



Chuka University

info@chuka.ac.ke | 020 231 0512 / 020 231 0518

TECHNOLOGY APPLICATION IMPEDIMENTS ON BUSINESS IDEA SCREENING AND SUSTAINABILITY OF AGRO-BASED YOUTH OWNED SMALL AND MEDIUM ENTERPRISES IN MERU COUNTY

Peter Gituma Kimathi

Faculty of Business Studies, Chuka University, P. O. Box 109-60400. Chuka, Kenya.

Email: pgituma@chuka.ac.ke; petgitu@gmail.com;

How to cite:

Kimathi Peter Gituma (2021). Technology application impediments on business idea screening and sustainability of agro-based youth owned small and medium enterprises in Meru county. In: Isutsa, D. K(Ed.) *Proceedings of the 7th International Research Conference held in Chuka University from 3rd to 4th December 2020, Chuka, Kenya*, p.288-295

ABSTRACT

This paper is focused examining some of the challenges faced by youth in applying modern technology in screening business ideas before implementation to enhance management of sustainable agri-based small and medium scale enterprises (SMEs) in a competitive economy particularly these hard times of unemployment and unpredictable social distress like Covid -19. This study explored the phenomenon of idea screening which expands current understanding of how youth perceive ideas for innovative agro-based projects in determining quality production and value addition. The study critically and contextually examined the best practice among youth in screening business ideas which will not only help Kenyan small and medium scale enterprises to survive and sustain the hard times but rather grow steadily and so become strong enough to contribute their quota to sustainable development in Kenya. Some of the impediments on idea evaluation/screening among youths which sets out objectives includes limited capital, absence of innovation, poor networking. The study applied descriptive survey design. The target population was 20 agri-based youth owned enterprises registered under Meru county Government. 40 Respondents were sampled from owners of 20 SMEs meaning each enterprise contributed 2 respondents. Data was collected using a 5-point Likert scale questionnaire to gather perception from the respondents. Based on the findings the following were revealed impediments: in access to seed capital, poor networking and lack of innovation. Some of the key recommendations includes sourcing for cheap and reasonable capital, capacity building, enhancing forums for interactions, and platforms for innovation, benchmarking, exchange programmes.

Keywords: idea screening, SMEs, Sustainability, Limited Capital, Innovation, Networking,

BACKGROUND OF THE STUDY

Youth unemployment around the globe has become a major challenge in the 21st century. According to the World Youth Report (2018) approximately 88 million youth around the world are unemployed and underemployed. According to International Labour Organization report by Elder and Sparreboom (2018), the long term impact of youth unemployment could be felt for decades. The report projects that 73.4 (12.6%) million young people are expected to be out of work in 2015 an increase of 3.5 million between 2007 and 2013. While youth unemployment is a widespread phenomenon in the world, the case is much worse in Kenya. Today, Kenya's youth unemployment rate, according to Youth Employment Marshall Plan (2019) is at 67 percent, among the highest in the world. It is widely acknowledged that Small and Medium Enterprises (SMEs) generate employment opportunities, economic growth and produce commercial innovations of high quality. Consequently, there is a growing appreciation within Government, Development Community and Civil Society that an important aspect of holistic and all-inclusive development is the active participation and involvement of the youth in SMEs (Youth Employment Marshall Plan, 2018). The population growth rate of the youth has outstripped both the growth of the economy and employment opportunities. This means in essence fresh employment opportunities must be created including by the youth themselves. The best way the youth can create opportunities is through entrepreneurship (Sagwe et al., 2014).

The key issues concerning youth had been raised in internationally negotiated documents, such as the International youth forum of the 2017 held in Britain, International Conference on Population and Development, Development, peace, and participation have been the three most popular themes in the past four decades to raise issues of concern for youth. Reflecting these themes youth outlined ten priority areas of concern for young people namely education, employment, hunger, poverty, health, environment, drug abuse, juvenile delinquency, leisure time activities, girls and young women, and participation (Advocates for youth,2017).Under the bill of rights (Article 21 (3)) the constitution obligates all state organs and officers to address the needs of vulnerable groups within society, including women, older members of society, persons with disabilities, children, youth, members of minority or marginalized communities, and members of particular ethnic, religious or cultural communities. The youth in Kenya, who number about 9.1 million, account for about 38% of the population and of this 51.7 % are female. The youth form 60% of the total labour force but many of them have not been absorbed in the job market owing to the country's high unemployment level (Kenya National Youth Policy, 2007). The number of persons enumerated during 2009

population and housing census in Kenya was 38,610,097 representing an increase of about 35% from the 1999 census. The population pyramid shows that the population of Kenya is still very youthful (KNBS, Kenya Census 2009). In this study we shall use the Kenyan definition. Generally, over 200 million Africans are now officially designated as Youths that are 15 to 35 years of age. Kenya formulated the Vision 2030 development agenda which would propel the country into a middle-income country by the year 2030. According to the Vision 2030 strategy, the youths are regarded as an integral and important component especially towards wealth creation. This is because the youth formed much of the human capital and therefore human development strategies implemented during that transitional period would have long-term impacts on the structure and quality of human capital. Young people, then and in the future, would be the principal stakeholders and beneficiaries of the Vision 2030 (implementation of the flagship projects and key national policies and programmes identified under the Vision 2030 and the MTP) (MOP)

Statement of Problem

In Kenya, the level of unemployment is very high with the most affected being the youth who are graduating from universities and other institutions of learning, who fail to secure formal employment opportunities and hence fail to gainfully contribute to economic development of the country despite their enthusiasm, energy and drive (Sagwe, Gicharu and Mahea, 2016). The need to come up with strategies to deal with the situation is highly regarded. One of the strategies put in place by the government is the Youth Empowerment by supporting their enterprises particularly agro-based which could assist in widening country food basket. According to UNICEF 2018, Modern technology has experienced vast expansion in recent years, leading to its extensive use by people from all generations. For a generation of young people, technology has assumed a substantial stake in their social and educational lives (Namusonge, G.S. (2016). The vast majority of adolescents have access to computers, the Internet, cell phones, video games, and many other forms of modern technology.

The evolution of technology has dramatically changed society. An endless number of people all over the world use modern technology particularly youths but it has been noted they experience endless challenges when screening business ideas turning them to viable and profitable opportunities particularly in agro-based enterprises. The growth of technology has changed the world, which in turn has changed the daily lives of youth. Dehmler (2017) asserts that youth today are growing up in an interconnected, networked world. The youth have unprecedented access to modern technologies and use them in expected and unexpected ways particularly screening business ideas which is the foundation of any successful enterprise. Despite their increasing adoption, there is little systematic evidence on internal innovation contests in value addition, reprocessing, branding, and packaging among other processes within agro-based enterprises. Some notable exceptions are the studies by Spears et al. (2016), Chen et al. (2015), La Comb et al. (2017), Santos and Spann (2015) and Soukhoroukova et al. (2014) which emphasize technology effectiveness for business idea screening through mobilizing existing knowledge, and enhancing communication for selection of large pools of new product ideas

LITERATURE REVIEW

Theoretical Theory

Churchill and Lewis Firm Growth Theory

The development and performance of any enterprise, large or small, tends to follow a predictable pattern that is usually characterized by sequential progressive phases. Churchill and Lewis as presented in Perenyi (2008) examined the problems and challenges of the firm as it grows; the owner/manager needs to display different managerial talents like networking and managerial skills when dealing with challenges. For a small business to grow and perform successfully, the owner/manager must develop the requisite competencies to enable the business to progress to the next phase. The model developed by Churchill and Lewis has five performance stages; existence, survival, success, take-off and resource maturity. In the existence stage, a key focus is obtaining customers and as such, the extent of formal systems is minimal and, in some cases, non-existent (Churchill & Lewis, 1983). In addition, the organizational structure is flat and therefore, the owner/manager adopts a management style where there is direct supervision of employees.

Innovation Theory

Innovation theory, also called diffusion of innovation theory, explains how advancements gain traction and over times spread, of diffuses, throughout a specific population. These advancements can be new ideas, technology, behaviors or products. Diffusion of Innovation (DOI) Theory by Rogers (1962), is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a

social system, adopt a new idea, behavior, or product. Adoption means that a person does something differently than what they had previously (i.e., purchase or use a new product, acquire and perform a new behavior, etc.). The key to adoption is that the person must perceive the idea behavior, or product as new or innovative.

Empirical Review

Impact of limited Capital on Business idea Screening and Sustainability of Agro-based Youth Owned Small and Medium Enterprises

According to International Labour Office (2017), Youth entrepreneurs face a lot of challenges in accessing finances to inject in their business both as startup, seed capital and finance expansion of the businesses. In addition, access to credit from commercial banks and other financial institutions due to discrimination has led them to poorly apply modern technologies in screening business ideas. Lack of access to finance is one of the major challenges facing youth owned SMEs worldwide. Access to credit helps to increase stock, capital, conducting marketing, advertisements and promotions. The study revealed almost 80% of the initial source of business start-up for most of the youth SME owners was self-financing followed by loans from banks which is a major obstacle in screening business ideas for viability and sustainability. This leaves youth with the option of applying traditional methods (observation, brainstorming, SWOT among others) of screening business ideas. In addition, due to the lack of self-sustaining resources, the absence of a substantive credit history, sufficient collateral or guarantees to secure loans or lines of credit, young people are often seen as particularly risky investments and therefore face difficulties in accessing finance.

Absence of Innovation effects on Business idea Screening and of Sustainability of Agro-based Youth Owned Small and Medium Enterprises

Technological innovation is the process by which industry generates new and improved products and production processes. Technological innovation includes activities ranging from the generation of an idea, research, development and commercialization to the diffusion throughout the economy of new and improved products, processes and services. Effective technological innovation includes either the diffusion process or the spread of the innovation commercially (Zairi, 2016). Technological innovation requires and is followed by new technology exploitation. New technology exploitation (NTE) refers to the utilization of new technology or scientific developments to improve the performance of products or manufacturing processes. The failure of youth to recognize and manage breakthrough technology innovation often results in enterprise inefficiencies and frustration (Boyd, R.L. (2015)). Rogers (2016) described the innovation-decision process as —an information-seeking and information- processing activity, where an individual is motivated to reduce uncertainty about the advantages and disadvantages of an innovation. For Rogers (2017), the innovation-decision process involves five steps: knowledge, persuasion, decision, implementation, and confirmation. These stages typically follow each other in a time-ordered manner.

The innovation-decision process starts with the knowledge stage. In this step, an individual learns about the existence of innovation and seeks information about the innovation. —What? —how? and —why? At the implementation stage, an innovation is put into practice. However, an innovation brings the newness in which —some degree of uncertainty is involved in diffusion. Uncertainty about the outcomes of the innovation still can be a problem at this stage. In technical business services, product innovations included highly specialized software, task-orientated computer products, data management tools, and internet-based services; process innovations ranged from computerized networking in the development of software, the adoption of ISO standards, and the development of new project standards and methodologies dealing with evaluation methods and quality testing (Baldwin et al., 2016). Creation of new products is an important driver in economic growth and productivity both to the youth SMEs and country at large. When new goods and services emerge, new markets also emerge to consume them. Innovation matters. In the consumer product realm, it can drive profitability and sustainability of youth based SMEs, and it can help enterprises succeed—even during tough economic times. The study revealed that 90% of the youth in agro- based enterprises were not aware of these innovation processes and tools hence were still applying traditional business ideas screening methods which is a real impediment (DeTienne, D. R. & Chandler, G. N. (2017)).

Impact of poor Networking on Business idea Screening and of Sustainability of Agro-based Youth Owned Small and Medium Enterprises

Social networks, role models and mentors are important sources of information and resources for youth entrepreneurs. Membership in business associations provides a venue for exchanging information and building partnerships. Yet prevailing social norms and youth's time burdens can make networking a challenge for youth. Youth Entrepreneurs make use of social relations and social contacts as channels to gain access to information,

customers, and suppliers and to the sources of finance. They make use of family and friends networks to access unpaid family work as well as emotional support. It has been found that support from personal network improves survival, growth and sustainability chances of new enterprises. Specifically, support from strong ties (spouse/life partner, parents, friends and relatives) is more important than support from weak ties (business collaborators, acquaintances, former employers and former co-workers) which influence the success of new youth enterprises. Help and emotional support from friends are more important for success in case of the youth entrepreneurs (Mutuku, et al, 2016). Youth have different priorities in establishing networking relationships. Male motives are more instrumental (seeking personal gain) while female have more affective considerations in social relationships. Their management style is not seen as being relevant and thus, female is often excluded from the male networks which are very effective. Youth do not have the same tools, assets, and chances in the small business arena. When confronted by business problems or difficulties, youth entrepreneurs seek assistance first from family, then from close friends and only last from knowledgeable business sources rather than seeking advice from their networks. According to Della-Giusta M. & Phillips C. (2016), this might be due to lack of professional experience or the diverse social network needed for youth to fully utilize the information and resources provided.

It was reported that youth entrepreneurs faced a shortage of peer support networks even though various entrepreneurs and industry associations have been formed which generally serve as a platform for youth entrepreneurs to establish networks and exchange information and experiences as well as to conduct training programmes, seminars and workshops on motivation, leadership and entrepreneur development and to provide other means of support. This is due to the fact that youth may not join these associations as they lack information on the existence. This limits the youth entrepreneurs' ability to seek informal advice and peer financing as well as the information networks needed for survival and sustainability. This might pose a challenge to youth entrepreneurs in establishing networks which are helpful to the survival of their enterprises (De Tienne, D. R. & Chandler, G. N. (2015). The study revealed that 80% of the youth did not fully utilize these professional and profound information and network in screening their business ideas which resulted in unviable and un-sustainable agro-based enterprises.

METHODOLOGY

The study adopted descriptive research design. The study was carried out in Meru Town and its environs in Meru County and targeted Owners/Managers of 50 Youth owned agro-based small and medium sized enterprises. It was found necessary to select all the SMEs in this category since they were not many and a 100 percent response rate was unlikely considering that a few had closed due Covid 19 outbreak. Out of the 50 SMEs selected 46 responded representing 92% response rate which was considered sufficient enough. Meru Town and the environs was selected because it is the economic hub of the county and most SMEs are located here.

Data was collected using a 5-point Likert scale questionnaire to gather perceptions of the respondents. The questionnaire comprised of three parts; part one consisted of demographic information, section two consisted of Technology application and the last part consisted of questions related to sustainability. This was measured using a scale based on earlier studies Lumpkin and Dess, 2016. Validity and reliability tests were carried out and confirmed. Data was collected and analyzed using descriptive statistics and inferential statistics to confirm the relationship.

PURPOSE AND OBJECTIVES

The main purpose of the study was to examine Technology application impediments on Business idea Screening and Sustainability of Agro-based Youth Owned Small and Medium Enterprises in Meru. The specific objectives were:

- i) To establish the effect of limited capital on sustainability of agro-based youth owned SMEs
- ii) To analyze the effect of absence of innovation on sustainability of agro-based youth owned SMEs
- iii) To evaluate the Impact of poor networking on sustainability of agro-based youth owned SMEs

RESULTS AND DISCUSSION

Questionnaires Response Rate

A total of 46 out of 50 self-administered questionnaires were filled and returned yielding a response rate of 92%.

Reliability and Validity Test

The results in the table below show Cronbach's alpha of well above 0.7 implying that the Instruments were sufficiently reliable for measurement.

Table 4.1: Dimensions and Reliability Statistics

Dimension	Items	Cronbach's Alpha
Limited Capital		0.906
Absence of Innovation		0.715
Poor Networking		0.762

All items were measured with a five-point Likert scale

Limited Capital and the Sustainability of Youth owned SMEs

Respondents were asked to give their views concerning how they perceived certain statements about the effect of limited capital on the sustainability of youth owned enterprises in Meru County. The rates of 1-5 scale was used where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree and 5=Strongly Agree. The results of the study showed that most of the respondents strongly agreed that the owner/manager of the enterprise were challenged in terms of capital necessary to support business idea screening (mean of 5.49 and a standard deviation of 0.6061). The participants also strongly agreed that owner/manager were challenged in accessing necessary capital for business idea screening (mean of 5.51 and a standard deviation of 0.7754). The statistics showed that the respondents were not sure that over the past three years, the enterprises secured enough capital to screen business ideas (mean of 4.32 and a standard deviation of 0.8886).

Participants were also neutral to the statement that their business has enough capital to support business idea screening in 3 years (mean of 4.22 and a standard deviation of 1.0933). The youths who participated in the study indicated that they agree that limited capital was real challenge in support of screening business ideas in the last 3 years (mean of 4.59 and a standard deviation of 0.607). Table 4.2 shows these statistics. The average mean of 3.926 indicates youth owned agro-based SMEs faced a real challenge in securing enough capital necessary to support technology in screening business ideas. This can be explained perhaps due to discrimination by financial institutions in lending, lack of securities to pledge against loans among others.

Table 4.2: Descriptive statistics for limited capital with normality test

	Mean	Std. Deviation	Skewness	Kurtosis
Owner/manager were challenged in terms of capital	5.49	0.6061	0.0607	-2.103
Owner enterprise was challenged in securing enough capital	5.51	0.7754	-1.0702	-0.0051
Over the past three years, the participants were not sure enterprises secured enough capital	4.32	0.8886	0.8445	0.2398
Respondents were neutral that enterprises secured capital	4.22	1.0933	-0.4619	-0.0655
Youth supported lack of capital was a real challenge	4.59	0.607	0.0607	-2.1025
Average mean of limited capital	3.926			

Source: Survey data, 2020

Absence of innovation and the sustainability of youth owned enterprises

Respondents were asked to give their views concerning how they perceived certain statements about the absence of innovation affecting the sustainability of youth owned. The rates of 1-5 scale was used where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree and 5=Strongly Agree. The study revealed that most of the respondents agreed that there was a challenge in terms of developing modern techniques in screening business ideas (mean of 4.05 and a standard deviation of 0.875). Most participants agreed that there they are not aware of modern techniques for screening business ideas (mean of 4.13 and a standard deviation of 1.063). Participants strongly agreed that the government did not support them in applying modern techniques in screening their ideas (mean of 4.61 and a standard deviation of 0.910).

Table 4.2: Descriptive statistics for Absence of Innovation with Normality test

	Mean	Std. Deviation	Skewness	kurtosis
Challenges in developing modern technologies for screening Business ideas	4.05	0.875	0.0000	-1.3033
Lack of knowledge on the existence of modern techniques	4.13	1.063	-0.8739	-0.7456
Lack of government support in application of techniques	4.61	0.910	-1.2392	-0.2876
Average mean of Risk Taking	3.976			

Source: Survey data, 2020

The tables above show that a number of youth owned SMEs were adversely affected by absence of innovation necessary to screening business ideas for sustainability of their enterprises represented by an average mean of 3.976.

Poor Networking and the Sustainability of youth owned Enterprises

Respondents were asked to give their views concerning how they perceived certain statements about the poor networking and the sustainability of youth owned enterprises. The rates of 1-5 scale was used where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree and 5=Strongly Agree. *The study revealed that majority of the respondents agreed that they were not exposed to entrepreneurial environment (mean of 4.34 and a standard deviation of 0.7396).* Respondents agreed that they do not have support in attending any entrepreneurial workshops and seminars to sharpen their skills (*mean of 2.88 and a standard deviation of 0.6399*). The study revealed that the respondents agreed that they were not aware of any avenues for entrepreneurial trainings (*mean of 3.56 and a standard deviation of 0.8486*). Respondents however disagreed that they seek to avoid competitive clashes (*mean of 2.36 and a standard deviation of 0.8249*).

Table 4.3: Descriptive Statistics for poor Networking with Normality test

	Mean	Std. Deviation	Skewness	kurtosis
Lack of exposure to the entrepreneurial environment	4.34	0.7396	-0.4282	-0.6498
Lack of support to attend entrepreneurial workshops and seminars to sharpen their skills and knowledge	2.88	0.6399	-0.2416	-0.5125
Owners/managers lack information on the existence of entrepreneurial avenues for trainings	3.46	0.8396	-1.0782	-0.6791
Owner/manager seek to avoid competitive clashes	3.56	0.8486	-0.6921	0.0622
Average mean of Pro-activeness	3.724			

Source: Survey data, 2020

Sustainability Measures of the youth owned Enterprises

Respondents were requested to indicate the extent of agreement to statements about sustainability of youth owned enterprises. The rates of 1-5 scale was used where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree and 5=Strongly Agree.

Table 4.4: Descriptive Statistics for Sustainability Measures with Normality test

	Mean	Std. Deviation	Skewness	Agreeing Extent
The business had over the year's demonstrated continuous growth in profits before tax.	3.00	0.5660	0.0000	Agree
The business has enlarged its market share	3.77	0.9335	-0.5538	Agree
There has been recorded continuous sales growth	3.67	0.6756	-0.7363	Agree
The business has enhanced production capacity	3.78	0.8964	0.4589	Agree
Business has been diversified overtime	3.64	0.7866	-0.8763	Agree
Business enhanced high degree of customer satisfaction.	4.80	0.6752	-1.7667	Agree
Increased number of workers	2.74	0.4321	-0.5407	Agree
Business has created job security for its employees.	3.65	1.7657	-0.9871	Not Sure
Business has been introduced new technologies overtime	3.54	0.8763	-0.6750	Not Sure
Business has enhanced its financial sustainability.	4.56	0.7856	-0.8762	Agree
Average mean of Enterprise Performance	3.891			

Source: Survey data, 2020

Most of the youth owned SMEs believed their businesses were successful as indicated by the mean of 3.891. From this analysis, 70.9% considered their business having performed badly due effect of technology in screening business ideas.

Correlation of Technology Application (limited capital, absence of Innovation, and poor Networking) versus the Sustainability on the Youth Owned Enterprise

Correlation is a statistical measure that indicates the extent to which two or more variables fluctuate together. Strength of relationship between +/- 0.7 to 1.0 indicates strong, +/- 0.3 to 0.69 indicates moderate and +/- 0.0 to 0.29 indicates weak to none. A positive correlation indicates the extent to which those variables increase or decrease in

parallel; a negative correlation indicates the extent to which one variable increases as the other decreases. below shows that the association between limited capital, poor networking and absence of innovation was 82.2%, 64.3% and 87.9% respectively.

Table 4.5: Correlation of Technology Application (limited Capital, Absence of Innovation, and Poor Networking) versus the Sustainability on the Youth Owned Enterprise

	Sustainability	Limited capital	Poor networking	Absence Of innovation
Sustainability	1			
Limited Capital	0.822**	1		
Poor networking	0.643**	0.523**	1	
Absence of Innovation	0.879**	0.776**	0.738**	1

**Correlation is significant at the 0.01 level (2-tailed).

The above table shows the correlation analysis between the 3 dimensions of technology application, limited capital, poor networking, absence of innovation and the sustainability of SMEs.

Regression Analysis

R Square is the coefficient of determination. It expresses the proportion of variation in a dependent variable which is explained by variation in independent variables.

Table 4.6: Regression Model Statistics

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.838 ^a	.692	.234	.979

a. Predictors: (Constant), limited capital, poor networking, absence of innovation.

The correlation coefficient of 83.8% in the above table indicates that the combined influence of the predictor variables has a greater positive correlation with the sustainability of SMEs. The coefficient of determination (R^2) is an estimate of the percentage variation in the dependent variable (sustainability) which can be predicted from the Technology application variables (limited capital, poor networking and absence of innovation). This coefficient shows how well the multiple regression model fits the data. A value close to zero shows a weak fit whereas a value close to one implies a good fit. The R^2 - value of 0.692 in Table above, indicates that 69.2% of the variation in sustainability has been significantly explained by the 3 predictor variables (limited capital, poor networking and absence of innovation) identified in the regression equation. Therefore, the hypothesis can be accepted.

Conclusions on the analysis

The purpose of the study was to investigate the Technology application impediments on Business idea Screening and Sustainability of Agro-based Youth Owned Small and Medium Enterprises in Meru County study established that technology application was significant and positively related to the sustainability of SMEs. These findings support those of previous studies technology application by (. Zelbst et al., (2015)).

Recommendations for the Technology application impediments on Business idea Screening and Sustainability of Agro-based Youth Owned Small and Medium Enterprises

- Conduct market research to identify the potential business ideas for youth-targeted interventions through SMEs
- Look for opportunities to finance youth-owned SMEs, including subsidized sources of finance and equity capital.
- Join programs that provide knowledge on how to profitably reach the youth's market (e.g., the Global Banking Alliance for youth for financial institutions).
- Explore partnerships that better link access to finance with capacity-building programs (including targeting entire value chains).
- Identify support-program mechanisms for youth entrepreneurs that can have an impact on the entire value chains where youth entrepreneurs are concentrated.
- In partnership with research institutes, improve results measurement frameworks so as to better capture the success factors of capacity-building programs for youth entrepreneurs.
- They must also understand the importance of social and business networking to their business success.

- They must take the initiatives to participate in any training programmes organized for them.
- The government can do more in providing special assistance to youth entrepreneurs on a continuous basis.
- Youth entrepreneurs must be made to understand the advantages of external sources of financing for their businesses.
- Youth entrepreneurs must be made to realize the importance of network in gaining access to capital/loans and information from various stakeholders. The government, youth entrepreneurs and NGOs can formulate strategies to enable informal mentoring supportive relationship among the youth entrepreneurs. This will definitely help the new entrepreneurs to bypass the obstacles which impede growth, success, and personal fulfillment.
- The society should encourage the development of more youth entrepreneurs and see them as key enablers in the nation's economic development agenda.

CONCLUSION

This paper provides a comprehensive review of the three determinants of sustainability of youth entrepreneurs through Technology application in Business idea Screening of Agro-based SMEs, particularly in Kenya. As the determinants are derived from the global literature on youth entrepreneurship, it is hoped that the recommendations made in this study provide useful guidelines to youth entrepreneurs, government, associations, the NGOs and other relevant stakeholders. These would aid in better positioning the significance of these determinants towards the success of youth entrepreneurs in Kenya.

REFERENCES

- Boyd, R.L. (2015). Race, gender, and survival entrepreneurship in large Northern cities during the Great Depression, *Journal of Socio-Economics*.
- Carr, M. (1993), Women in Small-Scale Industries-Some Lessons from Africa, in I.S.A. Band and G.A. Bruijne(eds), *Gender, Small-Scale Industry and Development Policy*, London: MSRP, Exeter.
- Carter, S. Wilson, F. Shaw, E. and Lam, W. (2016) Gender, Entrepreneurship and Business Finance: Investigating the Relationship between Banks and Entrepreneurs in the UK. In C. Brush, N. Carter, E. Gatewood, P. Greene and M. Hart (eds). *Growth-Oriented Women Entrepreneurs and Their Businesses* Cheltenham: Edward Elgar.
- Della-Giusta M. & Phillips C. (2016). Women entrepreneurs in the Gambia: challenges and opportunities. *Journal of International Development*.
- DeTienne, D. R. & Chandler, G. N. (2017). The Role of Gender in Opportunity Identification *Entrepreneurship Theory and Practice*, 31(3).
- Hisrich, R. D., Peters, M. P. & Shepherd, D. A. (2015). *Entrepreneurship* (7th ed.). New York: McGraw-Hill Co.Inc.
- Langowitz, N. & Minniti M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31 (3).
- Mutuku, M., Olubandwa, A., and Odero, D., (2006). *Entrepreneurial learning among women micro-entrepreneurs in Kenyan dairy processing industry*, paper presented at the 3rd International Entrepreneurship Conference organized by the United International University (USIU) Nairobi
- Namusonge, G.S. (2016), *Entrepreneurial Finance and Micro, Small and Medium Enterprises (MSME) Innovation in Kenya*. Technological and Industrialization Conference, JKUAT Nairobi.
- Republic of Kenya. (2018) *Development of Micro and Small Enterprises Creation for Poverty Reduction and Wealth Creation*. Nairobi. Government Printers.
- Wasihum, R, & Paul, I. (2013). Growth Determinants of women operated micro and small enterprises in Addis Ababa. *Journal of sustainable Development in Africa*, 13(6), 2010.
- Weber, M. (2014). *The Protestant Ethic and the Spirit of Capitalism*. London: Routledge.
- Wilburn, K. (20016). A Model for Partnering with Not-for-Profits to Develop Socially Responsible Businesses in a Global Environment. *Journal of Business Ethics*, 85, 111–120.
- World Bank. (2014). *Enhancing women's participation in economic development*. Washington DC: World Bank.
- World Bank. (2009). *Enterprises surveys*. Washington DC: World Bank.
- Yamane, T. (1967). *Statistics, An introductory Analysis* (2nd ed.). New York: Harper and Row.
- Zeller, M, & Sharma, M. (2015). Many borrow, more save, and all insure: implications for food and micro- finance policy. *Food Policy*, 2, 28–40.
