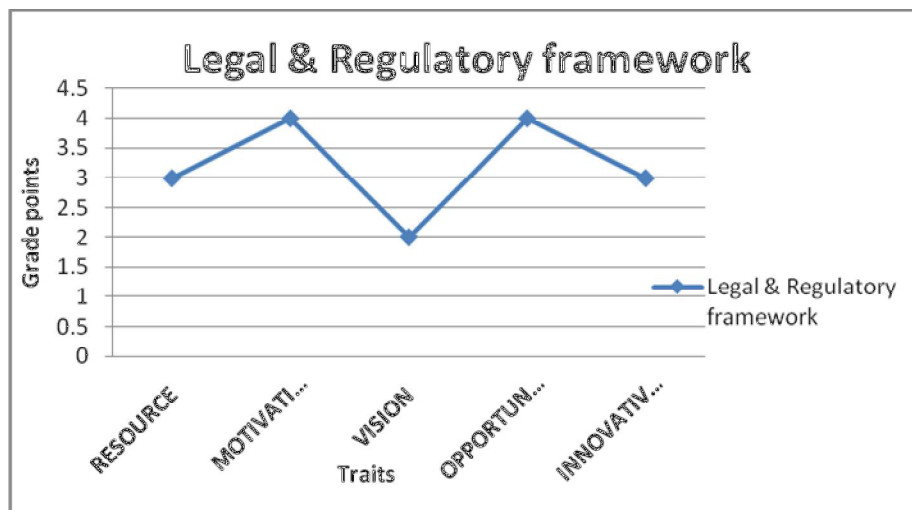Table 3 Factors that affect entrepreneurial traits

Figure 4.5.1 Graph of how the legal and regulatory framework affects entrepreneurial traits

Figure 4.5.2 Graph of how infrastructure affects entrepreneurial traits
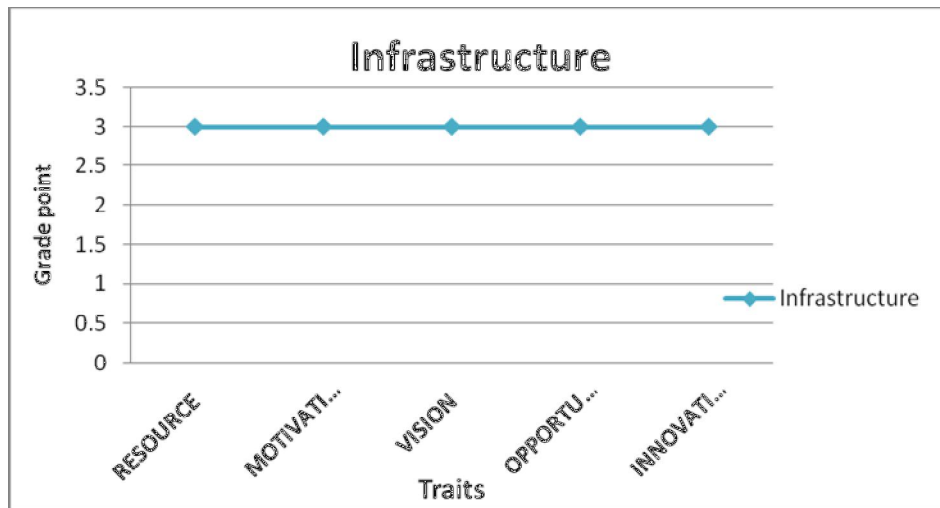

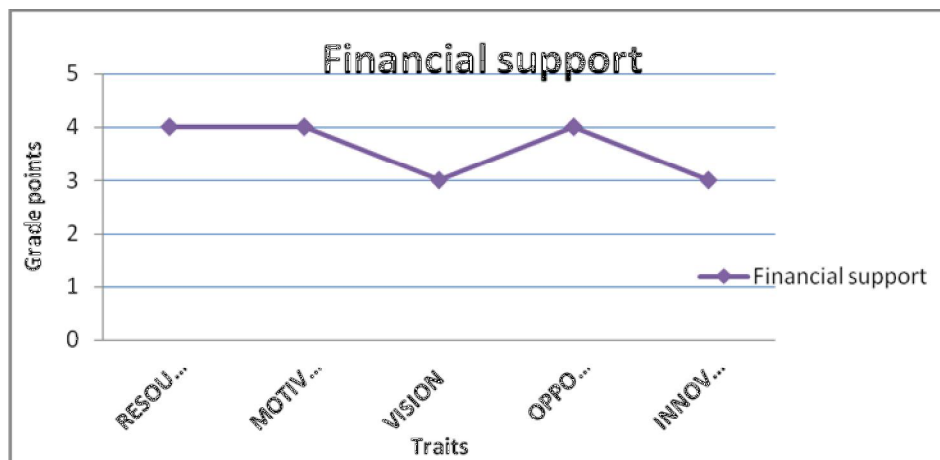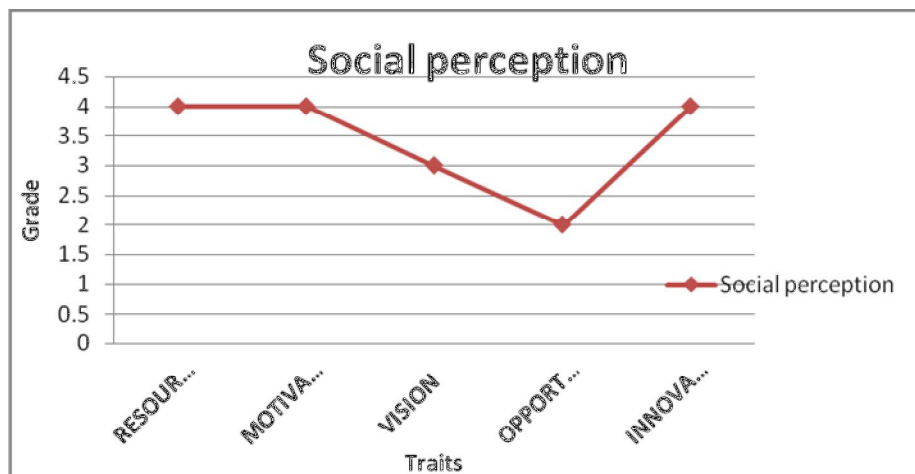Figure 4.5.3 Graph of how financial support affects entrepreneurial traits

Figure 4.5.4 Graph of how social Perception affects entrepreneurial traits

GLOSSARY

ENTREPRENEUR – is a person who has possession of a new enterprise, venture or idea, and assumes significant accountability for the inherent risks and the outcome.

ENTREPRENEURSHIP - is the act of being an entrepreneur.

ECONOMIC DEVELOPMENT- Qualitative change and restructuring in a country's economy in connection with technological and social progress.

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) - includes all technologies critical for the manipulation and communication of information.

INFORMATION AND COMMUNICATION TECHNOLOGY FOR ACCELERATED DEVELOPMENT (ICT4AD) POLICY - policy seeks to emphasize on an ICT driven socio-economic plan capable of turning Ghana into an information based society. The objectives of the policy include creating the enabling environment to facilitate the deployment, utilization and exploitation of ICT in the economy.

INFRASTRUCTURE - refers to the basic physical and organizational structures needed for the operation of society or country. It is the base upon which economic growth is built on.

INNOVATION – refers to the process of exploiting new ideas leading to the creation of a new product, service or process.

KNOWLEDGE BASED ECONOMY - This refers to the focus on the role of information, technology and learning in economic performance.

METHODOLOGY – a system of methods used to undertake a study or activity.

POLICY - refers a plan or course of action of a government, business or individual intended to influence and determine decisions and other matters in relation to a particular purpose. It serves as a guiding principle.

PRIMARY DATA - raw data gathered to be analyzed for the research

SECONDARY DATA - represents existing data gathered by other researchers and used in the research.

TRAITS – refers distinguishing qualities that a person possesses over others.

YOUTH - refers to persons between the age of 25 years and below. This is in relation to the study as it applies to Ghana's population.