# ROLE OF INFORMATION TECHNOLOGY SKILLS ON YOUTH EMPOWERMENT PROJECTS: A CASE OF NAKURU TOWN, KENYA

# BY

#### **EMMAH WANGUI MUGO**

A Research Project Submitted in Partial Fulfillment of the Requirements for the award of a Master of Arts Degree in Project Planning and Management of the University of Nairobi

# **DECLARATION**

This research project is my original work and has not been present	ted for a degree or any other
award in any other university.	
SIGNATURE:	DATE:
EMMAH WANGUI MUGO	
ZMMIII WINGELMEGO	
L50/88951/2016	
This research project has been submitted for examination with my	approval as the university
supervisor.	
CICNATUDE.	DATE :
SIGNATURE:	DA1E :
DR.JOHN OURU NYAEGAH(Ph.D)	
LECTURER: ODeL CAMPUS	
UNIVERSITY OF NAIROBI	

# **DEDICATION**

This research project is dedicated to my parents Mr. and Mrs.Mugo for their continued support and encouragement and the entrepreneurial spirit that they have instilled in me, my sisters and brothers for their kind words and continued patience that has encouraged me to persevere. I wish to express my gratitude to all who stood by me to complete the project report for this study.

#### ACKNOWLEDGEMENT

I wish to acknowledge my Supervisor Dr.John O.Nyaegah for his encouragement, understanding, guidance as well as constructive criticism in this research project report. He has continuously offered me professional advice and closely supervised the whole project process. His continuous supervision really assisted me in completing my project report on time and also gave me an insight in understanding what research is all about. He went out of his way to take me through very basic but important aspects of research. I sincerely thank him for being my Supervisor and for his willingness to accommodate me in his tight schedule.

In addition, I thank the University of Nairobi management for giving me the opportunity to pursue this master's degree in this highly established institution. I wish to express my sincere gratitude to the lecturers who taught me in the masters programme for their support and professional advice. I also wish to acknowledge my fellow masters students who stood with me throughout my study and who gave me the encouragement and highly contributed to my academic achievement. The team work portrayed highly gave me a positive outlook towards my studies. The positive attitude towards education that they potrayed to me really helped me to take studies positively. They are my role models and without them I would not have come this far.

I wish to thank the youth in Nakuru town for actively participating and voluntarily providing the required information during data collection which enabled me complete my study on time. The young people and friends who i interacted with in the course of my study and who have greatly helped me grow in my career. The continuous encouragement that they portrayed helped me take my studies positively and seriously and therefore the successful completion thank the typist who assisted in editing my project report and binding. She ensured that the project report conforms to the University standards and this enabled me to complete my project report on time.

Further,I wish to express my gratitude to my parents Mr. and Mrs.Mugo. They have been a source of motivation and always there to offer support whenever I needed them. My son Matthew Ryan and my daughter Maryann Renee for being there for me throughout my study. They have been my source of joy and this made me enjoy my studies and endured my absence for a long period but encouraged me to move on.

I would like to thank my employer the Kenya Revenue Authority for giving me the chance to be part of the KRA family where I derive my financial resources and expertise as well as giving me the opportunity to pursue the Masters Course. I thank my colleagues who stood by me even at times when I had to leave work to attend my course. They greatly offered me moral support that kept me going and this enabled me complete this course successfully.

All this could not have been possible if it were not for the Almighty God.

# TABLE OF CONTENT

TITLE	••••••	PAGE
DECLA	ARATION	ii
DEDIC	CATION	iii
ACKN	OWLEDGEMENT	iv
LIST O	OF FIGURES	viii
LIST O	OF TABLES	ix
ABBRI	EVIATIONS AND ACRONYMS	X
ABSTR	RACT	xi
CHAP	ΓER ONE	1
INTRO	DDUCTION	1
1.1	Background of the study	1
1.2	Statement of the problem	5
1.3	Purpose of the Study	7
1.4	Objectives of the study	7
1.5	Research Questions	7
1.6	Significance of the study	8
1.7	Limitations of the Study	8
1.8	Delimitations of the Study	9
1.9	Basic assumptions of the Study	9
1.10	Definitions of Significant terms	9
1.11	Organization of the Study	9
CHAP	ΓER TWO	11
LITER	ATURE REVIEW	11
2.1	Introduction	11
2.2	Entrepreneurial training and project sustainability	11
2.3	Online financing and sustainability of youth empowerment projects	12
2.4	Internal Controls and youth empowerment projects	14
2.5	Online Marketing and sustainability of youth empowerment projects	15
2.6	Information technology skills on Youth empowerment Projects	15
2.6.1	Youth Project Challenges facing youth in Kenya	20
2.7	Theoretical Framework	21
2.7.1	Joseph Schumper's Entrepreneurship and Innovation Theory	21

2.7.2	Technological Determinism Theory	22
2.7.3	Signaling Theory	23
2.7.4	Technological Revolution Theory	24
2.8	Conceptual Framework	25
2.9	Knowledge Gap	26
2.10	Summary of Literature Reviewed	27
СНАРТ	TER THREE	28
RESEA	RCH METHODOLOGY	28
3.1	Introduction	28
3.2	Research Design	28
3.3	Target Population	28
3.4	Sample size and sample selection	28
3.5	Research Instrument	29
3.5.1	Piloting of the instruments	29
3.5.2	Validity of the study instruments	29
3.5.3	Reliability of the study instruments	29
3.6	Data Collection Procedure	30
3.7	Data Analysis Techniques	30
3.8	Operationalization of Variables	30
3.9	Ethical Considerations	31
СНАРТ	TER FOUR	32
DATA .	ANALYSIS, PRESENTATION AND INTERPRETATION	32
4.1	Introduction	32
4.2	Response Rate	32
4.3	Demographic characteristics	32
4.3.1	Demographic characteristics by Gender	32
4.3.2	Demographic characteristics by age	33
4.3.3	Demographic characteristics by Level of Education	33
4.3.4	Demographic characteristics by position in the youth project	34
4.3.5	Demographic characteristics by category of businesses of the youth projects	35
4.3.6	Demographic characteristics by project duration	35
4.3.7	Demographic characteristics by influence to start up business project	36
4.3.8	Demographic characteristics on use of IT skills in running the project	37
4.3.9	Demographic characteristics by the kind of IT skills used by the youth project	37
4.3.10	Demographic characteristics by satisfaction for use of IT skills in the youth projects	38

4.3.	.11 Demographic characteristics by changes brought about by use of IT skills in the youth projects	39
4.3.	.12 Demographic characteristics by what would be improved to bring about satisfaction in of information technology skills in youth empowerment projects.	
4.4	Entrepreneurial training on sustainability of the youth empowerment projects	40
4.5	Online financing on sustainability of youth empowerment projects	41
4.6	Internal controls on sustainability of youth empowerment projects	42
4.7	Online marketing on sustainability of youth empowerment projects	43
CHA	PTER FIVE	45
SUM	MARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	45
5.1	Introduction	45
5.2	Summary of Findings	45
5.3	Conclusions of the Study	48
5.4	Recommendations of the Study	49
5.5	Suggestions for Further Research	50
REFI	ERENCES	51
APPI	ENDICES	55
App	pendix i: Letter of Transmittal	55
App	pendix ii: Questionnaire to the Youth in Nakuru Town	56
App	pendix iii: Authorization letter from University of Nairobi	63
App	pendix iv: Ministry of Education Authorization Letter	64
App	pendix v: NACOSTI Authorization Letter	65
App	pendix vi: NACOSTI Permit	66
App	pendix vii: County Commissioner Authorization Letter	67
Apı	pendix viii: Originality Report	68

# LIST OF FIGURES

Figure	Page
Figure 2.1 Conceptual framework	25

# LIST OF TABLES

Table	Page
Table 3.1 operationalization of variables	31
Table 4.1 Response rate	32
Table 4.2 Demographic characteristics by Gender	33
Table 4.3 Demographic characteristics by age	33
Table 4.4 Demographic characteristics by level of education	34
Table 4.5 Demographic characteristics by position in the youth project	34
Table 4.6 Demographic characteristics by category of business of the youth project	35
Table 4.7 Demographic characteristic by project duration.	36
Table 4.8 Demographic characteristics by influence to startup business project	36
Table 4.9 Demographic characteristics by the use of information technology skills in running	ig the
project	37
Table 4.10 Demographic characteristics by the kind of information technology skills used	37
Table 4.11 Demographic characteristics by satisfaction in use of information technology sk	cills in
running the youth project	38
Table 4.12 Demographic characteristics by changes that information technology skills have	brought
to the youth project	39
Table 4.13 Demographic characteristics by changes improvements to bring about satisfaction	on in use
of information technology in the youth project.	40
Table 4.14 How information technology skills enhance entrepreneurial training	40
Table 4.15 How information technology skills enhance proper internal control system	43
Table 4.16 How information technology skills enhance funding of the youth projects	42
Table 4.17 How information technology skills enhance marketability of goods and services	44

# ABBREVIATIONS AND ACRONYMS

GEM: Global Entrepreneurship Monitor

GOK: Government of Kenya

ICT: Information and Communication Technology

ILC: International Labour Commission

ILO: International Labour Organisation

IT: Information Technology

KNBS: Kenya National Bureau of Statistics

MTN: Mobile Telecommunication Network

MOYAS: Ministry of Youth Affairs and Sports

OECD: Organization for Economic Cooperation and Development

PWC: Price Waterhouse Coopers

SMEs: Small and Medium Enterprises

STI: Science, Technology and Innovation

UCT: University of Cape Town

UNDP: United Nations Development Programme

USA: United States of America

YBI: Youth Business International

YEDF: Youth Enterprise Development Fund

YEP: Youth Empowerment Projects

#### **ABSTRACT**

The purpose of this study was to show the role of information technology skills on sustainability of youth empowerment projects in Nakuru Town. Youth unemployment is a critical issue amongst the youth in the developing nations as it has led to high costs of living due to the fact that they have to be supported by the minority of employed individuals. Unemployment has brought about major issues like poverty, drug abuse, immorality and crime in the country. A closer look at the problem of unemployment shows that there is a major issue with skills development in terms of youths not possessing the rightful skills to run businesses to boost on employment and alleviate the unemployment problem. This has therefore brought about youths engaging in unsustainable projects. The purpose of this study was to examine the role of information technology skills in youth empowerment projects in Nakuru Town. The study was guided by four objectives: to examine how entrepreneurial training on information technology skills enhance sustainability of youth empowerment projects, to assess how online financing enhance sustainability of youth empowerment projects, to determine how internal controls enhance sustainability of youth empowerment projects and to establish how online marketing enhance sustainability of youth empowerment projects. Four theories have been put forward to show how information technology skills influences both social structures and transformations in business production and trade. These are Joseph Schumper's Entrepreneurship & Innovation theory which views technological innovation as the source of economic growth, Schumpeter urgued that economic change revolves around innovation, entrepreneurial activities and market power, technological determinism theory which assumes that a society's technology and especially productive technology determines its social structure and cultural values, signaling theory which shows how technology based entrepreneurs manage to transform their ideas into viable businesses and technological revolution theory which shows the effects of technological change on global economic structure in the way companies and nations organize production, trade goods, invest capital and develop new products and processes. The conceptual framework shows how information technology assists the youth to achieve their goals in project sustainability. There is therefore a gap in terms of use of information technology skills in running of youth projects. Since no adequate research has been carried out in Nakuru town on use of information technology skills to tackle the youth unemployment problem, this study sought to explain the role that information technology skills plays in sustainability of youth empowerment projects. The research was a case study. The research design was descriptive and questionnaires were used to collect data. The target population was the youth projects based in Nakuru town. The sample size was estimated at 150respondents who were drawn from various projects. Data collection was by use of questionnaires. Data was later analyzed using statistics in percentages and frequencies. The findings from the study was that entrepreneurial skills, online financing, internal controls and online marketing influence sustainability of the youth empowerment projects. Suggestions and recommendations were done based on the findings. This was mainly on skills development, government intervention and to policy makers on interventions on youth empowerment Also there should be considerations in terms of female involvement in group leadership. Age, level of education and aims for staring business should also be put into consideration when coming up with youth projects.. Youth empowerment projects are seen as an avenue of opportunity for young people. It is an innovative way of integrating the youth into labor market. This is a valuable additional strategy to creating jobs and improving livelihoods and economic independence of young people. Skills in Information technology is thus seen as a way to enable youth acquire skills and jobs to start new projects and to bridge the unemployment gap.

# **CHAPTER ONE**

#### INTRODUCTION

## 1.1 Background of the study

Information technology has been on the rise as a way of solving practical problems especially in commerce and industry. The current economy is characterized by globalization, outsourcing, increased competition, speed of delivery of goods and services and intangible assets such as knowledge which are key drivers for enterprises. In this technology-driven business environment, due to the complexities and changing dynamics of businesses, they are often compelled to utilize technologies and tools extensively. Businesses are aimed at providing products and services that bring about operational efficiency. With a common experience that many businesses fail (Williams 2005), this gives the importance of the need to improve on businesses processes. Information technology has enabled a new world of entrepreneurs, using the latest digital technology, to disrupt old ways of doing business while streamlining business operations and processes in more established enterprises.

Its hard to believe that 30years ago, entrepreneurs were starting up businesses without a computer, mobile phone or internet connection in sight. The start of technology revolution that changed business processes can be traced back to the early 1980s when the mobile phones, MS-DOS and the apple Mackintosh emerged that changed everything (Rob Hunter,2015). Youth unemployment around the globe has become a major challenge in the 21<sup>st</sup> century. According to the world Youth Report (2005) approximately 88million youth around the world are unemployed. Kenya as a country is no exception. There is an increasing trend of young labour force with limited economic growth. Out of the thousands of youth completing tertiary education only a few are absorbed into the labour market.

The increasing unemployment rate of the youth is mainly due to the high number of youths completing education compared to the available chances of gainful formal employment. It is estimated that one in every five unemployed Kenyans are youths. This clearly indicates that the unemployment problem in Kenya is basically for the youth. Significantly youth are engaged in the informal sector which is largely unregulated and workers are therefore subjected to low incomes and long working hours without formal contract. The constitution of Kenya defines youth as an individual between the age of 18and 35 years. This is a critical sector of the population as it is characterized by enthusiasm, energy and dynamism.

This means that youth is the backbone of the country and this is where the economy can derive progress. Lack of jobs for the youth means that the economy will lag behind at a very high

rate. This would in turn bring about high burden to the economy as it struggles to ensure that all citizens are catered for. This is because the high number of the unemployed will depend on the few employed for sustainability. This lowers investment and thus instability, crime and drug abuse comes in. Majority of the unemployed youth have formal education but no training in specific areas that would assist them get jobs. Therefore you find that the major problem is not getting jobs but having the rightful skills that would enable the youths to get placements. This leads the youths to informal sector which has a lot of instability and poor working conditions as well as low earnings. The large number of youths thus remain poor.

The Government through the ministry of youth affairs and sports(MOYAS) in 2006 thus established the Youth Entreprise Development Fund(YEDF) which had the premise of curbing youth unemployment in Kenya. It was of the view that youth unemployment had a socioeconomic and political impact and the initiatives would thus bring a huge impact on job creation for the youth. The fund would provide revolving fund, through provision of cheap loans to the youth for business formation for starters and boosting of already existing businesses. This would bring about youth empowerment as well as economic stability which is one of the vision 2030 pillars. In 2009 the Government of Kenya(GoK) acknowledged the importance of youth empowerment by introducing the Kazi Kwa Vijana Initiative (KKV),the work for youth programme whose main aim was to keep the jobless youths busy. Its main aim was to employ both rural and urban youths in labour intensive public works projects like roads maintenance, water harvesting, afforestation and waste collection.

The government also through the initiative supports a fund providing young people with finances for self employment and entrepreneurial skills development. The local youths are involved in management and implementation of the projects. The junior staff are allowed to make decisions without being micro managed. The constitution of Kenya of 2010 incorporated the youth as an important portion for economic development and Article 55 states specific obligations towards the youth. This includes ensuring that the youth have access to education, training and employment, can participate in political and economic spheres and representation of the youth in various governance levels through direct nomination. These governance levels include the senate, national and county assemblies.

A lot of resources have therefore been directed towards empowerment. This has therefore led to the development of youth empowerment projects. The development and growth of youth empowerment projects in Kenya is important as it is aimed at improving social and economic growth. The concept of youth empowerment projects has however faced some challenges. According to Ongeri (2012), in a study of factors influencing sustainability of youth groups noted that issues of group management, participation of members of the group and extent of implementation of youth projects are some of the challenges that hindered youth groups from

achieving their objectives. Njeri (2012) in a similar study established that marketing, technological skills, education level and personal factors as influencing sustainability of youth projects.

The issue of information technology skills thus comes in as a solution in hindering most of the challenges encountered by the youth. It plays a very critical role in that it enlightens up the youth in finding paths to exercise their already acquired knowledge as well as their innovativeness. The kind of Information technology skills that the youths incorporate in their projects enable them to achieve their goals and render them sustainable. Some of the skills include: communication skills, organizational skills, writing skills, problem solving skills, trouble shooting skills, project management skills, planning skills, customer service skills and research skills. These skills to a great extent enable the youth to startup projects that are self sustaining and that can create more employment. Innovation curbs the issue of unemployment by encouraging the youth to startup projects that can bring about sustainability.

Self employment and micro and small business creations are routes that young people can explore to forge their future. Thus projects and enterprises are where the jobs are (Haftendon and Salzano,2003). The specific needs of the youth and particularly their entrepreneurial potential as well as their critical contribution to economic and social progress are underestimated (Irene,2009). The development of small projects and enterprises is often overlooked and viewed as an alternative to joblessness. Youth projects and enterprises in Kenya cut across all sectors of the economy and provide one of the main source of employment and generate widespread economic benefits (GoK,2005). Youth projects especially in entrepreneurship has therefore gained more importance in many countries as a way of boosting economic competitiveness and promoting regional development. Studies carried out show that in Asia and Latin America about 60% of the youth find it difficult to get job opportunities and to start up businesses. This is mainly because most of the youth have a secondary education and lower.

The role that entrepreneurship plays in the socio-economic development of a country is well acknowledged and as a result, a large number of programmes to support entrepreneurship to fulfill its economic and societal roles designed by the governments and international organizations have been established. However due to the perceptions that the concepts of entrepreneurship and youth entrepreneurship are interchangeable, youth entrepreneurship remain somewhat unaddressed in many countries while considerate attention has been made upon entrepreneurship in general. Globally, about 85% of the world's youth live in developing nations and majority are growing up in the cities. With over 200million youth living in poverty, there is a clear need to specifically engage and support the youth by empowering them.

According to the international labour office(2005) projection, youth unemployment is more than 21per cent. In a report issued by the International Labour Organization in 2017,Youth unemployment stand at 18% in Europe,10% in USA,11.2% in Asia,12.1% in the United Kingdom. In Sub Sahara Africa, the youth unemployment rates stand at 53% in South Africa, 24.6% in Zambia and 13.6% in Malawi. In East Africa the youth unemployment rate stands at 3.3%% in Rwanda and 4% in Uganda,7.6% in Ethiopia and 22.1% in Kenya.In Sierra Leone, the youth account for one third of the population. Youth Employment and Empowerment programme (YEEP) was initiated in 2011 which built on UNDP's intensive post-war experience supporting the empowerment of Sierra Leone youths.

It was built to strengthen national policy, strategy and coordination for youth employment and seeks to provide basic support services for youth across the country, including business development and career advice and guidance. The programme was focused on three components: Institutional and policy development which focused on sufficient technical capacity of the Ministry of Youth Affairs(MOYA) and National Youth Commission(NAYCOM) to facilitate policy development, ensuring that relevant policies are coherent and harmonized and have a positive impact on employment creation, Youth, Youth Empowerment which focused on promoting youth empowerment and leadership primarily through the strengthening of chiefdon and District Youth Councils and Employment Promotion which focused on assisting youth in their transaction from school to work through provision of employment provision services in internship opportunities and support to micro, small and medium sized business development.

According to economic survey of 2003, the small and medium projects and enterprises accounted for 74.2percent of the total persons engaged in employment and contributed upto 18.4percent of the country's Gross Domestic Product. The Ministry of Youth Affairs and sports(MOYAS) strategic plan 2008-2012 is linked to the vision 2030 and its first medium term plan, was prepared to cater for youth and development. It has the responsibility of raising the labour participation in the country to 85percent by other projects promoting an entrepreneurial culture and developing infrastructure for SMEs. Given the importance of small projects and enterprises to the youth and their economies in the developing countries, the research efforts will be directed towards understanding how information technology skills fosters creation and growth of youth projects in the region.

That is understanding the concept of youth employment and income generation through projects in the context of Nakuru town based in Nakuru County. According to the 2009 census, Nakuru town has a population of about 298,254 with youth of ages between 15-35 comprising approximately63% of this population .Lack of or low technological skills, capital, unwillingness as well as low entrepreneurial spirit have led to high levels of unemployment, poverty and idleness

among the youth. Most of the youth have tried on group businesses which have ended up failing. The question therefore is why the high failure rate and what are the success factors.

# 1.2 Statement of the problem

The major problem facing the youth in Nakuru town is that much of their economic activity is concentrated within a limited number of sectors and mainly in the transport industry. Most of the youth are in the matatu, bodaboda and tuktuk industry which hinders their exposure to the global trends and therefore unable to meet their needs. This industry is mainly low growth interms of skills development and sustainable livelihood on the youth and as such the youth tend to lag behind economically. The major reasons as to why this trend persists is due to low education levels and low quality of education whereby most of the youth have the formal education with no kind of training in specific skills and the quality of such education is very low as compared to the developed nations,

Lack of skills in other areas of activities whereby the youth are not able to come up with unique products or processes (IEA,2013), lack or limited finances to startup businesses due reliance on family members and friends as well as low information on available sources(Njeri,2012). Funding from self and family members as well as friends is the primary source and as such if its limited then the youth end up being frustrated and give up easily. According to Njeri,2012, lack of ready markets for the products or services is also another challenge which is due to limited information on available markets both locally and internationally. Selling of undifferentiated products and services in overtraded markets makes it extremely difficult for young entrepreneurs to generate a profit and will rarely lead to viable business creation over the long term.

The use of information technology by the youth in businesses in areas like network marketing and product differentiation is generally low which impedes competitiveness on their products and services with other entrepreneurs leading to low profits. Many young entrepreneurs run their businesses from home or on the streets which significantly limits their access to suitable markets. While use of online platform could enable the many home businesses to expand their market reach, the cost of internet access can be prohibitive. Improving information technology infrastructure would allow for a reduction in the cost of technology thus the potential to reach new markets and this could have a significant impact on the suitability of youth businesses.

Youth empowerment projects have emerged as an important tool of socioeconomic development aimed at youth empowerment, strengthening livelihoods and poverty alleviation (MOYAS,2008). They have been formed for entrepreneurial development to engage young people in economic activities, create self employment and enable the country become a globally competitive and prosperous nation by the year 2030. To attain this course, a number o efforts and

strategies have been made by the Kenya Government to initiate youth development programmes, such as the Youth Enterprise Development Fund established on the premise that micro, small and medium enterprise development initiatives are likely to have the biggest impact on job creation and thereby address the problem of unemployment(MOYAS,2008).

A close look at the resources the government has set aside to uplift youth enterprise initiatives indicates that the youth projects have not lived upto this expectation. The anticipated impact on job creation is economic empowerment of the target groups is yet to be established. The youth empowerment projects are incapable of maintaining themselves for a long period of time. Official reports indicate that most of the youth projects do not mature in the first three years. Despite efforts by the government and other stakeholders investing in the youth enterprises, very few of these projects go beyond implementation stage (Kenya Vision 2030). The challenge on sustainability of youth projects is mainly as a result of group leadership, internal controls in the group, level of education of the group members

Other activities which are carried out in Nakuru mainly the agribusiness, construction, electrical and mechanical businesses are not competitive as well since the youth view this as for the older generation. These are activities with high potential for growth but this can only be achieved by use of information technology in order to keep the businesses at pace with the emerging trends and to improve on the processes. Majority of the youth in Nakuru use information technology mostly on the internet and mobile applications not for business improvement but rather on other purposes like for watching movies and other unimportant uses just to pass time. Lack of the youth commitment to embrace information technology is one of the major causes of unemployment, poverty and idleness in Nakuru town.

The current trend of unemployed young graduates from tertiary institutions do not have the necessary entrepreneurial abilities, competencies, exposure and values that will help them to adapt and integrate to the world of business. Many entrepreneurs who tend to establish and be independent in their own way often fail in the world of work and this can be associated to their little knowledge of what it takes to be an entrepreneur. The economically active citizen that is the youth are also affected by lack of or insufficient funds (Njeri,2012) low resources and lack of entrepreneurial skills. These problems are mainly associated with inaccessibility to loans, poor infrastructure and development facilities, inadequate funding by the government. All these are requirements to acquiring the necessary skills and competencies needed for proper adaptation and integration within the environment of competitive rivalry.

Though the government has through the private sector tried to encourage entrepreneurship, low progress has been made up to date. This can be associated with low or poor attitude, low level

of understanding and perceptions among the youth towards entrepreneurship. Most universities and tertiary institutions in Kenya produce graduates to an economy that is already overpopulated. Most youth and especially the graduates prefer white collar jobs after their education. Experiences show that most of these youths spend much of their time moving from office to office to look for jobs in order to earn huge salaries. On getting to the jobs they get disappointed on learning the vice versa and thus remain frustrated looking for other means to make ends meet.

It is for these reasons that the Government through the Vision 2030 recognizes the role of science, technology and innovation (STI), in which new knowledge plays a central role in boosting wealth creation, social welfare and international competitiveness. The elements that allow effective exploitation of knowledge are: an economic and institutional regime, that provides incentives for the efficient use of existing knowledge, the creation of new knowledge and flourishing of entrepreneurship (Kenya Vision 2030). An educated and skilled population that can create, share and use knowledge well, a dynamic information and communication infrastructure that can facilitate processing, communication, dissemination and an effective innovation system that is a network of research centres, universities, private enterprises and community groups that can tap into the growing stock of global knowledge, assimilate and adapt it to local needs, while creating knowledge and technologies as appropriate. However if the youth can embrace information technology as a source of information for their own sustainability and for economic growth, then this may go a long way in bringing about positive change in the society

#### 1.3 Purpose of the Study

The purpose of this study was to show the role of information technology in youth empowerment projects in Nakuru Town.

#### 1.4 Objectives of the study

The study sought to achieve the following objectives:

- 1. To examine how entrepreneurial training on information technology skills enhance sustainability of youth empowerment projects.
- 2. To assess how online financing enhance sustainability of youth empowerment projects.
- 3. To determine how internal controls enhance sustainability of youth empowerment projects.
- 4. To establish how online marketing enhance sustainability of youth empowerment projects.

#### 1.5 Research Questions

The study was guided by the following research questions:

- 1. How does entrepreneurial training on information technology skills enhance sustainability of youth empowerment projects?
- 2. How does use of online financing enhance sustainability of youth empowerment projects?

- 3. How do internal controls enhance sustainability of youth empowerment projects?
- 4. How does online marketing enhance sustainability of youth empowerment projects.

## 1.6 Significance of the study

With the emerging number of youth in the region, and with the fact that formal employment has become scarce and unsustainable, the need for use of information technology in youth projects has taken precedence. If enough markets and products were available as and when required then there would be no need to conduct this study. The issue of globalization, unemployment, competition and the need for speedy delivery of goods and services too has majorly contributed to the need for technological advancement and the youth have a higher chance of using the current technological advancements to improve on economic activities. This study would be significant to the youth, agencies as well as the county government in addressing the need for the youth to embrace information technology in youth projects as a means to improve on their livelihoods as well as the economic well being.

The policy makers would be able to promote training in the business use of information technology and be in a position to bring new information and technologies within reach of young people. They would be able to analyze the previous and current programmes on the youth projects and how the youths have previously tackled the issue of technology in these projects, and look for ways to incorporate the youth in their annual training programmes. The study would also be aimed at assessing the technological solutions of the most sustainable and viable projects and businesses that the youth can embrace. The study would also open room for further studies on technological advancement amongst the youth. The study would basically involve understanding how information technology has earlier been used by the youth and analyze how it can improve the lives of youths positively and assist them to embracing sustainable projects as a source of their livelihood as well as wellbeing of Nakuru town.

# 1.7 Limitations of the Study

The study was carried in Nakuru town which is dominated by different communities. This means presence of different cultures and practices and thus brought some different opinions on use information technology and youth projects. Some communities did not embrace information technology as a source of wealth rather as an option thus the responses was based on the cultural perception. Some of the youth were not be willing to participate for lack of knowledge about information technology. They had a different perception about research.. Time and resources were also limited thus limiting the extent of reach of respondents and gathering of enough information. To address these challenges, i explained to the youth the importance of this study and how the information would be useful to their projects. I assured the respondents on confidentiality of the

information that they would avail. I also tried as much as possible to ensure that I incorporated the different cultural perspectives so that the information received would be useful for my study. I sourced for the required funding to ensure that I was financially prepared for this study.

# 1.8 Delimitations of the Study

This study was carried out in Nakuru town to find out how information technology skills can be useful to the youth in empowering them to start sustainable projects. This involved analyzing the entrepreneurial training, internal controls, funding and marketability of goods and services as influenced by the level of information technology skills used..No previous studies had been conducted in the region and therefore the research would be beneficial and the data collection methods would be easy to understand.

## 1.9 Basic assumptions of the Study

The study assumed that the sample was a representative of the population, the instruments used to collect data were valid and that the respondents were willing to give accurate information.

## 1.10 Definitions of Significant terms

**Information technology skills:** Skills learnt as a result of use of computer and other technologies.

The technological skills required are; online skills, critical thinking, science behind technology, adaptability and courage.

**Youth:** An individual aged between 15-35 years.

**Youth empowerment Projects:** These are projects initiated through government intervention to provide a platform of access to resources with the aim of providing employment and life sustainable activities to the youth.

Globalization: Economic process of integration and interaction among people,

companies and governments and is aided by information technology.

**Competition:** Activity or condition of striving to gain or win something by defeating or establishing superiority over others.

Nakuru Town: Fourth largest city in Kenya from Nairobi, Mombasa and Kisumu.

Capital city of Nakuru county and one of the 11constituencies of Nakuru County.

**Programmes:** Activities designed to involve a particular group.

# 1.11 Organization of the Study

The research study is organized into five chapters. Chapter one is the general introductory chapter and entails background of the study, statement of the problem, purpose of the study, objectives of the study, the research questions, significance of the study, limitations as well as the delimitations of the study, the assumptions in the study and definition of significant terms. Chapter two contains the literature review related to the study and which includes the theoretical, conceptual

framework and the knowledge gap of previous studies. Chapter three contains the research methodology, This includes research design, the target population, sample size and sampling techniques, data collection methods and analysis techniques, ethical considerations and operational definitions of variables. Chapter four contains data analysis, presentation, interpretation and findings of the study. Chapter five contains a summary of findings, conclusions and recommendations based on the findings of the study

# **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter highlighted the literature related to the study that has been outlined by other scholars. It explained the role played by information technology skills in empowering the youth towards sustainable projects. The theoretical framework compared youth projects in developed and developing nations based on the level of information technology skills used. This was followed by analysis of factors influencing use of information technology skills by the youth to develop businesses.

The conceptual framework was developed showing the key variables used in the study. Finally the research gaps were identified during the review that were addressed in this study.

# 2.2 Entrepreneurial training and project sustainability

Entrepreneurial skills is defined as identifying customer needs, technical and market opportunities and pursuing opportunities(Hayton,2015). Hayton identifies positive relationship between entrepreneurial skills and project performance. In a study on social economic situation of youth in Africa. Chigunta (2005) suggests that institutions and programs developers for younger enterprises should develop practical programs that can transform their business ideas into commercial entities. He proposes that the following skills should be adopted by young entrepreneurs: capacity to plan, communication, marketing, interpersonal skills, basic management skills, quantitative/analytical skills, personal relationship and leadership skills.

In South Africa, there are sound policies to address youth problems such as entrepreneurial skills among young people, the youth projects have however remained weak and less sustainable due to unfriendly business regulatory measures and lack of consultation by the youth on matters pertaining to development policies and programs addressing youth issues. Entrepreneurial readiness among the youth entrepreneurs who benefitted from youth fund program in Nairobi is still low and that 48% of the youth surveyed had less than 50% likelihood of project success and hence impacting on repayment rate.

Chumwa (2005) observed Youth Empowerment Development Fund objective is not only the development of SMEs by providing loans to youth owned projects but also to attract and facilitate investment in micro, small and medium enterprise, commercial infrastructure such as business or industrial parks, markets or business incubators that will be beneficial to youth projects. Thus the youth cannot take full advantage of these beneficial programs from the fund if they lack requisite

entrepreneurial skills for doing projects. In a study on youth projects in Gatundu South by Kanyari and Namusonge(2013),successful youth entrepreneurs were found to be passionate and obsessive about making their business opportunities work.

Their belief and conviction in an idea of action is an entrepreneurial skill which help them to sustain and endure any setbacks. Hardwork and commitment are some strong entrepreneurial skills which most youths are lacking. Chigunta (2005) also noted that young entrepreneurs also need to know how to develop a business plan, business management, finance management and budgeting, time management, stress management, improving sales, managing and reducing costs. stock control and marketing. There is therefore need for programs to be developed and geared towards skills training, business counseling, mentor support and creating support networks.

# 2.3 Online financing and sustainability of youth empowerment projects

Online financing or digital finance means financial services delivered through mobile phones, personal computers, the internet or cards linked to a reliable digital payment system. According to Gomber, Koch and Siering(2017), digital financing comprises a magnitude of new financial products, financial businesses and finance related software of customer communication and interaction. Digital finance enables individuals and businesses access payments, savings and credit facilities via the internet without the need to visit a bank or without dealing directly with the financial service provider(Peterson K.Ozili,2017).

In Europe, the internet has emerged as a widely recognized and used distribution channel for the banking industry(Barbesino, Camerani and Gaudino,2005). The goal of digital financing platforms is to contribute to poverty reduction and to contribute to the financial inclusion objectives of businesses (United Nations,2016). According to CGAP(2015) there are three key components of any digital financial service: a digital transactional platform, retail agents, and use by customers, agents of devices that is the mobile phones inorder to transact via digital platform. To use digital financial services(DFS), the DFS user will have an existing bank account which they own, and should have available funds in their accounts to make payments and receive revenue via digital platforms including mobile devices, personal computers or the internet.

Online financing also incorporates crowdfunding which according to Giuliana, Veronica and Flavio(2015) is a practice which involves people living in different geographical areas contribute to funding a project they share an interest in. Money is raised via online platforms thus utilizing the web technologies. Crowdfunding is a new phenomenon however its growth rate has been substantial. Startups and small and medium enterprises (SMEs) face funding problems and crowdfunding may have become an alternative funding source Giuliana, Veronica and Flavio(2015). For crowdfunding to succeed the following features are relevant: a business idea or

project that requires funding, many investors willing to contribute to the realization of that business and an online platform to connect backers and entrepreneurs.

Kirby and Worner (2014)suggest that crowdfunding models can be classified as community crowdfunding or financial return crowdfunding, which differ regarding the presence of a return of backers(investrors) or not. Community crowdfunding includes social lending or donation while financial return crowdfunding refers to peer to peer lending and equity crowdfunding. Digital Financing has benefits which include: provision of convenient and secure finances to poor individuals in the developing nations. This is due to the recent improvements in the accessibility and affordability of digital financial services around the world. Digital financing provides a diverse range of financial products and services for individuals as wellas small and medium businesses.

Digital financing enables the project to receive money within a short period and thus the ability to make timely decisions. Kenya's efforts to promote youth projects has been taken positively by a number of scholars and in 2005, the government established the Ministry of Youth Affairs, and in 2006 launched the Kenya National Youth Policy. The policy highlights five fundamental principles to promote civic and business engagement among youth: Respect for cultural belief systems and ethical values, Equity and accessibility, Gender inclusiveness, Good governance, Mainstreaming youth issues. The National Youth Policy led to the establishment of the Youth Enterprise Development Fund(YEDF) being one of the flagships of vision 2030 which provides young entrepreneurs and start-ups with loans, facilities marketing and offers business development services to youth owned projects in order to improve access to financial capital and services and ensure sustainable business models.

The Vision 2030 sees the fund as a strategy of gainfully engaging the youth, mostly the unemployed. This is achieved through provision of credit and equipping the youth with appropriate skills to creatively engage in economically viable activities. The fund targets young people within the age of 18 to 35 years whose population is about 13 million. It spells out the legal obligations of borrowers and has in place legal provisions that ensures those who misuse the funds are dealt wit according with the law. The fund facilitates investment in micro, small and medium enterprises such as business incubators that will be beneficial to youth enterprise and provide linkages with large enterprises. It also facilitates marketing of products and services of youth owned projects in both domestic and international markets thus employment of youth in the international labour markets.

So far the fund has disbursed over 11billion Kenya shilling to over 500,000 youth groups and individual youth projects in the country. The fund has had a mixed impact on youth projects according to several impact assessments conducted in different parts of Kenya. In some areas it has

fueled the growth of new enterprises, due to pre existing project networks and training programs. In others the fund has not had a significant impact on initiatives, largely due to their low viability, lack of entrepreneurship training prior to and after loan disbursement, and poor follow up on loan beneficiaries.

The private sector has not been left out of Africa's push for greater youth projects. Private foundations including the African innovation Foundation and the Bank of Africa, offer a number of awards and prizes to promote business innovation, such as the innovation Prize for Africa, African Entrepreneurship Award, African Awards for Entrepreneurship and the Pan-African MTN Entrepreneurship Challenge. There are several cash prizes and invitations for business proposals directed towards young people across Africa.

# 2.4 Internal Controls and youth empowerment projects

Internal control is a process of assuring achievement of an organizational objectives in operational efficiency and effectiveness, reliable financial reporting and compliance with laws, regulations and policies. These controls ensure that proper documentation of financial activities to enhance planning, budgeting, reporting and analysis of information. Organizations with sound financial management are able to attain financial project sustainability.(Kumar,2004).Studies have shown that sound financial management of youth projects can determine their sustainability. It is necessary for the project members to be enlightened on the project's financial records which shows transparency. It is shown that peoples participation at every stage of group undertaking transforms members into participants and thus everyone feels as part of the project making it sustainable.

According to European regional development fund report (2007-2013), project sustainability is influenced by factors both inherent and external to the project. Sustainability at the project level can be attained through quality project planning, prudent financial management and adequate funding. Poor financial management is the reason for failure of most projects. According to Ongeri (2012), financial managers of most youth projects are appointed by individuals outside the youth project. These members have a great role to play in the project and must ensure that youth project's funds are well used for the sustainability of the youth project. It was observed that for youth projects to improve on financial management, accountability has to be improved by use of financial documents especially the periodic reports, disclosure statements, performance assessments amongst others.

In a study conducted in Malaysia, various reasons were given as to why project members fail to fully participate in project activities. Some of these reasons include regular defaulting by some members, non-adherence to project norms, lack of cooperation and team work, ineffective group leadership, lack of group formation, mismanagement of accounts, group conflicts among

others,(Rahman,2002) Apmas/Eda (2007), in a study of Indian self help groups reported the problem of members dropping out of groups thus revealing the need for clear rules and regulations pertaining to members organizational behavior and contribution to the group. The suggestion was for discussion and consensus on by-laws, indicating rules and regulations for group functioning as well as roles and responsibilities of all the members which is noted to be very paramount to project sustainability.

Internal controls can be evaluated and improved to make a youth project run effectively and efficiently. Effective internal control implies the group generates reliable financial reporting and sustainability complies with the laws and regulations that apply to it. Internal controls can however provide reasonable, not absolute assurance that the objectives of an organization will be met(PwC,2013). According to Lie D. Putra (2016), online internal controls are very crucial in ensuring validity of transactions, mutual authentication of identity, authorization, end to end data integrity and confidentiality, non repudiation and audit ability of transactions. There is need to establish the legality of transactions, dentity of the parties transacting as well as equipments used, review of access controls and separation of duties within the organization which ensures transparency. Authorizations too need strict controls to avoid misuse of the projects funds. The companies accounts too need to be audited and this involves trailing of transactions from initiation to the end. This is enabled if the system of internal controls is properly maintained and easy to follow.

#### 2.5 Online Marketing and sustainability of youth empowerment projects

According to Forbes(2017),Online marketing is the practice of leveraging web-based channels to spread a message about an individual's or business product or service to potential customers. This includes use of email, social media, display advertising and search engines optimization. The main objective is to reach potential customers easily as most people spend time in reading and socializing online. The internet has greatly brought about new channels for advertising and marketing engagements. Online marketing was greatly contributed by the high costs involved in traditional marketing which basically involved use of printing, billboards, television and radio advertisements. Anyone with a business can use online marketing to promote their products at very minimal costs and be able to reach a wide range of customers. Some of the online marketing tools used are: email marketing, social media marketing, search engine optimization, display advertising, video marketing, customer relationship management and content management system(CMS).

#### 2.6 Information technology skills on Youth empowerment Projects.

Information technology involves technical methods, skills, processes, techniques, tools and raw materials. As argued by many scholars, the term technology is difficult to interpret, observe or

evaluate (Blomstrom and Kokko,1998). Many of the literatures are fragmented along different specialties and generally there is no commonly accepted paradigm (Reddy and Zhoa,1990).

Past researchers have viewed and defined the term technology from many perspectives (Reddy and Zhoa,1990). According to Kumar et.al(1999) technology consists of two primary components: A physical component which comprises of items such as products, tools, equipments, blueprints, techniques and processes, Informational component which consists of know how in management, marketing, production, quality control, reliability, skilled labour and functional areas. The current studies on information technology gives more emphasis on research and development(Dunning,1994).By scrutinizing the technology definition, there are two basic components that can be identified: Knowledge or technique, Doing Things.

Information technology is always connected with obtaining certain results resolving certain problems, completing certain tasks, using particular skills, employing knowledge and exploiting assets(Lan and Young,1996). The concept of technology does not only relate to the technology that embodies in the product but is also associated with the knowledge or information of its use, application and the process in developing the product(Lovell,1998:Bozemann,2000). The early concept of technology as information holds that the technology is generally applicable and easy to reproduce and reuse(Arrow,1962). However Reddy and Zhoa (1990) contend that the early concept of technology contradicts with a strand of literatures on international technology transfer which holds that technology is conceived as firm specific information concerning the characteristics and performance properties of the production process and product design.

They further argue that the production or operation technology is embodied in the equipment or the means to produce a defined product. On the other hand the product design or product technology is that which is manifested in the finished product. Pavitt (1985) suggests that technology is mainly differentiated knowledge about specific application. Thus based on this argument, technology is regarded as the firms intangible asset which forms the basis of a firms competitiveness and will generally release under specific condition(Dunning,1981). Tihanyi and Roath (2002) propose that technology can include information that is not easily reproducible and transferable. Based on this argument, technology is seen as tacit knowledge(Polany,1967) or firm specific, secrets or knowledge known by one organization(Nonaka,1994). Based on Sahal's(1981) concept, Bozeman(2000) argues that technology and knowledge are inseparable simply because when a technological product is transferred or diffused, the knowledge upon which its composition is based is also diffused.

The 2014/2015 Global Competitiveness Index recognizes that information technology can play an important role in developing more productive higher value-added sectors within sub-

Saharan Africa. The youth particularly usage on latest technology skills is extremely low. About 73% of youth businesses indicated that they were using technologies or procedures that were available more than five years ago. Information technology and especially the use of internet has leveled the playing field for small business marketers competing against established businesses. With advanced video and graphics editing software, small business owners can create professional marketing materials that reach thousands or millions of viewers online. The youth can take advantage of cost efficient web marketing tools such as Google Adwords to spread targeted marketing messages to a broad audience or a select niche.

Whether it is laptops or cell phones, information technology helps in connecting with the world and acts as a portal to vast amounts of knowledge which can be accessed with ease. However many youths do not utilize technology in its full extent to propel themselves to new heights. Information technology brings about change of culture in that people are no longer bound to the old methods of doing things but rather on a global way of achieving goals. Technology impacts on youth projects in various ways:

Communication-Good communication is important to allow efficient flow of information in a business. Technology provides multiple channels for businesses to communicate both internally and externally. This could involve connecting to international markets through the use of video conferencing thus assists in collecting feedback from customers, which can be used to improve or alter a product to suit the needs of the customer better. According to Howard Williams(2016),the advent of email was one of the greatest milestones of business communications. He urged that email had a huge impact on business landscape since it broke down the international barriers to communication and trade that existed previously.

**Research and Development-** Through the use of information technology, youths can research the market through the use of secondary data. This is extremely useful as it provides businesses with indepth knowledge about markets before penetrating them. Along with secondary research, businesses can use information technology to conduct primary research in addition to using online surveys and customer feedback.

Web Based Advertising- One of the most beneficial use of information technology is advertising to millions of people around the globe just at a click of a button. Web based advertising consists of websites and social media. Websites can be built using tools like word press or professional web developers. Social media accounts are easy to build for projects and provide exposure to a wide variety of platforms such as facebook, Twitter and YouTube.

Adelman (2000) noted that a particular generation of an organizations overall objectives, principles and tactics relate to the technologies that the organization uses. Such strategies primarily

focus on the technologies themselves and the people who manage those technologies. Advances in information technology have enabled standardization, automation and globalization at a rate that early theorists probably never thought possible. Youth projects can be an important avenue of opportunity for young people. Within the framework of potential efforts to boost employment for young people, it is an additional innovative way of integrating youth into the labor market. In view of rising youth unemployment and the increasing lack of labor demand, promoting youth projects can be a valuable additional strategy to create jobs and improve livelihoods and economic independence of young people.

Furthermore it has a multidimensional approach as it fights youth unemployment in two different ways: On one hand, it creates employment opportunities for self-employment youth as well as for other young people being employed by young entrepreneurs. On the other hand it provides youth with entrepreneurial skills and attitudes that are necessary to cope with the general shift from traditional "job for life" careers towards "portfolio careers". Thus it improves young people's general employability for today's and tomorrow's labor markets. The formal job market in Africa is in a depressed state and with this, more and more youth in Sub-Sahara Africa are looking to sustainable projects to secure their future. According to a recent global study young people on the continent are more upbeat about their ability to become entrepreneurs than their peers in any other region.

As many as 60% of 18 to 34year olds on the continent who took part in a joint study by the Global Entrepreneurship Monitor (GEM) and Youth Business International(YBI) were optimistic about the availability of good business opportunities, and believed they had the skills and knowledge to start a business and sustainable projects. This compares to just over 17% of young people in the European Union, almost 17% in Asia Pacific and South Asia, and around 30% of North America. The only other region that came close to sub-Sahara Africa's optimism was Latin America and the Caribbean, where 40% of the youth believed they had the opportunities, skills and knowledge to start a sustainable projects. This was according to the January 2015 report on understanding the entrepreneurial attitudes, aspirations and activities of young people. As the report points out these figures are for potential youth entrepreneurs, whose desire in starting a sustainable project or business has yet to be translated into action.

Even though Sub-Saharan Africa still has the world's highest percentage, only 29% of young people are involved in projects that are mostly new and unique.. The downside is that about a third of these projects were established out of necessity rather than to capitalize on a market opportunity, and most have low growth potential. Fewer than 45% of youth project owners had completed secondary school. According to the Global Entrepreneurship Monitor(GEM) and Youth Business International (YBI) report, nearly 35% of Africa's youth lack the basic skills required to

perform a job, and are not likely to have the necessary skills to successfully start and manage a project or business. The positive side is that youth in Sub-Sahara Africa are less afraid to fail in projects than their counterparts elsewhere. Only a quarter of potential entrepreneurs in the GEM/YBI study said fear of failure would prevent them from starting a business, compared to over 46% in European Union.

It is critical to consider that Africa's work age population is expected to rise to about one(1) billion in the next 25years, thus making job creation and project development a top priority. There is a wide agreement that lack of access to finance and markets, low levels of education, poor business or project skills and an absence of suitable mentors are among the biggest obstacles that the youth generally face. Being a youth too can be a disadvantage if prospective funders and other sources of support have preconceptions about the inexperience of youth. Similarly, societal and cultural aspects may take a dim view of youth projects. At an event in Bertha Centre for social innovation and Entrepreneurship at the UCT Graduate School of Business in Cape Town, students voiced frustration over the tendency of parents and grandparents to pressure them into traditional career choices.

The students viewed youth projects and entrepreneurship as a way to alleviate social challenges, from health and housing to nutrition, education, environment, women and youth empowerment. An example is the cell phone "stokvel" application that students from the UCT's graduate School developed to help low income communities save money by buying in bulk. The application called Lakheni won the students third place in the global social Venture Competition. Another award winning African Social innovator is Wangechi Mwangi,a 21year old University student from Kenya who recently won a Global Social Impact Award for her company Valuraha, which teaches young people how to save and invest in a fun way.

Samuel Malinga a 26year old from Uganda is an agricultural engineer founded Sanitation Africa. The innovative project has developed a full cycle sanitation system that starts with a locally manufactured low-cost hygienic modular latrine and ends with the conversion of sludge into cooking briquettes and agricultural manure.

Mutoba Ngoma a Zambian entrepreneur launched Tapera Bio Industries project which is involved in the production and promotion of biodiesel fuel and derivatives of vegetable oils.

Tapping into the digital revolution, young people are now developing a wide range of cutting-edge services and products that are transforming fields including agriculture, business, healthcare and transportation. These services and products address everyday issues and have improved socio-economic conditions at both local and national levels. Kenya is often touted as Africa's Silicon Valley. From mobile payment systems to innovative agricultural information tools,

Kenya is already witnessing how youth projects are transforming its economy. Within the agricultural sector, many innovative products have been developed to provide services in different agricultural subsectors including seed choice, marketing products and livestock. One of the most recent innovations is the award winning Pawa-Farm, an innovative Virtual Agro-weather Advisory Platform that combine information technology based tools to provide timely, relevant and usable weather and climate information to farmers.

Data provided by this platform includes agronomic advisories modeled in line with the projected climate conditions to enable farmers to make informed decisions and improve farm-management practices under risky weather conditions. It is encouraging that products made by young entrepreneurs have already caught the attention of both the private and public sectors. Recognizing that project innovation is central to economic growth. African governments are increasing their commitment to promoting youth projects as manifested in the development of national entrepreneurship programs and enterprise funds.

# 2.6.1 Youth Project Challenges facing youth in Kenya

The 2009 National census survey of Kenya revealed that about 65percent of its population was engaged in small projects/enterprises(KNBS,2010). According to the 2003 Economic Survey by the Kenya Government, employment within these enterprises increased from about 4.2 million in the year 2000 to about 5.1 million in the year 2002. The informal sector accounted for 70 percent of total employment opportunities. The trend in small enterprises employment has been upward. With many developing countries, there is limited research and scholarly studies about the small enterprises sector in Kenya. Previous baseline surveys have not captured statistics for youth projects and enterprises in Kenya hence, the absence of data by youth.

Based on the growth statistics, the SME sector which is growing rapidly has the potential to provide employment to majority of Kenyan Youth. There is need to identify the factors that hinder or promote the development and growth of youth projects and to develop appropriate intervention programmes to give them some encouragement.

Despite their significance, youth projects are faced with the threat of failure with the past statistics indicating that three out of five fail within the first few months. These challenges seem to change depending with the macro and micro conditions prevailing. According to a research carried out in Nairobi, it was established that a majority of small projects are owned or run by people in the bracket of 25 to 34 years of age(Bowen et.al,2009) and this clearly indicates that Kenyan youth are entrepreneurs. Bowen also established that poor technological skills, competition from large firms, lack of access to credit, insecurity, power interruptions, political instability, cost of materials, low demand and restrictive by- laws are the main challenges. Other challenges facing the youth include:

**Social Pressure:** Potential young entrepreneurs are particularly vulnerable to dissuasion from authority figures and peers who encourage talented young people to seek careers in established sectors and enterprises. The education system also promotes routine learning rather than creativity and innovation.

**Poor IT infrastructure:** The state of infrastructure is not very conducive for young project owners and especially those struggling to start businesses. This is mainly on cost of installation as well as the charges involved in use of the internet. Improving on the IT infrastructure would allow for a reduction in the cost of technology and thus the potential to reach new markets and this could have a significant impact on the suitability of youth projects.

**Poor use of technology:** Most of the youth with access to technology use it in the wrong way. The current trend in using the internet in betting has really hindered the youth from engaging in gainful projects. Most of their resources are tied to this course in the view of getting rich quickly. Most youths also use the internet to play video games and watch movies rather than building their skills in sustainable projects..Policy makers should promote training in use of Information technology in the proper manner and to bring about economic sustainability. Access to new information and other technologies needs to be brought within reach of young people. This implies the introduction of pricing mechanisms adapted to young people's means.

**Lack of credibility:** Youths face credibility constraints as banks and other lenders tend to dismiss the capacity of young people to engage in business.

**Poor network:** that is lack of business network of potential mentors and business associates.

**Poor supporting structures:** Young people have few avenues to access business trainings. Most of the project and business skills are gained outside academic education which the youth are not able to access.

The National baseline survey 1999 shows that the solutions lie within the business structures. Differentiating products and services to satisfy customer needs, disciplined finance management, appropriate business location and good networking (Bowen et al,2009).

#### 2.7 Theoretical Framework

The study uses Joseph Schumpter's Entrepreneurship and Innovation theory, technological determinism theory, Signaling theory and Technological revolution Theory.

#### 2.7.1 Joseph Schumper's Entrepreneurship and Innovation Theory

Schumpter was probably the first scholar to theorize about entrepreneurship and innovation. In his theory Schumpter argued that innovation and technological change of a nation come from the entrepreneurs. He asserted that the doing of new things or doing of things that are already done in a

new way stemmed directly from the efforts of entrepreneurs, (Pol & Carroll,2009). He was the most influential thinker to argue that long cycles are caused by innovation. In his view, technological innovation is at the cause of both cyclical instability and economic growth. In his view, technological innovation is at the cause of both cyclical instability and economic growth. Fluctuations in innovation cause fluctuation in investment and those cause cycles in economic growth.

The technological view of change needs to demonstrate that changes in the rate of innovation governs changes in the rate of new investments. Schumpeter identified innovation as the critical dimension of economic change. He argued that economic change revolves around innovation, entrepreneurial activities and market power. He sought to prove that innovation-originated market power can provide better results than the invisible hands and price competition. He argued that technological innovation often creates temporary monopolies, allowing abnormal profits that would soon be competed away by rivals and imitators. These monopolies were necessary to provide the incentive for firms to develop new products and processes.

This theory is important in this study in that any developing nation's interest is to maximize innovativeness among young people. This is brought about by empowering young people by giving them the chance to start their own projects and business opportunities where they have the autonomy to give products and services which are unique and which adds value to the economy. Kenya young people have the capability to exploit available opportunities, are risk takers and are capable of innovating renowned products and services.

#### 2.7.2 Technological Determinism Theory

This theory assumes that a society's technology determines the development of its social structure and cultural values. The term is believed to have originated from Thorstein Veblen(1857-1929), an American sociologist and economist. The first major collaboration of a technological determinist view of socioeconomic development came from the German philosopher and economist Karl Marx, whose theoretical framework was grounded in the perspective that changes in technology, and especially productive technology, are the primary influence on human social relations and organizational structure, and that social relations and cultural practices ultimately revolve around the technological and economic base of a given society.

#### Concept

Technological determinism seeks to show technical developments, media, or technology as a whole, as the key mover in history and social change. It is a theory scribed by hyper globalist who claims that as a consequence of the wide availability of technology, accelerated globalization is inevitable. Therefore technological development and innovation become the principal motor of

social, economic or political change. According to Merritt Roe Smith, technological determinism is the belief in technology as a key governing force in society. Technology changes the way people think and how they interact with others and can be described as "technology determines history".

The idea of progress is centralized around the idea that social problems can be solved by technological advancement and this is the way that society moves forward. Technological determinists believe that we are unable to control technology(Lelia Green). This suggest that we are somewhat powerless and society allows technology to drive social changes because societies fail to be aware of the alternatives to the values embedded in it. A technical determinist view holds that the uses made of technology are largely determined by the structure of the technology itself, that is its functions follow from its form(Neil Postman).

# 2.7.3 Signaling Theory

This theory shows how technology based entrepreneurs manage to transform their ideas into viable businesses. Technology based entrepreneurs are highly regarded as targets of economic policy(Lerner,2010). When considering what makes technology based entrepreneurs different, different scholars have mostly proposed to decipher what type of resources configurations or combinations would explain the success or failure of the technology innovations of so many promising ventures. In technology entrepreneurship context, scholars focused on understanding firm resources that might be useful when competing to capture value but not have paid sufficient attention to the other side of the board, where actions are critical in a value-creation context are occurring (Priem et.al,2011).

#### Concept

This theory views what entrepreneurs deal with resources and how their actions could actually impact the market (Priem et. al,2011). The first step is to understand that not all actions could convey information that impacts the potential market demand. This theory was introduced by Spence (1973), to explain how job applicants would disclose details that were interpreted as signals of their qualities to recruiters. The assumption here is that new technology based ventures, with no past transactions in the market, no track record of successful product development, and offering untested novel technology products, might have to rely on symbolic elements to convince their potential customers. In this sense, the capacity of entrepreneurial to act and convey the right signals, regardless of the uncertainty and resource limitations, is expected to provide additional clues to understand the technology project process.

Three types of signals are perceived as valuable: that is market, technology and social capital signals. Market signals include actions that are related to raising awareness of new venture and its reputation, This may include publications in the magazines that are mainly read by everyone.

Technology signals are built upon unique technological resource of the new venture. This could include patents which would contribute to a market differentiation strategy.

Social capital signal includes endorsements by institutions both public and private, development and research partners, and even connectors with well-known investors. Social capital signals are observed to be used to influence both access to resources and market activation.

## 2.7.4 Technological Revolution Theory

The effects of technological change on the global economic structure are creating immense transformations in the way companies and nations organize production, trade goods, invest capital and develop new products and processes. Sophisticated information technologies permit instantaneous communication among the far-flung operations of global enterprises. As put forward by Morris Tanenbaum, there is a period of discontinuous change as the breadth of technological applications expands and the time scale of change becomes shorter. This process has placed new demands on organizations as they strive to obtain quick and effective market information and access, recoup their research and development investment more quickly and recognize the importance of sharing technological capabilities.

Government plays a central role in technology issues at the national level. Technology has now become a part of almost every political discussions as politicians have realized the impact of technology on world events. Governments vary in the way they influence and exploit technological changes for example through regulation, procurement, protectionist's policies and support research and development. Public attitudes among various countries also differ and can affect governmental technology policy. Given the fact that there is no correct way of dealing with technologies, which is applicable to all countries, *SirRobin Nicholson* commented that each country must find its optimum way depending on its history, institutions and public attitudes.

Ramo argues that it is only the government that can perform the regulatory functions necessary for the smooth operation of free enterprise activity that makes use of new technologies. It is also the government that will be the primary obstacle to diffusion of the benefits of technology to world society. Globalization will bring about the emergence of many small and medium size multinational firms that will rely on a network of technology alliances. Governments will provide oversight and strategic direction. The impact on developing countries will be enormous. With the help of new technologies, third world countries can transform their raw materials into value added commodities and thereby accelerate economic development without dysfunctional effects.

## 2.8 Conceptual Framework

# **Independent Variables**

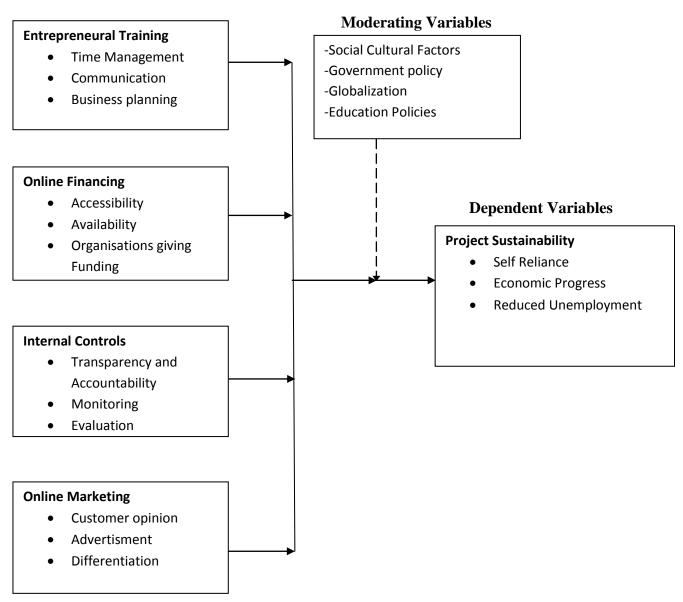


Figure 2.1 CONCEPTUAL FRAMEWORK

According to the conceptual framework, social cultural factors, global economy, Government policy and education policies tend to hinder the youth from utilizing technological skills to bring about success in their projects. This means that youth projects effectiveness can be enhanced when these factors are more favorable. Earlier in this chapter the level of use of information technology skills by the youth in projects enhances entrepreneurial training, level of internal controls in youth projects, funding accessibility by the youth and level of marketability of goods and services from the youth projects. The higher the use of information technology platforms by the youth, the higher the development and sustainability of the youth projects.

#### 2.9 Knowledge Gap

Technology is viewed as a potent force in transforming social, economic and political life across the globe. Technology has two dimensions that is the technological knowledge and the techniques or application of this knowledge. Most developing countries are harnessing the use of technology to accelerate their development processes. With an estimated 300million or more youth entering the global workforce over the next decade, coming to reality with the technological challenge is crucial based on the gap between countries that have and those that don't have easy access to technological advances. There is a wide technology use gap between the developed and developing nations. There has been a growing concern about the impact of technological change on the work of micro and small projects which are majorly owned by young entrepreneurs.

Even with change in technology, many small business entrepreneurs appear to be unfamiliar with new technologies. Those who seem to be well positioned are most often unaware of this technology and if they know, it is not either locally available or not affordable or not situated to local conditions. Foreign firms still remain in the forefront in accessing the new technologies. The rapid advancement of information and communication technologies and its application by business seems to be accompanied by an increasingly widened gap in the use—of information and communication technology skills amongst the youth projects This is even more evident in small projects and mostly those managed by the youth as they are normally lacking resources to provide training for technology advancement.

A study by Cragg and King(1993) found that one of the strongest inhibiting factors for youth projects information technology development and implementation was the lack of information system knowledge. More recent research on e-commerce adoption confirms the same thing. Research by Corbitt (2000) found that there was an obvious concern that electronic commerce was not fully understood and the "I do not know" response was the prevailing view on ecommerce adoption in companies studied. Considering the barriers for ecommerce adoption in projects run mainly by the youth, a number of studies have been conducted to address this issue and identified the lack of skills and knowledge is one of the barriers for the uptake and use of internet and e-commerce.

In order to bridge this gap, improving youth awareness, developing technological skills in entrepreneurship and encouraging communities to take technology positively can help promote entrepreneurship among the youth. Sound education policy also provides an important instrument to offset the negative impacts of globalization and enhance youth employability as well as productivity and competitiveness of youth projects. There is need to combine new technological capacity with investments in a broad variety of sectors.

These strategies need to be supported by improvements in education, technological skills development and vocational training and research. Training in use of technology is essential and a key step in taking advantage of emerging economic opportunities.

#### 2.10 Summary of Literature Reviewed

This chapter explained what technology is and how it has been used to help in sustaining the youth in projects development in different nations through use of different marking tools, change of culture, better communication as well as research and development. It also presented a review of literature which has previously been carried out in regard to this study. This involved a comparison of Youth entrepreneurship and use of technology in both the developed and developing nations. The chapter also highlighted some successful youth projects in different continents and entrepreneurship is seen as the avenue for young people in boosting employment and a source of value addition strategy to create jobs and alleviate social challenges. This chapter also explained how funding and resource availability influenced youth projects. The challenges facing the youth were identified as social pressure, poor IT infrastructure, poor use of technology, lack of credibility and poor supporting structures.

This chapter also gave the theoretical framework and used Joseph Schumper's Entrepreneurship & Innovation Theory ,technological determinism, signaling and technological revolution theories to explain how technology impacts on culture, economic structures, production and experiences as well as ideas to bring about youth embracing projects that can change their lives positively as well as the economic impact. The Conceptual framework showed that cultural factors, global economy, Government policy and education policies tend to hinder the youth from utilizing technological skills to bring about success in their projects. This means that youth projects effectiveness can be enhanced when these factors are more favorable.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

Research methodology is the strategy for collecting data after identification of the problem and after completion of literature review. It describes the procedures used to conduct the research. This chapter explains the methodology used to collect data which includes the research design, target population, sampling strategy, data collection instruments and analysis of data collected and ethical considerations that the researcher considered.

#### 3.2 Research Design

This involves a set of methods and procedures used in collecting and analyzing set of variables specified in the research problem. Such includes the methods used to collect data, sampling tools and strategies and time as well as costs involved in data collection and analysis. A descriptive survey method was used to collect data relating to the role of technology as a source of youth empowerment in entrepreneurship. This helped in collecting original data from the youth and also gave both numerical and descriptive data that was used in measuring the relationship between variables that was studied. This was done by use of questionnaires.

#### 3.3 Target Population

This refers to the specific group relevant for this study. According to Mugenda et al.2003 a population is a group of individuals or objects that have the same form of characteristics. In this study the target population was 150youths in both Nakuru East and Nakuru West sections in Nakuru town. This study focused on Nakuru town because much of entrepreneurship activities and technological advancement is done in town by the youth. Whereas areas like agriculture may be seen from the outskirts, much of the business takes place in town.

#### 3.4 Sample size and sample selection

A sample is a smaller number from the population that is used to make conclusions about the whole population. Sample size selection is determined by among other things, the purpose of the study, population size, risk of selecting, the allowable sampling error, data analysis plan and the method of study. Probability sampling was used in this study and the sample size was approximately 60percent of the target population. I obtained a list from the ministry of youth and gender and randomly selected the projects but ensured I obtained the sample size required for my study.

#### 3.5 Research Instrument

A research instrument is a measurement tool designed to obtain data from research subjects. It is designed before collecting data. If data collection relates to interview then interview schedule guides are designed for collecting data. An interview schedule guide is a set of questions that the interviewer will use to collect data. If a survey will be carried out then questionnaires will be designed. This could be done on paper or online. The data collection methods depends on the purpose and aim of the study. In this study data was collected by means of paper questionnaires inorder to ensure that more respondents are reached physically in order to get adequate feedback.

#### 3.5.1 Piloting of the instruments

Piloting involves testing all the survey steps from start to finish before actual data collection. This is normally carried out with a large sample and if any data collectors are involved then they should be trained first. Data is collected and information entered in the database used. Piloting helps in identifying practical problems with implementation rather than with the survey design. The questionnaires were initially issued to 30respondents who were randomly selected from the town business centre. The response was good and therefore the rest of the questionnaires were distributed to the other respondents. Piloting was conducted to enhance validity and reliability of the questionnaire.

#### 3.5.2 Validity of the study instruments

Validity of the study instruments relates to the accuracy or the extent at which the survey measures right elements that need to be measured. That is how well the instruments measures what it is intended to measure. It permits appropriate inferences to be made about a specific group of people for a specific purpose. Thus results obtained actually represents the variables under study. It is rare that an instrument can be 100% valid and as such validity is measured in degrees. Pilot testing was used to measure the research content validity whereby the instrument was given to an expert to evaluate its relevance. Rating was done on each item on the questionnaire in a scale of most relevant(1),somehow relevant(2) and irrelevant(3). Validity was determined using content validity index(C.V.I). That is the items were rated an either most relevant or somehow relevant. This was divided by the total number of items in the questionnaire giving a 0.9 validity ratio.

#### 3.5.3 Reliability of the study instruments

Reliability of research instrument refers the ability of the instrument to measure consistent characteristics or results of a particular item over time, ensuring the same test performed upon the same individual gives the same results. Reliability estimates evaluate the stability of measures. A measure that does not contain random errors is considered as perfectly reliable. Presence of random errors can be due to biasness on the interviewer or due to questions construction. To test the reliability of the instrument used, a test-retest technique was used whereby a report on a pretest on

Bahati subcounty showed that the questionnaires were reliable since they were all filled up without queries. There was some level of consistency when compared with those returned by the Nakuru respondents.

#### 3.6 Data Collection Procedure

Data collection started when the proposal document was approved by the supervisor. The researcher used questionnaires which had both open and closed ended questions. This was to enable the researcher to obtain more information about certain variables of the respondents. The questionnaires were coded and later distributed to the selected respondents who would provide data by filling the questionnaires. The filled questionnaires were collected at a later date. This was to ensure that the questionnaires were fully filled. Where possible the questionnaires were filled and collected the same day. The researcher tried to ensure that as much as possible the questionnaires were filled and returned.

#### 3.7 Data Analysis Techniques

Data analysis involves examining, categorizing and tabulating the evidence to address the initial prepositions of the study. The data collected is usually unorganized and thus difficult to give observations on. According to Leedy,1993, questionnaires are analyzed using open coding which involves breaking down, examining, comparing and categorizing data. Thus patterns can be observed and conclusions drawn. The questionnaires received were first coded and quantitative data entered into the computer for analysis using descriptive statistics, to get the percentages and frequencies. Data was presented using frequency tables and analyzed by interpreting the percentages. Observations made were explained which included any qualitative data which was necessary for this study.

#### 3.8 Operationalization of Variables

This refers to the way that the researcher decides to measure the variables in the study. In this study several variables were measured using various methods.

**Table 3.1 operationalization of variables** 

<b>Research Questions</b>	Independent	Indicators	Types of Analysis
1. How does entrepreneurial training on information technology skills enhance sustainability of youth empowerment	Entrepreneural Training	<ul> <li>Time Management</li> <li>Efficiency</li> <li>Communication</li> </ul>	-Mean -Percentages -Frequencies
projects.  2. How does online financing enhance sustainability of youth empowerment projects.	Online Financing	<ul><li>Accessibility</li><li>Availability</li><li>Organizations giving funding</li></ul>	-Mean -Percentages -Frequencies
3. How do internal controls enhance sustainability of youth empowerment projects.	Internal Controls	<ul> <li>Transparency and Accountability</li> <li>Monitoring</li> <li>Evaluation</li> </ul>	-Mean -Percentages -Frequencies
4. How does online marketing enhance sustainability of youth empowerment projects.	Online Marketing	<ul><li>Customer opinion</li><li>Advertisement</li><li>Differentiation</li></ul>	-Mean -Percentages -Frequencies

#### 3.9 Ethical Considerations

This is done to ensure that no one suffers or is harmed by the adverse consequences of the research. As an initial step the researcher obtained a transmittal letter from the University of Nairobi and a research permit from the National Council for Science and Technology (NACOSTI) as an approval to conduct the research. In addition, the researcher introduced herself to the youth and explained the kind of study being carried out and why the study was important. The names of the respondents were not displayed on the research documents and no respondent was forced to fill the questionnaires.

#### **CHAPTER FOUR**

#### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter dealt with data analysis, presentation and interpretation of the research findings. The study was on the role of information technology in youth empowerment projects in Nakuru Town. The chapter is organized into two sections. The first section on descriptive statistics provides demographic information of the respondents. The second section presents the analysis of the responses to the objectives as provided by the respondents in the questionnaires. The data was interpreted as per the research questions. The findings is done using frequencies and percentages. This chapter also analyzed the questionnaires return rate.

#### 4.2 Response Rate

A total of 150questionaires were issued to the selected respondents out of which 102 questionnaires were returned duly completed. This represents a response rate of 68%. This high return rate was characterized by ensuring that the questionnaires were filled in the presence of the interviewer apart from slight instances where the questionnaires had to be left and picked later. some of the respondents did not return the questionnaire forms for analysis. The response rate is shown in table 4.1

Table 4.1 response rate

Item	<b>Target Sample Size</b>	<b>Response Rate</b>	Percentage %
Respondents	150	102	68%
Total	150	102	68%

#### 4.3 Demographic characteristics

The study sought to establish the following demographic information of the respondents: gender, age, level of education, kind of enterprise, leadership position, project duration, reasons for setting up the project, use of information technology skills in running the project.

#### 4.3.1 Demographic characteristics by Gender

Gender in this research was important in order to determine the extent of gender representation in the youth projects. The findings are as shown in table 4.2 below

Table 4.2 Demographic characteristics by Gender

Item	Category	Response Rate	Percentage %
Gender	Male	70	69
	Female	32	31
	Total	102	100

This study indicates that 69% or 70 respondents in this study were male while 31% or 32 respondents were female. This shows that female involvement in youth group projects tend to be lower than that of the male. This therefore means that male youth have benefitted more on information technology skills than the female counterparts. There is however 30% gender presentation.

#### 4.3.2 Demographic characteristics by age

The study sought to determine the dominant age group of the youth in the youth projects. The findings are as in table 4.3

Table 4.3 Demographic characteristics by age

Item	category	Response Rate	Percentage %	
Age	18-24	23	23	
	25-29	45	45	
	30-35	26	25	
	Above 35 years	8	8	
Total		102	100	

The results show that the youths aged between 25-29 years were the majority at 45% or 45respondents. The youths aged 30-35 years followed at 25% or 26 respondents. Youths at 18-24 years were at 23% or 23 respondents and those beyond 35 years were at 8% or 8 respondents. The majority of the youth were between 25-29 years which could be as a result of majority of youths at this age group participating in projects unlike those below 25 years, who could just be out of school and still be struggling to start projects. Thus this group could be disadvantaged in accessing information technology skills as compared to the older youth in the 25-29 years bracket.

#### 4.3.3 Demographic characteristics by Level of Education

The study sought to determine the level of education in order to establish whether the youth possessed the necessary education background to enable them gain knowledge on the use of

information technology skills to better their projects and businesses. The findings are as tabulated in table 4.4

Table 4.4 Demographic characteristics by level of education

Item	Category	Response Rate	Percentage %	
Level of Education	Primary and below	12	12	
	Secondary Level	44	43	
	Tertiary level	29	28	
	University Level	17	17	
Total		102	100	

The findings indicated that respondents who had primary school level were 12% or 12respondents. The Youths who had secondary school education were at 43% or 44respondents. Those who had attained tertiary education were at 28% or 29 respondents and those with University education were at 17% or 17respondents. This shows that most youths prefer to start businesses or projects after secondary school education. This could contributed by the fact that they are still energetic and able to gain skills easily to run their businesses as well as access new markets.

#### 4.3.4 Demographic characteristics by position in the youth project

This study sought to determine the composition of the youth projects leadership in terms of gender. The responses were as tabulated in table 4.5

Table 4.5 Demographic characteristics by position in the youth project

Item	Category	Respon	Response Rate		Percentage %	
		Male	Female	Male	Female	
Position held	Chairperson	22	10	40.00	21.30	
1 Osition field	Secretary	6	9	10.9	19.10	
	Treasurer	12	8	21.8	17.02	
	Others	2	5	3.6	10.63	
	None	13	15	23.6	31.90	
Total		55	47	53.9	46.10	

This analysis indicates that the male dominated in the chairpersons position at 40% or 22respondents as compared to females who were at 21.3% or 10respondents. This is also seen at the treasurers position where the males dominated at 21.8% or 12respondents and females at 17.02% or

8respondents.Females however dominate in the secretary positions with 19.1% or 9respondents as compared to the male who are at 10.9% or 6respondents.This therefore means that the male dominate the youth groups positions in the youth projects.

#### 4.3.5 Demographic characteristics by category of businesses of the youth projects

This study sought to determine the category of businesses that the youth projects specialized in. The responses were as tabulated in table 4.6

Table 4.6 Demographic characteristics by category of business of the youth project

Item	Category	Response Rate	Percentage %
Business Category	Farming	4	12.7
	Manufacturing	1	2.9
	Commercial Retail	12	39.4
	Poultry	4	8.8
	ICT	8	25.4
	Others	3	10.8
Total		32	100.

From the analysis there is indication that most of the youth projects specialize on commercial retail businesses at 39.4% or 12 projects followed by ICT which is at 25.4% or 8projets as compared to manufacturing which is at 2.9% or 1 project, Poultry farming which is at 8.8% or 4projects, farming which is at 12.7% or 4projects. This shows that most of the youths don't have much experience in manufacturing and thus may prefer doing retail or ICT businesses because they have the ability to gain technology skills faster and use it in their retail businesses.

#### 4.3.6 Demographic characteristics by project duration

This study sought to establish how long the projects had been in operation. This would prove how stable or well managed the projects are. The findings are as in table 4.7

Table 4.7 Demographic characteristic by project duration

Item	Category	Response Rate	Percentage %
Project duration	Less than one year	5	15.6
	1-3years	16	50
	3-5years	8	25
	Over 5 years	3	9.4
	Total	32	100.0

The analysis indicates that majority of the projects have been in existence for 1-3yearsor 16projects. These are followed by projects which have been in existence for 3-5years at 25% or 8projects. The projects which have been in existence for less than one year are at 15.6% or 5projects and those over 5years old are at 9.4% or 3projects. This suggests that most of the projects started mainly because of the Government intervention in terms of youth projects registration and awarding of tenders by the government institutions.

#### 4.3.7 Demographic characteristics by influence to start up business project

This study sought to establish what influences or reasons led to the youth starting up projects. The findings are as in table 4.8

Table 4.8 Demographic characteristics by influence to startup business project

Item	Category	Response	Percentage %
	Need for employment	62	60.8
Reasons for Project startup	Business opportunity	12	11.7
	Add income	15	14.8
	Utilize skills	3	2.9
	Others	10	9.8
	Total	102	100

The analysis indicates that youth are influenced to start up businesses mainly due to the need for employment at 60.8% or 62respondents. This is followed by the need to add income at 14.8% or 15respondents. Influence by business opportunity is at 11.7% or 12respondents. Others reasons are at

9.8% or 10respondents while need to utilize skills comes last at 2.9% or 3respondents. This shows that the youth are in need for employment and thus look for ways to fill this gap by initiating projects.

#### 4.3.8 Demographic characteristics on use of IT skills in running the project

The study sought to establish to what extent the youth projects are using information technology skills in running their businesses. The findings were as tabulated in table 4.9

Table 4.9 Demographic characteristics by the use of information technology skills in running the project

Item	Category	Response Rate	Percentage %
Use of information technology skills	Yes	30	25.0
ese of information teenhology skins	No	72	75.0
	Total	102	100

From the findings it is clear that 29.41% or 30 respondents use information technology skills in their projects. The other 70.56% or 72 youths do not use these skills or are not aware how information technology skills can help them boost their businesses.

#### 4.3.9 Demographic characteristics by the kind of IT skills used by the youth project

The study sought to establish the kind of information technology skills that the youth projects used to enhance success in their businesses. That is if they used communication skills, organizational skills, planning skills, project management skills or customer service skills. This was to established the the correct type of skills were present to enable the projects sustainable. The findings were as in table 4.10

Table 4.10 Demographic characteristics by kind of information technology skills used by the youth projects

Item	Category	Response Rate	Percentage %
Kind of information	Entrepreneurial	2	6.67
technology skills used	Financing	6	20.00
	Planning	9	30.00
	Project mgt	11	36.66
	Marketing	2	6.67
	Total	30	100

The findings indicated that 6.67% or 2respondents used information technology skills in communication,20% or 6respondents used it for organizing their projects,30% or 9respondents used it for planning,36.67% or 11respondents used information technology skills for managing their projects while 6.67% or 2respondents used information technology skills for customer service. This indicated that majority of the youth projects used information technology skills to better manage their projects and probably to find new and better ways of achieving better returns.

#### 4.3.10 Demographic characteristics by satisfaction for use of IT skills in the youth projects.

This study sought to establish the rate of satisfaction in using information technology skills by the youth projects that used information technology skills in their operations. The findings were as in table 4.11

Table 4.11 Demographic characteristics by satisfaction in use of information technology skills in running the youth project.

Item	Category	Response Rate	Percentage %
Satisfaction in use of information	Very Satisfied	12	40.00
technology skills	Satisfied	13	43.33
	Dissatisfied	5	16.67
	Total	30	100

The findings indicated that out of the 30youths from the projects that used information technology skills in their businesses, 83.33% or 25respondents were satisfied, while 16.67% or 5respondents are dissatisfied. The youth projects satisfaction mainly comes from technology skills assisting them in identifying new markets for their products as well as ease in application and access of loans in the online platform.

## 4.3.11 Demographic characteristics by changes brought about by use of IT skills in the youth projects.

The study sought to establish the changes which information technology skills had brought to the youth projects that used information technology skills in running their projects. The findings are as in table 4.12

Table 4.12 Demographic characteristics by changes that information technology skills have brought to the youth project.

Item	Category	Response	Percentage	
		Rate	%	
Changes brought about	Increased sales	8	26.67	
by use of information	Improved customer relation	8	26.67	
technology skills	Improved market information	14	46.66	
Total		30	100	

From the findings by the youth groups that used of information technology skills, it is clear that it had led to increased sales at 26.67% or 8respondents. Further use of information technology skills had improved customer relation at 26.67% or 8respondents while market information had improved at 46.66% or 14respondents. This thus means that information technology skills are very useful in any business project since there is great chance of knowing what is going on in the market and ways of differentiating products as well as being able to get ready markets for products. Thus the youth projects would be encouraged to embrace technology skills.

# 4.3.12 Demographic characteristics by what would be improved to bring about satisfaction in use of information technology skills in youth empowerment projects.

The study sought to determine what the youths would like improved on the use of information technology skills in carrying on their projects. The findings are as in table 4.13

Table 4.13 Demographic characteristics by changes improvements to bring about satisfaction in use of information technology in the youth project.

Item	Response	Percentage%
	Rate	
Improvement in use of	9	30.00
information technology improved accessibility		
lowered internet charges	16	53.33
updates on technological developments	5	16.67
Total	30	100

From the findings it indicates that changes by lowered internet charges would greatly improve satisfaction in use of information technology in running the youth projects at 53.33% or 16projects. This was followed by improved accessibility at 30% or 9projects. Updates on technological developments was the least at 16.67% or 5 projects.

#### 4.4 Entrepreneurial training on sustainability of the youth empowerment projects.

The study also sought to establish how entrepreneurial training on information technology skills enhance sustainability of the youth empowerment project. It sought to establish how the youth had benefited from entrepreneurial training and if it had brought about sustainability of the projects. It sought to establish if good communication is enhanced in the project operations, if information technology skills is essential for empowerment of youth in business projects, if the projects have policies to ensure proper time management to avoid wastage, if there is county support in information technology skills training for the youth projects, if the youth group capitalizes on new business opportunities and if the group stresses on efficiency in the project operations. The findings are as in table 4.14

Table 4.14 Entrepreneurial training on sustainability of youth empowerment project.

Item G	Good communication		Empowerment in Youth projects		Policies to ensure proper time management	
	Freq.	%	Freq.	%	Freq.	0/0
Strongly Disagree	-	-	16	53.33	10	33.33
Disagree	21	70.00	10	33.33	18	60.00
Neutral	4	13.33	3	10.00	-	-
Agree	3	10.00	1	3.33	2	6.67
Strongly agree	2	6.67	-			
Total	30	100.00	30	100.00	30	100.00

The findings indicated that 70% or 21 respondents disagreed that there was good communication in the youth projects. This made it very difficult for the groups to operate effectively The study also indicate that 13.33% or 4.16.67% or 5respondents agreed that there was good communication within the youth empowerment projects. On project empowerment the findings indicated that 86.66% or 16respondents disagreed that there was empowerment in the youth projects while 13.33% or 4respondents agreed that empowerment was present in the projects. This made it very impossible for the projects to operate effectively. On policies to ensure proper time management, 93.33% or 28 respondents disagreed to having policies for proper time management while 6.67% or 2respondents agreed to having policies for proper time management. This brought about a lot of tension due to poor time management.

#### 4.5 Online financing on sustainability of youth empowerment projects.

This study also sought to establish how online financing enhance sustainability of funding of the youth projects. It sought to establish if the youth projects had access to credit from the Government youth fund and other financiers, if the projects had online platforms for accessing credit and if the projects were able to repay and view loan repayments online. The findings were as in table 4.16

Table 4.16 Online financing on sustainability of youth empowerment projects.

Item	Access to credit from		On the	On the online platform		Repay & view	
	Govt. Y	outh fund and	for acce	for accessing credit		nents online	
	Other fir	ther financiers					
	Freq	%	Freq.	%	Freq.	%	
Strongly Disagree	-	-	-	-		-	
Disagree	21	70.00	19	63.33	21	70.00	
Neutral	-	-	-	-	-	-	
Agree	7	23.33	5	16.67	9	30.00	
Strongly agree	2	6.67	6	20.00	-	-	
Total	30	100.00	30	100.00	30	100.00	

The findings indicated that 70% or 21respondents did not have access from the Government youth fund and other financiers 30% or 9respondents had access to these funds. On the online platform for accessing credit, 63.33% or 19respondents did not have online platforms for accessing credit while 36.67% or 11respondents had online platforms for accessing credit. On repayments and viewing of repayment online 70% or 21respondents did not repay or view repayments online while 30% or 9respondents repaid and were able to view the repayments online. This therefore indicated that a substantial number of the projects were not able to access funding and very few used the online platforms for accessing as well as repaying loans.

#### 4.6 Internal controls on sustainability of youth empowerment projects.

This study sought to establish how online internal control system enhance sustainability of the youth projects. It sought to establish if the youth projects had a vision and mission, if they maintained reliable accounting records, if online internal control system assisted them in monitoring and implementation of the projects progress. The findings are as tabulated in table 4.15

Table 4.15 Internal controls on sustainability of youth empowerment projects.

Item	Project has vision		Project	maintains reliable	Monitoring	projects
	& Mission		accounting records		progress	
	Freq	%	Freq.	%	Freq.	%
Strongly Disagree	-	-	-	-	-	-
Disagree	4	13.33	19	63.33	18	60.00
Neutral	2	6.67	-	-		
Agree	9	30.00	8	26.67	7	23.33
Strongly agree	15	50.00	3	10.00	5	16.67
Total	30	100.00	30	100.00	30	100.00

The findings indicated that 80% or 24respondents that agreed that they had a vision and mission for their projects.13.33% or 4respondents disagreed to having vision and mission statements while 6.67% or 2respondents were neutral which could have been characterized by lack of knowledge on what visions and missions were. On reliable accounting records 63.33% or 19respondents did not maintain reliable accounting records which led to a lot misappropriation of funds and lack of accountability. The study further indicated that 36.67% or 11respondents maintained reliable accounting records. On monitoring of project progress 40% or 11respondents agreed to monitoring of project progress while 63.33% or 19respondents did not monitor. This brought about lack of transparency and misunderstandings within the group since no proper timelines were followed.

#### 4.7 Online marketing on sustainability of youth empowerment projects

This study sought to establish online marketing enhanced sustainability of the youth projects. It sought to establish if the youth projects had online platforms for accessing markets both locally and internationally, if they focused on customer opinions in branding and packaging their products and if they were able to differentiate their products to make the suitable to the customers. The findings were as in table 4.17

Table 4.17 Online marketing on sustainability of youth empowerment projects

Item	Onlin	Online platforms		on customer	Differentiate products	
	for accessing ready markets		opinions in branding and packaging			
	Freq.	%	Freq.	%	Freq.	%
Strongly Disagree	-	-	-	-	-	-
Disagree	19	63.33	9	30.00	18	60.00
Neutral	_	-	12	40.00	7	23.33
Agree	8	26.67	9	30.00	2	6.67
Strongly agree	3	10.00	-	-	3	10.00
Total	30	100.00	30	100.00	30	100.00

The findings indicated that, 63.33% or 19respondents did not use online platforms to access ready markets while 36.67% or 11respondents used online platform to access ready markets. On focus on customer opinion in branding and packaging, 30% or 9respondents agreed to focus on customer opinions in branding and packaging, 40% or 12respondents were neutral while 30% or 9respondents disagreed on focusing on customer opinion in branding and packaging. On differentiating products, 60% or 18respondents disagreed to differentiating their products to fit the market demand, 23.33% or 7respondents were neutral on differentiating products while 16.67% or 5respondents agreed on differentiating products. This indicated that despite the youth projects using information technology skills in their businesses, majority did not use it to access markets, to do branding as well as differentiating their products. This led to low sales and increased costs for the youth projects.

#### **CHAPTER FIVE**

#### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter gave a summary of the major findings, conclusions and recommendations of the study. This study was guided by the following objectives: to examine how entrepreneurial training on information technology skills enhance sustainability of the youth empowerment projects, to assess how online financing enhance sustainability of youth empowerment projects, to determine how use of internal controls enhance sustainability of youth empowerment projects, and to establish how online marketing enhance sustainability of youth empowerment projects.

#### 5.2 Summary of Findings

The purpose of this study was to establish the role of information technology skills on youth empowerment projects in Nakuru Town. Based on the objectives of this study, the first objective being to examine how entrepreneurial training on information technology skills enhance sustainability of the youth empowerment. It sought to establish how the youth had benefited from entrepreneurial training and if it had brought about sustainability of the projects. It sought to establish if good communication is enhanced in the project operations, if information technology skills is essential for empowerment of youth in business projects, if the projects have policies to ensure proper time management to avoid wastage, if there is county support in training on information technology skillsof the youths, if the youth group capitalizes on new business opportunities and if the group stresses on efficiency in the project operations.

The study established that 70% of the respondents disagreed that there was good communication within the groups. The study also established that 86.66% of the respondents disagreed that there was empowerment of the youth project members on the projects objectives. The study also established that 93.33% of the respondents disagreed to having policies to ensure proper time management in the business. This greatly led to misuse of the projects time and thus poor performance. If appropriate entrepreneurial skills were acquired on how to run these projects, it would go along way to ensuring that the projects were successful. Proper communication would be enhanced, time management would be given a priority as well as proper policies and procedures. Every member would feel as having an obligation to ensure that the project works.

The second objective was to assess how online financing enhanced sustainability of youth empowerment projects. It sought to establish if the youth projects had access to credit from the Government youth fund and other financiers, if the projects had online platforms for accessing credit and if the projects were able to repay and view loan disbursements and repayments online It

was established that 70% of the respondents did not have accessibility of funds from the Government Youth fund and other financial institutions. It was further established that 63.33% respondents did not have online platforms for accessing credit facilities. This made it very tedious and time consuming to access these funds. This meant that timelines were not met as expected. Further analysis established that 70% were not able to repay or view disbursements and repayments on loans online which was very time consuming as they had to move to the financiers to do the repayments as well as seek clarity on repayment progress. Online financing was seen to be very crucial as it would enable any member to view their credibility status and even ask questions. With the manual system, funds could be misappropriated by a few members who would bring failure to the whole project.

The third objective was to determine how internal controls enhance sustainability of youth empowerment projects. It sought to establish if the youth projects had a vision and mission, if they maintained reliable accounting records, if the projects had online internal controls to assist them in monitoring and implementation of the projects. It was established that 80% of the youth empowerment projects agreed to have vision and mission. These however were not clear on the youth members. It was also established that 63.33% of the youth projects did not maintain reliable accounting records. This therefore created friction within the group members. It was also established from the analysis that 60% of the respondents disagreed to having a monitoring mechanism of the project's operations. This therefore meant that the internal controls needed to be looked into to take care of all the participants by introducing the online internal controls which could be accessible to every member. This would bring more and proper understanding of the company vision and mission. Record keeping would also be enhanced thus preventing loss of project funds. The members would be in a position to monitor project's performance.

The fourth objective was to establish how online marketing enhance sustainability of youth empowerment projects. It sought to establish if the youth projects had online platforms for accessing markets both locally and internationally, if they focused on customer opinions in branding and packaging their products and if they were able to differentiate their products to make them suitable to the customers. From the analysis it was established that 63.33% of the respondents did not use online platforms to access markets for their products. This was established to be characterized by increased costs in internet usage as well as mobile phone applications. This difficulty in accessing discouraged the youth from accessing wider markets locally and internationally. The study further established that only 30% of the respondents focused on customer opinions when it came to branding and packaging. This hindered marketability of their goods since they did not have a clear picture of what the customers really wanted. This was mainly due to the high cost of getting customer feedback online. Further analysis indicated that 60% disagreed to

differentiating their products to fit the market demands. This was due to lack of internet skills on how to differentiate their products as well as the high costs involved in designing unique products. This therefore means that the cost of accessing online information needs to be looked into and government intervention will be of great help to ensure that this information can be easily accessed at minimum costs.

From the study, the results indicate that majority of the youth projects have not taken advantage of information technology skills to improve their business operations. From the first objective which is to examine the role of entrepreneurial training on information technology skills to enhance sustainability of youth empowerment projects, it is evident that there is poor communication, poor or no policies and thus no evident empowerment on the youth projects members. A good business requires good and open communication, proper policies and procedures which enables the project to maximize on profits. This actually shows how lack of entrepreneurial training led to most youth empowerment projects failing. This can however be enhanced by use of information technology skills to enable the projects set up proper policies which can be accessible to all members. This will also bring about empowerment as members will feel part of the project.

In the second objective which was to assess how online financing enhance sustainability of youth empowerment projects, the study revealed that majority of the youth projects did not have accessibility to credit. There was also low online platform usage on the projects to access credit and information on ready financiers to boost the projects. This greatly hindered expansion of the youth projects since very minimal funding could be raised by the members. This as well meant that a lot of time was wasted in applying and receiving funding from the financiers. Most lending institutions require online registration which means that most of the projects had difficulties in accessing funds. Information technology skills on online financing is therefore very vital in remedying this. Use of online platforms will enhance maximum time utilization and efficiency in accessing, utilization and repayment of loans.

In the third objective which was to determine how use of internal controls enhance sustainability of the youth empowerment projects, it was observed that majority of the youth projects had vision and mission statements. However these were not clear to most of the members. They did not understand what the strategic goals of the projects were. This meant that they were not enthusiastic to meet the projects objectives. Most of them did not seem to understand what visions and missions were. It was also observed that reliable accounting records were not kept and therefore bringing a lot of misuse of projects funds. Accountability was not being practiced and this lead to conflicts as no one could understand the records kept. Further studies revealed that monitoring of the projects was only done to a certain extent. This meant that projects time would be misused or

the business would head in the wrong direction for not being monitored properly. Proper monitoring would also ensure that resources are used as planned.

The fourth objective was to establish how online marketing enhance sustainability of youth empowerment projects. From the analysis it was established that only 36.67% projects used the online platforms for marketing their products and accessing information on any new market strategies. It was also established that just 30% of the youth projects focused on customer opinions before branding and packaging of products. Most of the youth groups did not differentiate their products to fit the market needs. This means that the youth groups did not utilize the available opportunities. The online platforms are very useful in providing market information and what products are demanded most. If the youth groups utilized the internet in a better way, they would be able to provide products that are fast moving and this would enable them to plan their resources well and enable them to settle the loans efficiently.

#### **5.3** Conclusions of the Study

Youth projects are an important driver of economic change and progress. They lead to job creation and empowerment of the young generation. According to MOYAS 2008, youth projects enable economic activities by creating self employment activities. However from the study it can be realized that these youth projects are affected by various factors which derail them from meeting their goals. Most of these projects have been in operation for between 1 to 3years. This means that they are still in their initial stages and need to be boosted so that they could operate effectively. This could be through capital enhancement as well improvement on entrepreneurial skills coupled by technological advancements.

Most of these projects are not able to access funds as and when required and majority also have not acquired the necessary entrepreneurial skills to run the projects. There is need to gain skills on online financing so that these resources can be accessed easily and efficiently. Most of the Youth projects are male dominated. They have taken much of the leadership positions thus demolorising their female counterparts. There is high female population and they need to be empowered inorder to assist in economic progress. About 40% of the youth projects are in the commercial retail businesses. This means that the youths are not innovative enough to come up with unique activities inorder to penetrate the market. There is need to empower them to be in a position to come up with unique ideas to boost the economy. This empowerment will come along with information technology skills which will enable them come up with very unique products and services.

The retail businesses deal with similar products and services and this may bring about loses as customers would not be moved. Most of the youths are between the age of 25 years to 29 years and majority in this group have gone upto secondary school education. This means that they have

not gained enough skills to be in a position to take up high roles. This has greatly contributed to mismanagement of these projects. Those who have gone to tertiary levels are very minimal as compared to the required numbers to spearhead and take control of the projects. At this age group the youths are normally very energetic and need much roles to explore on their potential. This means that the youths need to be very much engaged and skilled properly so as to sustain these projects. Much of the required skills are technology based so that they can explore on opportunities and any new information in the markets.

#### 5.4 Recommendations of the Study

Based on this study, the follow recommendations were made:

The study established that most of the youths have gone upto secondary school education. There are recommendations that entrepreneurship skills be made to be part of secondary school curriculum. This will enhance knowledge on wider areas on entrepreneurship.

The age, gender, level of education, reason to start up the youth project and members duration in the project greatly affect the prosperity of the project. There should be great consideration when it comes to setting up the projects to ensure that all these factors are put into consideration. When a youth group is coming up and being registered, the ministry concerned should look into this to ensure there is continuity of the program and to avoid these projects from falling off after few years of operation.

Government funding agencies should make it easy for the youth projects to access funds. There should however be prudence in issuing these funds such that misappropriation could be avoided. Accountability should be key and before the groups are financed, some background checks need to be carried out to avoid issues of groups getting funds and failing to repay back. Continuous monitoring of the activities of the groups is key to ensure that they are operating within their mandates.

The study also established that youths have accessibility to information on technological advancements but are reluctant to utilize such information because of reasons like high costs on internet usage, and lack of technology based equipments like computers and mobile phones which can support such information. There is need for the government to invest much on information technology and innovation so as to enable easy access as well as maintenance of these equipments at low costs. The government needs to lower the internet charges to empower the youth to access new markets and raw materials for their businesses.

According to the study, the youths mainly start new projects for employment purposes. Most of these businesses are commercial which means that they are not competitive enough since they deal with what is already available. This is the reason why the youth need to be innovative enough

and with the use of information technology they can go a long way in attaining this. The government also needs to come up with talent identification and mentorship programmes whereby individual talents can be established early enough and taken care of until the youth are old enough to start on projects. The private sector also needs to come in handy to assist the upcoming youths who have the capabilities to move the economy forward.

#### 5.5 Suggestions for Further Research

The youth projects and programmes greatly contribute to the well being of the economy. The youth being the majority need to be managed in a way that will bring a positive impact to the society and economy at large.

There is need for further research on the following areas:

- 1. Investigate the role of female entrepreneurs in project sustainability in Nakuru county
- 2. Assess the impact of government policy on youth empowerment programmes.
- 3. Establish the role played by the County Government on Youth empowerment Projects in Nakuru County.

#### REFERENCES

- Irene,N.K(2009),An investigation into the factors influencing the success of youth Entreprises in Nyeri municipality, University of Nairobi.
- World Economic Forum, 2015, Competitiveness Report 2014-2015 http://reports.weforum.org/global competitiveness report-2014-2015/subsaharan-african/
- Jacqui Kew,(2015), Africa's Young Entrepreneurs.unlocking the potential for a brighter future, University of Cape Town
- OdunayoSalau(July 2014), Attitudes of youths young graduates towards entrepreneurial skills acquisition, Covenant University, Business Management Department.
- Francois Bonnici(2015), why Africans young people should turn toentrepreneurship, Bertha Centre for Social Innovation and Entrepreneurship, University of Cape Town.
- Kempe Ronald Hope Sr.(2012), Engaging the youth in Kenya: Empowerment, education and employment. International Journal of Adolescence and Youth, UNDP Nairobi, Kenya.
- June NdeteMutuku(2009), Effect of mpesa technology strategy on the performance of Kenya Commercial Bank Ltd, University of Nairobi.
- Omolo, J. (2011) 'Youth Unemployment in Kenya'. In Kitonga A. &Njonjo, K.S. (Eds.) Youth Research Compendium. Youth: Infinite Possibility or Definite Disaster? Nairobi: Institute of Economic Affairs
- RaduanCheRose(2012), Defining concept of technology and technology transfer, National Defence University of Malaysia, Kuala Lumpur Malaysia.
- OECD (2012), Putting the Young in Business: Policy Challenges for Youth Entrepreneurship. The LEED Programme, Territorial Development Divisio, Paris.
- Ritchel M.(2010), Growing up digital, wired for distraction, Retrieved from http://www.nytimes.com/2010/11/21/technology/21brain.html?page wanted=all&\_r=0
- P.Malyadri,B.Sumana, Youth (2012), Youth Entrepreneurship: Key challenges for inclusive Development, Osmania University.
- Chigunta, F. (2002). Youth Entrepreneurship: Meeting the key policy challenges. Wolfsoncollege, OxfordUniversity, England.
- Pathak, P., Holmes, J., & Zimmerman, J (2011). *Accelerating Financial Capability among Youth: Nudging New Thinking*. Washington, DC: New America Foundation.
- ILO (2005), Youth: Pathways to decent work, Report VI Promoting Youth Employment-Tackling the challenge, ILC, 93<sup>rd</sup>Session, Geneva.
- Muthee, M.W. (2010). *Tackling Youth Unemployment in Kenya*, OSI New Simon African Voices Scholar, Woodrow Wilson Centre
- Matsumoto, M., Hengge, M & Islam, I. (2012). Tackling the youth employment crisis: A macroeconomic perspective. ILO, Geneva

- Lee, D.Y. & Tsang, E.W.K. (2001). The effects of entrepreneurial personality, background and networking activities on venture growth, Journal of management studies, Vol. 38 No. 4.
- Giroud, Axele (2003). Transnational Corporations, Technology and Economic Development: Backward Linkages and Knowledge Transfer in South-east Asia. Cheltenham, UK: Edward Elgar Publishing Limited.
- Marshall,R.(1978),Rationalising the problem of youth unemployment.Journal of Education and training,Vol.20.Issue.3.
- Abdullah, Syahida and Muhammad, Amran (2008). The Development of Entrepreneurship in Malaysia: State-led Initiatives. *Asian Journal of Technology Innovation*. **16** (1). *101-116*
- Mugenda O.M and Mugenda, A.G (1999). Research Methods: Quantitative and Qualitative Approaches, Acts, Nairobi.
- Ministry of Youth Affairs and Sports(2009). Youth Employment Marshall Plan.
- Kanyari, W, J & Namusonge, S.G. (2013); Factors that influence the Kenyan youth entrepreneurs towards the youth enterprise development fund: A case study of Gatundu south district, Kenya. *International Journal of Education and Research* Vol. 1 No. 5 May 2013.
- General Assembly Resolution(2008), A/RES/62/126, Policies and Programmes involving Youth in the global economy-promoting Youth participation in social and economic development.
- Felix Wahoro(2013), Challenges Affecting Youth Access to Youth Enterprise Fund. A study of Youth Empowerment Support Services-Kenya, United States International University, Africa
- H.GuyfordStever and Janet H.Muroyama(1988), *Globalization of Technology*, International Perspectives.
- House, W.J., Ikiara, G., McCormic, D. (2011). Self-employment in Kenya development strategy. In Gray, K., ed., Employment and education: Strategies and opportunities for development. Professors of World Peace Academy, Nairobi, Kenya.
- Alexander Giones, Francese Miralles (2015), Do Actions Matter More that Resources, A signaling Theory Perspective on the Technology Entrepreneurship Process.
- OECD(2010), *Most influential theories of learning*. The office of learning and Teaching, Department of Education and Training. Melbourne
- ILO (2008), *Skills for Improved productivity*, *employment growth and development*, Report V, International Labour Conference, 97<sup>th</sup> Session, Geneva.
- Lin, C. A., & Atkin, D. J. (2007). Communication technology and social change: Theory and implications. Mahwah, N.J: Lawrence Erlbaum Associates.
- Marshall, C. & Rossman, G. (1999). Designing qualitative research. 3rd ed.
- Shapiro, A. L. (1999). The control revolution: How the Internet is putting individuals in charge and changing the world we know. New York: PublicAffairs.
- Subrahmanyam, K., & S mahel, D. (2011). *Digital youth: The role of media in development*. New York: Springer.

- Turow, J., &Kavanaugh, A. L. (2003). *The wired homestead: An MIT Press sourcebook on the Internet and the family*. Cambridge, Mass: MIT Press.
- ADEA, (2014). Kenya Country Report for the 2014 Ministerial Conference On Youth Employment How to Improve, Trough Skills Development and Job Creation Access of Africa's Youth to the World of Work Abidjan, Côte D'ivoire, 21-23 July, 2014
- Barclay Bank Survey. (2009). Youth Entrepreneurship in the United Kingdom. London, UK.
- Figura, R.E. (2012). *An end to Poverty through Micro lending*. An examination of the Need from credit by poor, Rural Women and success of Micro lending Programmes. http://www.nesl.edu/intl Journal/Vol8/micro lending -V8nl.pdf,
- Sarosa, S, and D, Zowghi (2003), "Strategy for adoption information technology for SMEs: Experience in adopting email within an Indonesian furniture company," Electronic Journal of Information Systems Evaluation 6(2): 165-176
- Cargo, M., Grams, G.D., Ottoson, J.M., Ward, P. and Green, L.W. 2003. Empowerment as fostering positive youth development and citizenship. *American Journal of Health Behaviour*, 27(Suppl. 1): S66–S79.
- PWC (2013.Annual Report pg 26-27.
- Flores, K.S. 2008. *Youth participatory evaluation: Strategies for engaging young people*, San Francisco: Jossey-Bass Publishers.
- Ongeri E.(2013) Factors influencing the sustainability of youth groups in Marani District Kisii County, Kenya. University of Nairobi.
- Schumpter J.A (1947), *The creative Response in Economic History Journal of Economic History* WY 7.149-159. New York. Harper & Roc Publishers.
- Njeri K.E (2012). Factors influencing Sustainability of youth group entrerprises: The cese of small and medium entreprises in Nyeri town municipality, Kenya. University of Nairobi.
- Chemwa J.(2015). Factors influencing repayment of Youth Entreprise Development Fund loans by youth groups in Chepalungu Constituency, Bomet County. University of Nairobi.
- Hayton J.(2015). *Leadership and management skills in SMEs*, Warwick Business School. Department of Business, Industry and skills.
- Chigunta F.(2005) Being "Real" about Youth Entrepreneurship in Eastern and Southern Africa: Implications for Adults, Institutions and sector structures. ILO. No 72.
- Michael Jassor ,(2016). Factors influencing sustainability of youth group projects funded by youth enterprise development fund, Bomet County, Kenya. University of Nairobi.
- Joseph J. Mugure (2013). Effectiveness of socio-economic projects on youth empowerment in Nakuru Municipality, Kenya. University of Nairobi
- V.Kumar and RajendraK.Srivastava (2004). *Measuring market productivity*: Current knowledge and future directions. University of Connecticut.

- Gomber, Koch and Siering (2017), *Digital Finance and Fintech*: Current research and future research dimensions, Journal of Business Economics.
- Ahlers GK. Cumming D, Gunther C, Schweizer D (2015) Signalling in equity crowdfunding. Entrep Theory Pract 39(4):955-980.doi:10.111/etap.12,157

#### **APPENDICES**

**Appendix i: Letter of Transmittal** 

From: EmmahWangui Mugo University of Nairobi Nakuru Learning Centre emmahmugo@yahoo.com

To: The Youth Nakuru Town Nakuru County

Dear Respondent

This is to kindly inform you that I am a student at the University of Nairobi pursuing a Master's degree in Project Planning and Management.

I am conducting a study on the role of information technology skills on youth empowerment projects in Nakuru County and this being a requirement for completing my Master's Degree at the University I am requesting you to participate in the study.

The participation is voluntary and any information obtained from you will be used for academic purposes only and will be strictly confidential.

Thank you for your participation.

Yours faithfully,

Emmah W.Mugo Registration No.L50/88951/2016 Mobile 0722-356260

#### Appendix ii: Questionnaire to the Youth in Nakuru Town

#### Introduction

I am a student at the University of Nairobi pursuing a Master's degree in Project Planning and Management and conducting a study on the role of information technology skills on youth empowerment projects in Nakuru County. The purpose of my study is to identify what role technology has played in empowering the youth towards sustainable projects and if there are any gaps in use of information technology skills and how this can be addressed so that the youth can fully embrace the benefits of using information technology. This being a requirement for completing my Master's Degree at the University, I am therefore requesting you to participate in the study. The participation is voluntary and any information obtained from you will be used for academic purposes only and will be strictly confidential.

#### **Section1: Demographic Information**

This section is intended to collect data on your personality as my respondent. This data will assist in ensuring that all intended respondents are incorporated in my research. Kindly put a tick  $(\checkmark)$  in the box provided.

1.	What is your gender?	
	Male	
	Female	
2.	What is your age?	
	15-20yrs	
	21-25yrs	
	26-30yrs	
	31-35yrs	
3.	What is your level of Education?	
	Master's Degree	
	Bachelors's Degree	
	Diploma	
	Certificate	
	None of the above	
4.	Are you currently in a youth project?	
	Yes	
	No	

Э.	what kind of enterprise is the youth proje	ect involved in?
	Farming	
	Manufacturing	
	Commercial Retail	
	Poultry	
	ICT	
	Others (Specify)	
6.	If Yes what is your position in the youth J	project?
	Chairperson	
	Secretary	
	Treasurer	
	Other(Specify)	
7.	How long has the project been in operation	on?
	0-3months	
	0-3months	
	4-6months	
	7-9months	
	10-12months	
	1-3years	
	3years and above	
8.	What was the main reason for starting up	the business?
	Self Employment	
	To add income	
	Passion driven	
	Others(Specify)	
9.	What influenced the startup of the youth J	project?
	Need for employment	
	Need to utilize skills	
	Business Opportunity	
	Others(Specify)	

10.	Have you been using information technological	ogy skills in running the project?
	Yes	
	No	
11.	If Yes what kind of information technolog	y skills do you use in the project?
	Entrepreneural	
	Online financing	
	Planning skills	
	online marketing	
	Customer service skills	
12.	For how long have you used the skills?	
	0-3months	
	4-6months	
	7-9months	
	10-12months	
	Above 1year	
13.	If No, give reasons for not using informat	ion technology skills in the project.
14.	Has information technology brought abou	at any change in your project?
	Yes	
	No	
15.	If Yes, what change has it brought?	
	Increased sales	
	Improved customer relation	
	Improved market information	
	Others(specify)	
16.	If No, what would you like improved in	norder to enhance use of information technology
	skills in the project?	
17	How would you rate your satisfaction for	use of information technology in the project?
	Satisfied	
	Dissatisfied	

18. What would you	like improve	ed to bring al	out satisfaction	in use of informa	ation technology
skills in the proje	ct?				
Improved accessi	bility				
Lowered charges	·	et use			
_					
Updated informat	tion on techn	ological deve	elopments		
Others(specify)					
Section 2. Entwenness	nal training	on guatainal	sility of vouth o	mnowomment nu	oioota
Section 2: Entrepreneur					
This section is intend	ed to colle	ect data on	how informat	ion technology	skills enhance
entrepreneurial training.	Kindly answ	ver the follo	wing questions	using the scale of	of 1-5(5-strongly
agree1-strongly Disag	gree)				
	,				
Entrepreneural Training	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Good communication	Disagree				Agree
is encouraged in the					
project operations					
Information technology					
skills is essential for					
empowerment of youth					
in business projects					
The youth project has					
policies to ensure					
proper time					
management to avoid wastage					
Information					
Technology skills					
influences					
entrepreneurial					
training.					
You have County					
support on Information					
Technology training for					
the youth project					

The

youth

capitalizes on new business opportunities

There is great stress on

efficiency in the project operations

group

#### Section 3: Online financing on sustainability of youth empowerment projects.

This section is intended to collect data on how information technology skills enhance funding of the youth project. Kindly answer the following questions using the scale of 1-5(5-strongly agree.....1-strongly Disagree)

Online Financing	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
The group has access to credit and					
financing from the Government Youth					
Fund and other financiers.					
The project has online platforms for					
accessing credit from various					
financiers					
The project repays and views the loan					
repayment schedules online.					
The project has mobile applications					
which enhance accessibility to many					
financiers.					

#### Section 4: Internal controls on sustainability of youth empowerment projects.

This section is intended to collect data on how information technology skills enhance proper internal control system of the youth project. Kindly answer the following questions using the scale of 1-5(5-strongly agree.....1-strongly Disagree)

<b>Internal Controls</b>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The project has a vision					
and mission					
The youth project					
maintains reliable					
accounting records					
The youth project has					
proper checks on					
approvals and					
authorizations on					
expenditure.					
There is transparency					
and accountability in the					
project activities.					
Information technology					
skills helps in					
monitoring the project's					
progress.					
Information technology					
skills helps in project					
implementation					

#### Section 5: Online marketing on sustainability of youth empowerment projects.

This section is intended to collect data on how information technology enhances marketability of goods and services of the youth project. Kindly answer the following questions using the scale of 1-5(5-strongly agree.....1-strongly Disagree)

Online marketing	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
The project has online					
platforms for accessing					
markets both locally and					
internationally.					
The project focuses on					
customer opinions in					
branding and packaging its					
products.					
The project uses					
advertisement platforms to					
establish a target market					
for its products.					
The project is able to					
differentiate its products to					
make them suitable to the					
customers.					

#### **Other Comments**

1.	How would you describe entrepreneurial training on information technology skills on sustainability of youth empowerment projects?
2.	How would you describe online financing on sustainability of youth empowerment projects?
3.	In your own opinion how would you explain the influence of internal controls on sustainability of youth empowerment projects?

How does online marketing enhance sustainability of youth empowerment projects?
What Government interventions would you advocate for in enhancement of use of information technology skills to improve livelihood amongst the youth?

Thank you for your participation



#### **UNIVERSITY OF NAIROBI**

Open, Distance & e-Learning Campus SCHOOL OF OPEN AND DISTANCE LEARNING DEPARTMENT OF OPEN AND DISTANCE LEARNING NAKURU LEARNING CENTRE

Tel 051 – 2210863

Our Ref: UoN/ODeL/NKRLC/1/12

P. O Box 1120, Nakuru *29*<sup>th</sup> June 2018

#### To whom it may concern:

#### RE: EMMAH WANGUI MUGO L50/88951/2016

The above named is a student of the University of Nairobi at Nakuru Extra-Mural Centre Pursuing a Masters of arts Degree in Project planning and management.

Part of the course requirement is that students must undertake a research project during their course of study. She has now been released to undertake the same and has identified your institution for the purpose of data collection on "Role of Information Technology Skills in Youth Empowerment Projects: A Case of Nakuru Town, Kenya

For that reason, I am writing this, requesting you to assist her.

Yours Faithfully,

COORDINATOR

DR. OURU JOHN NYAEGAH (PH.D) LECTURER: ODeL CAMPUS

UNIVERSITY OF NAIROBI

#### **Appendix iv: Ministry of Education Authorization Letter**

## MINISTRY OF EDUCATION STATE DEPARTMENT OF EARLY LEARNING OF BASIC EDUCATION

Telegrams: "EDUCATION",
Telephone: 051-2216917
When replying please quote
Email:cdenakurucounty@gmail.com
Ref.CDE/NKU/GEN/4/1/21 VOL.VII/71



COUNTY DIRECTOR OF EDUCATION NAKURU COUNTY
P. O. BOX 259,
NAKURU.

6<sup>th</sup> August, 2018

TO WHOM IT MAY CONCERN

### RE: RESEARCH AUTHORIZATION -EMMAH WANGUI MUGO PERMIT NO. NACOSTI/P/18/55812/24061

Reference is made to letter NACOSTI/P/18/55812/24061 dated  $26^{th}$  July, 2018.

Authority is hereby granted to the above named to carry out research on "Role of Information Technology skills in youth empowerment projects: A case of Nakuru Town" Nakuru County, Kenya for a period ending 25<sup>th</sup> July, 2019.

For COUNTY DIRECTOR OF EDUCATION
NAKURU COUNTY

Kindly accord her the necessary assistance.

G.N.KIMANI

FOR: COUNTY DIRECTOR OF EDUCATION

**NAKURU** 

Copy to:

University of Nairobi P.O Box 30197-00100 NAIROBI

#### **Appendix v: NACOSTI Authorization Letter**



#### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420 Fax:+254-20-318245,318249 Email: dg@nacosti.go.ke Website: www.nacosti.go.ke When replying please quote NACOSTI, Upper Kabete Off Waiyaki Way P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No. NACOSTI/P/18/55812/24061

Date: 26th July, 2018

Emmah Wangui Mugo University of Nairobi P.O. Box 30197-00100 **NAIROBI** 

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "Role of Information Technology skills in youth empowerment projects: A case of Nakuru Town, Kenya" I am pleased to inform you that you have been authorized to undertake research in Nakuru County for the period ending 25<sup>th</sup> July, 2019.

You are advised to report to the County Commissioner and the County Director of Education, Nakuru County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA

FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Nakuru County.

The County Director of Education Nakuru County.

National Commission for Science, Technology and Innovation is 1SO9001:2008 Certified

#### Appendix vi: NACOSTI Permit

THIS IS TO CERTIFY THAT: MISS. EMMAH WANGUI MUGO of UNIVERSITY OF NAIROBI, 0-100 NAIROBI, has been permitted to conduct encresearch in Nakurun County ommission for Science

echnology and Innovation National Commission for Science

on the topic: ROLE OF INFORMATION ence**TECHNOLOGY SKILLS IN YOUTH** hission for Science EMPOWERMENT PROJECTS: A CASE OF NAKURU TOWN, KENYA

ence, Technology and Innovation National Commission for Science ence, Technology and Innovation National Commission for Science,

ence, Technology and Innovation National Commission for Science, ence, Technology and Innovation National Commission for Science, ence, Technology and Innovation National Commission for Science,

Technology and Innovation National Commission for Science, gy and Innovation National Commission for Science,

ence, technology and relovation reasonal Commission for Science, ence technology and relovation National Commission for Science, ence technology and relovation National Commission for Science, ence 25th July, 2019 ovation National Commission for Science

ence, Technology and Innovation National Commission for Science, ence, Technology and Innovation National Commission for Science, ence, Technology and Innovation National Commission for Science, ence Applicant's d Innovation National Commission for Science,

ence.

Permit No : NACOSTI/P/18/55812/24061 Date Of Issue: 26th July,2018 Fee Recieved :Ksh 1000



Director Generals on for Science. Applicant's and Innovation National Commission for Science, Technology & Innovation National Commission for Science, ence, Technology and Innovation National Commission for Science, Technology & Innovation or Science, ence, Technology and Innovation National Commission for Science, ence, Technology and Innovation National Commission for Science, ence, Technology and Innovation National Commission for Science, Technology and Innovation National Commission for Science, ence, ence,

Science

#### CONDITIONS

The License is valid for the proposed research, esearch site specified period.

Both the Licence and any rights thereunder are ion-transferable.

Upon request of the Commission, the Licensee hall submit a progress report.

The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.

This Licence does not give authority to transfer research materials.

The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.

The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice. National Commission for Science

stogy and Innovation National Commission for Science,

logy and Innovation National Commission for Science, Technology and Innovation National

ology and Innovation National Commission for Science, Technology and Innovation National plody and Innovation National Commission for Science, Technology and Innovation National





National Commission for Science, **Technology and Innovation** 

RESEARCH CLEARANCE PERMIT

Serial No.A 19746

ence, Technology and Innovation National Commission for Science, Technology and Innovation National ence, Technology and Innovation National Commission for Science, Technology and Innovation National Commission for Science, Tech

#### Appendix vii: County Commissioner Authorization Letter



#### THE PRESIDENCY

MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT

Telegrams: "DISTRICTER", Nakuru Telephone: Nakuru 051-2212515 When replying please quote COUNTY COMMISSIONER
NAKURU COUNTY
P.O. BOX 81
NAKURU

Ref. No. CC.SR.EDU 12/1/2 VOL.III/(135)

6th August, 2018

TO WHOM IT MAY CONCERN

#### RE: RESEARCH AUTHORIZATION - EMMAH WANGUI MUGO

The above named student has been given permission to carry out research on "*Role of Information Technology skills in youth empowerment projects*" in Nakuru County, Kenya for the period ending 25<sup>th</sup> July, 2019.

Please accord her all the necessary support to facilitate the success of her research.

1

Patrick Omuse
For: COUNTY COMMISSIONER
NAKURU COUNTY

# ROLE OF INFORMATION TECHNOLOGY SKILLS IN YOUTH EMPOWERMENT PROJECTS: A CASE OF NAKURU TOWN, KENYA

ORIGIN	IALITY REPORT			
	2% ARITY INDEX	8% INTERNET SOURCES	4% PUBLICATIONS	7% STUDENT PAPERS
PRIMA	RY SOURCES			
1	www.una	•		<1%
2	www.coll	erinstituteofven	ture.org	<1%
3	cpa.ie Internet Sourc	e		<1%
4	Submitte Student Pape	ed to Australian	National Unive	ersity <1%
5	pascapbi	i-3a.blogspot.cor	n	<1%
6	technolog country of	mar. "State spon gy transfer proje context", The Jou , 09/25/2007	ects in a develo	oping \tag{\central} \tag{\central} \tag{\central}