

**IMPACT OF YOUTH FIRM PARTICIPATION IN NETWORKS AND
TECHNOLOGICAL INNOVATIONS ON BUSINESS PERFORMANCE: A
CASE STUDY OF FOOD PROCESSING INDUSTRY IN MOROGORO
MUNICIPAL**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER IN PROJECTS
MANAGEMENT OF THE OPEN UNIVERSITY OF TANZANIA**

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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for examination by the Open University of Tanzania a dissertation entitled; “Impact of youth firm participation in networks and technological innovations on business performance: A case study of food processing industry in Morogoro Municipal” in Partial fulfillment of the Requirements for the Degree of Master of Arts in Monitoring and Evaluation of the Open University of Tanzania.

.....
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DECLARATION

I, Veronica N. K. Kebwe, do hereby declare that this is my own original work, except where stated otherwise, and that the same work has not been submitted for an academic award to any University or Institution of Higher Learning.

.....

Signature

.....

Date

DEDICATION

This work is dedicated to my lovely brother Mr. Kandidi K. Kichanta and his family for his effort, encouragement and inspiration throughout my education journey, my beloved Mother Mwl. Yosepher Kebwe whose vision and dreams helped me in my study despite of her limited academic ability. Further dedication goes to my lovely husband Mr. Shukuru B. Senkondo for his support and close follow-up to make sure I succeed on my education, I wish him the best in his work and health life as well.

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ABSTRACT

This dissertation determines the impact of youth firm's participation in networks and technological innovations in business performance in Morogoro Municipal food processing industry. Specifically to identify factors for youth firm's participation in networking and technology innovation, that promotes business performance, to explore how youth entrepreneurs networked with input suppliers and the markets of their produce, to examine the relationship between networks and innovations in product, process and market. Sum of 120 participants were extracted from different levels which involved youth SMEs together with Morogoro Municipal (Business Development office department). The Quantitative data were obtained by the used of the questionnaires and the Qualitative data obtained from the interviews done to district staffs. Questionnaires and Interviews were used as data collection tools and data analysis was done using special programme known as Statistical Package for Social Science (SPSS) and Microsoft excel 2007. Findings of this study showed that, youth firms' (food processors) participation in networks on technological innovations in business performance it is still challenging to many of them and most of the business which are done in Morogoro Municipal are not formal. This means that the district business officers has a lot to do to emphasize them to formalize their business so that they can real know and realize if they are making profit or not. It is recommended that the government should provide a wide room to accommodate and provide an integrated strategy which will improve the model of business so there is a need of these officers to provide training on the importance of the youth who are in business to formalize their business. Food possessor should establish a platform that can assist them in getting easy their requirements i.e training, workshops, seminars.

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LIST OF ABBREVAITIONS

| | |
|------|--|
| CMIE | Monitoring Indian Economy |
| GDP | Gross Domestic Product |
| GPT | General Purpose Technology |
| ICT | Information and Communication Technology |
| RAS | Regional Administrative Secretary |
| SME | Small and Medium Enterprises |
| SPSS | Statistical Package for Social Science |

CHAPTER ONE

INTRODUCTION

1.1 Chapter Overview

The chapter shows a brief introductory part of the study which consists of background of the study, statement of the problem, general objective as well as specific objectives of the study.

1.2 Background of the Study

The importance of engaging youth in networking in improving technological innovation capability and business performance of both small and medium enterprises (SME) has shown curiosity from researchers and policy makers in different countries. The fact that SME innovation activities can be stagnated by scarcity of both tangible and intangible resources, participation in networks becomes inevitable as it ensures access to such needed resources for innovation (Chetty and Stangl (2009) assert that network relations are a source of diversity of knowledge, information, finance and technology which are key ingredients for innovation. Beckeman et al. (2013) argue that effective utilization of resources acquired from external sources results in products that are unique and difficult to be imitated by competitors. The networks can also help improve skills that seem to be an acute problem in SMEs (McAdam et al., 2004).

The reason for looking at SME technological innovation in the Tanzanian food manufacturing industry, in particular with a focus on youth SMEs, stems from the fact that the industry is dominated by SMEs whose main focus of innovation activities is laid on product and process innovations. Technological innovation is

considered an important competitive tool and significant contributor to organizational performance (Dasgupta et al., 2011).

The food processing industry in Morogoro is viewed as a main area to ensure food security and sustainability of the agriculture sector as a whole and it can create opportunities for developing partnerships with farmers, and the relationship being increased in production and quality of cash crops (United Republic of Tanzania, 2001). The industry transforms agricultural produce into a palatable form which has an increase shelf life (Dietz et al., 2000). Through technological innovation, the poverty reduction is being done to increase rural incomes by using value additional products and by providing different employments to youths (United Republic of Tanzania, 2001). The importance of networking in improving technological innovation capability and business performance of small and medium enterprises (SME) has attracted interest from researchers and policy makers in different countries.

The fact that SME innovation activities can be stagnated by scarcity of both tangible and intangible resources, participation in networks becomes inevitable as it ensures access to such needed resources for innovation (Dickson and Hadjimanolis, 1998). Chetty and Stangl (2009) assert that network relations are a source of diversity of knowledge, information, finance and technology which are key ingredients for innovation. Beckeman et al. (2013) argue that effective utilization of resources acquired from external sources results in products that are unique and difficult to be imitated by competitors. The networks can also help improve skills that seem to be an acute problem in SMEs (McAdam et al., 2004).

Tomás and Arias (1995) point out that the small firms which engage in multiple networks are in a better position to innovate and learn than outsider firms because they can easily develop new skills, abilities, products, processes and services. However, past research on innovation in food manufacturing industry presents mixed findings of the extent to which food processors engage in networks. On the one hand, scholars document evidence that within the industry there is low level of participation in innovation networks (Beckeman et al., 2013). This implies that the food manufacturers do not involve value chain actors and others in their innovation activities particularly in developing new products/services or processes.

On the other hand, the extant literature shows that the food processors rely, to a greater extent, on external sources (i.e. value chain actors and universities) for new ideas, knowledge and technology which are key inputs for technology-based, organizational and market innovations (Kühne and Gellynck, 2010). These mixed results raise a key question of what influences the SME participation in networks and whether such networks contribute to technological innovation and business performance.

The empirical research has looked at networking from different perspectives such as types/patterns of networks, network resources, frequency and quality of networks, network competence and location and their effects on innovation performance (Zheng et al., 2013), benefits and drawbacks of innovation networks (Tomás and Arias, 1995), potential advantages and problems of asymmetric network relationships (Colurcio et al., 2012) and the role of networks in enhancing innovation capacity (Kühne and Gellynck, 2010).

However, the focus of past studies has been laid on high-tech industries or large enterprises in which networks are formed and used to accomplish some innovation projects such as research and development while little attention has been paid to low-tech industries such as food manufacturing industry (Liu and Chaminade, 2010). In addition, this stream of studies was conducted by involving small firms from developed countries (Gunday et al., 2011) in which innovation levels of industrial sectors are higher and more diverse than in developing countries. Furthermore, the past research on innovation networking is fragmented such that majority of these studies have concentrated on analyzing the relationship of two themes such as networking and innovation performance; innovation and business performance or network participation and its determinants.

However, this approach considers innovation, in the context of networking as a simple and direct process and ignores the fact that innovation is a result of complex processes and interactions involving multiple network partners with different characteristics and resource endowment. It is, therefore important to adopt an integrated approach to investigation of networking and its contribution to technological innovation and business performance that takes into account the complexity of network relations, multiplicity of factors and processes involved in innovation activities of the network embedded firms.

However, this study intended to fill the gap in the literature by looking on the impact of youth firms' participation in networks on technological innovations and business performance in food processing industry. The study also is significant to the existing literature by developing an integrative conceptual framework that

combines five themes of networking (network competence, marketing orientation, entrepreneurial characteristics, degree of trust and social relationship) and empirically tests their relationships.

The reason for looking at youth technological innovation in the Morogoro food manufacturing industry stems from the fact that the industry is dominated by SMEs/youth whose main focus of innovation activities is laid on product and process innovations. Technological innovation is considered an important competitive tool and significant contributor to business/organizational performance (Dasgupta et al., 2011). The food processing industry in Morogoro is viewed as a main area to ensure food security and sustainability of the agriculture sector as a whole and it can create opportunities for developing partnerships with farmers, and the relationship being increased in production and quality of cash crops (United Republic of Tanzania, 2001). The industry transforms agricultural produce into a palatable form which has an increase shelf life (Dietz et al., 2000). Through technological innovation, the poverty reduction is being done to increase rural incomes by using value additional products and providing alternative employment (*United Republic of Tanzania, 2001*).

1.3 Statement of the Research Problem

Tanzania has sought to ensure robust growth in agriculture to meet basic nutritional needs, and to modernize the sector for increased productivity, employment to youth, profitability and income. While it depends heavily on agriculture, recent growth in Tanzania has been fueled by emerging sectors such as telecommunications and financial services. But this growth is not providing the number and quality of jobs

needed for a growing youth population, and without the education, skills, and experience demanded by a new economy, Tanzanian economy remain trapped largely in informal work and low-skilled jobs in agriculture (IGC, 2013)

Government initiatives on national development strategies Tanzania Ya Viwanda have emphasized the importance of small-scale agriculture, with a slow but steady shift to medium and large-scale farming. Sector growth issues revolve around productivity, with particular concern for increasing yields by smallholder farmers so that they can graduate to commercial farming. Government and private sector investment efforts have principally focused on supportive physical infrastructure, water and irrigation infrastructure, financial services and incentives to invest in agriculture, knowledge and information management, mechanization, trade and export development services, now more than ever, value-addition activities. (Brethenoux *et al*, 2012).

Other scholar did a research on youth firm's participation in networks on technological innovations in business performance. Matias (2012), did a research on the impact of Networking on Firm Performance. One of the most important research areas is related to entrepreneurship research and how relationship networks affect firm performance, Navyashree et al (2014), did a research to determinants of ICT Investment Intensity. Information and communication technology (ICT) is a general purpose technology (GPT) that has the potential for significant impact on many industries in an economy and Danail (2015), Growth Challenges of Food Processing Small-Sized Enterprises – Two Cases from Bulgaria.

Despite of the effort which has been done by the government of Tanzania in making sure that youth SMEs perform well in their business by emphasizing networking still the technological innovative sector is very critical part for commercialized business to young SME's on generating income like promote business performance such as network formation (Network competence, market orientation, entrepreneurial characteristics, perceived benefits, degree of trust, social relationship, industry's characteristics, the relationship between networks formation, Product Innovation, Process Innovation and Market Innovation) in contribution to Business performance. This is a gap which has to be filled, however the researcher conducted a study to determine factors that promote business performance through youth networking and technological innovations in food processing industry in Morogoro Municipal.

1.4 Research Objective

1.4.1 General Research Objective

Main objective of this study was to look on Impact of youth firm participation in network and technological innovations on business performance in Morogoro Municipal food industry.

1.4.2 Specific Research Objectives

The specific objectives of this study were to;-

- i. To identify factors for youth firm's participation in networking on technology innovation, that promotes business performance.
- ii. To explore how youth entrepreneurs networked with input suppliers and the markets of their produce.
- iii. To examine the relationship between networks and innovations in product,

process and market.

1.5 Research Questions

In the context to determine the Impact of youth firms' participation in networks on technological innovations in ensuring business performance the study was guided by the following research questions.

1.5.1 General Research Question

The general question of the study: What are the impacts of youth firm's participation in networks on technological innovations in business performance?

1.5.2 Specific Research Questions

- i. What are the factors of youth firm's participation in networking on technology innovation that promote business performance?
- ii. How do youth owned SMEs networked with input suppliers, product markets and other SMEs?
- iii. What is the relationship between networks and innovations in product, process and market?

1.6 Hypothesis

Null hypotheses (H_0) were developed from the research questions above. The hypotheses stated were as follows;

H_0 = The assessment of networking by youth entrepreneurs (food processors) on the value chain is significantly different from that of input suppliers

H_0 = There is relationship between business done by youth and technology

innovation used.

1.7 Relevance of the Study

This study was of more significance and intended to link networking to innovations to young SME's along the value chain. Youth are young and have no experience, no capital; most of them are not well educated on business area hence their networking needs to be studied to align it to innovations for without networking innovations is not raised. The lack of innovation among youth entrepreneurs was forgotten phenomenon that this study tried to fill. The findings from the study was contributed to the young SME on the policy which improved understanding of the value of networks and business model design practices among SMEs as important to the economic growth agents. Policy imperatives was benefit by taking consideration of the mechanisms and circumstances of when and how networks, innovation breadth and business model design translate into performance as it was identified in this research report.

1.8 Scope of the Study

The study was conducted in Morogoro Municipal to young SME's by visiting them individual members and agribusiness groups. The study was focused much more to individual agribusiness and groups once for the purpose of identifying the most challenges that most of them are facing on their daily basis activity.

1.9 Limitation of the Study

This study faced limitations i.e time, since the data were collected at working hours which leads to disruption to most of the respondents/participant of the study. Live

aside limitation of time, data were also obtained by interviewing independent respondents. The researcher did this on a voluntary basis which minimize cooperation with respondents and the researcher which leads to some respondents to be nervous and were hesitated to provide relevant information and ensure quality of the data. However in local government office, the officers who were responsible to authorize the permit to collect data did not sign/ authorize the research permit on time which affected the data collection activity also to delay. Another limitation which a researcher faced was financial constrain, that leads a researcher to limit on sample size selection.

1.10 Organization of the Study

This proposal is divided into the following chapters:-

- Chapter 1:** General Introduction: This chapter includes the general background of the study, the research objectives, and research questions, relevance of the study and scope of this study.
- Chapter 2:** Literature review: The background information on youth firms' was reviewed and summarized from different scholars, books and other source of information.
- Chapter 3:** Research Methodology; - This chapter explained the methodology and strategies of the study used, research techniques, area where the study was done, method of data collection deployed and Analysis mapping of the findings.
- Chapter 4:** Data presentation, analysis and discussion of findings; In this chapter is where the findings of the study has been explained. It gave out the

outputs in both figures and its meaning how do the findings tell out in relation to the study objective.

Chapter 5: Conclusion and Recommendation: this chapter gave out the researchers view on what has been done throughout the study. The research concluded as per the findings obtained. It also explained the recommendation what should be done to fill the gap identified in future.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This chapter reviews the available writings on the theoretical framework regarding the concept of Youth in Agribusiness and theories of Relationships like Systems theory in the Corporates communication process.

2.2 Theoretical Literature Review

2.2.1. Conceptual Definitions

2.2.1.1 Firms

A firm is a commercial enterprise, a company that buys and sells products and/or services to consumers with the aim of making a profit. A business entity such as a corporation, limited liability company, public limited company, sole proprietorship, or partnership that has products or services for sale is a firm. Firms fulfill the social role of production, transforming resources into finished goods and services. Typically, firms use four different basic types of resources in productive activities as follows;-

- i. Natural resources: taken directly from nature without previous transformation (land, air, water, wood, etc.).
- ii. Capital: funds needed to invest in tools, machinery, equipment, technology.
- iii. Human resources: physical and intellectual capabilities of the workers.
- iv. Entrepreneurship: the innovative ideas that shape the business model.

2.2.1.2. Youth Participation

Youth participation is the involving of youth in responsible, challenging action that

meets genuine needs, with opportunities for planning and/or decision-making affecting others in an activity whose impact or consequence is extended to others—i.e., outside or beyond the youth participants themselves. Other desirable features of youth participation are provision for critical reflection on the participatory activity and the opportunity for group effort toward a common goal (NCR, 1975)

This refers to full engagement of youth on their own communities. However it is habitually secondhand for most of young people to participate in any many forms which includes decision making on various matters, participate in sports, business, schools and many other activities where youth are not actively and historically involved. Youth participation is also considered as them taking a part in any activity and this has been used by different stakeholders including government agencies, different researchers, educators and others who describe and explain the actively involvement of youth in community development and other economic activities.

2.2.1.3 Networking

Networking is a process that fosters the exchange of information and ideas among individuals or groups that share a common interest. It may be for social or business purposes. Professionals connect their business network through a series of symbolic ties and contacts. In business term, networking is a socioeconomic business activity by which businesspeople and entrepreneurs meet to form business relationships and to recognize, create, or act upon business opportunities, share information and seek potential partners for ventures.

NOTE: This chapter is all about dereferences of documents published by other authors. Therefore ensure that when defining concepts you have at least 2 references

for each concept. To be more thorough, ensure that each paragraph in this chapter has at least one reference cited

(a) **Technological Innovation**, this refers to the process by which firms master and implements the design and production of products/services that are new to the business irrespective of whether the products/services are new to their competitors or their customers or the world (Mytelka & Farinelli, 2000).

(b) **Business Performance** refers as a state of competitiveness of the economic entity, reached by a level of efficiency and productivity that assures a sustainable presence on the market. Niculescu M. & Lavalette G. (1999)
Performance is an unstable balance between efficiency and effectiveness N. Albu & Albu. C. (2005).

(c) **Food processing Industry:**

- i. **Food processing industry** this refers to enormous significance for India's development because of the vital linkages and synergies it promotes between the two pillars of our economy, industry and agriculture. Shodhganga, (2003).
- ii. **Food Processing** is the conversion of agricultural product to substances which have particular textural, sensory and nutritional properties using commercially feasible methods.

2.2.1.4 Participation in Innovation Networks

Participation in innovation networks is inevitable because networks are “a powerful tool to foster innovation in companies and industrywide” (Tomás and Arias, 1995;

pp. 55). The closed-door innovation is no longer applicable in today's dynamic business environment which is characterized by rapid changes in technology, customers and competitors' behaviours and shorter product life cycles. Nowadays, innovation is considered a collaborative activity involving actors with different characteristics and endowments of resources (de Jong and Hulsink, 2012; Rodgers, 2004).

Innovation network is defined as a group of actors whose interaction results in development of innovations or creation of value to customers (Liu and Chaminade, 2010; Martino and Polinori, 2011). Network actors are sometimes referred to as nodes comprising of either individuals or firms which are connected to each other through relationships (Liu and Chaminade, 2010). Different categorizations of networks exist in the literature such as horizontal vs vertical networks, formal vs informal networks, weak vs strong ties. Networks which are composed of firms in the same industry are referred to as horizontal networks while a vertical network consists of value chain partners. The three types of actors found under vertical networks are customers, suppliers and knowledge institutions. Within the network, knowledge, technology and information are transferred and shared among actors, and joint problem-solving is practiced (Mu et al., 2008).

A review of literature on innovation networks by Ozman (2009) identifies three basic questions which the research on network innovation tries to answer: (1) what are the underlying motives for innovation collaboration? (2) With whom to collaborate? (3) What factors do affect firm's innovation collaboration decisions? Different reasons have been advanced to explain the motivation behind firms'

participation in innovation networks.

According to Tomás and Arias (1995) innovation networks are a strategic asset which should be shaped to the needs of the company. They further provide the underlying motives for inter-firm collaborations with technological focus which include: general characteristics of technological development; search for opportunities and markets, and the changing nature of innovation processes (ibid). A comprehensive literature review of inter-firm networks and innovation by Ozman (2009) provides theoretical explanations for participation in innovation networks. From the resource-based view, firms are drawn into external collaborations in order to: access complementary resources and markets and reduce uncertainty as firms do not have sufficient resources. Other reasons are similarity in technological bases, knowledge base of the industry and the stage of the life cycle of the firm (Ozman, 2009).

The organizational learning approach focuses on exploration and exploitation of knowledge base as the motives for collaborative arrangements. From this view, external collaborations are initiated as a means of either enhancing the capabilities for utilizing and building on the existing knowledge, exploring new knowledge or both (Ozman, 2009). As regards the third question which is the focus of this study, the extant literature identifies the factors which affect the firm's network participation. These factors provide a clear understanding of why some firms engage more in innovation networks than others. Ozman (2009) argues that firms do not only engage in innovation networks because they need complementary resources for innovation, but because they are also embedded in social networks that influence

their behavior. Several factors have emerged in the extant literature; both internal and external factors. Internal factors include firm's network competence, entrepreneurial characteristics, perceived benefits and market orientation while external factors consist of industry characteristics, degree of trust, social relationship, and environmental competition and dynamism. However, the literature on this stream is very fragmented due to paucity of studies that combines the two groups of factors into an integrative framework.

The Social Exchange theory provides a basis upon which the factors influencing firm's network participation are investigated and analyzed. Looking at inter-organizational relationship from sociological perspective, the theory posits that inter-firm linkages are based on voluntary actions of individual firms that are motivated by the expectations of benefits from the relationship. According to Häkkinen (2008), individual firms enter into collaborative relationships when the benefits exceed costs; and the transactions occur within an historical and social context. Das and Teng (2002) point out that because of the scarcity of resources; firms opt to engage in social exchange to obtain the needed inputs from others. Their involvement assures them access to those resources which are difficult to obtain through economic exchanges.

The social exchange process is built on two key concepts: trust and power-dependence. Trust, which is concerned with emotional bonds among partnering firms, is referred to as the positive expectations of rewards from a relationship. The concept of power-dependence explains the ability of one party to influence the behavior of another party as well as to determine the outcome in social exchange.

The need of resources creates dependence of one party over another party (Das and Teng, 2002).

Prior research on innovation networks in food manufacturing industry reveals mixed findings of the extent to which food manufacturers participate in innovation networks. One stream of extant literature shows that open innovation is rarely known and almost non-existent in the industry. The food processors do not engage their customers and suppliers or other chain partners in innovation activities particularly in developing new products (Beckeman et al., 2013; Fortuin and Omta, 2009). This implies that the firms rely only on internal sources for generation of new ideas and information for innovation. The study of Beckeman et al. (2013) found that the Swedish food manufacturing industry is characterized by:

- i. Non-involvement of customers in their innovation activities particularly in developing new products,
- ii. Lack of cooperation among partners within or outside the value chain and,
- iii. Lack of integration and limited sharing of vital information on complexity and choices in food production and supply among partners in the chain.

Similar findings were obtained by Fortuin and Omta (2009) whose study in the Netherlands revealed that a great number of companies in the food processing industry do not involve suppliers and customers in their innovation activities; the problem which makes them fail to leverage innovation resources and capabilities. It has been noted that the problems of non-engagement in innovation networks arise as a result of low level of trust among partners within and outside the value chain, lack of network competence and entrepreneurial attributes, limited internal capabilities

and absence of an open innovation mindset which limit exchange of vital information and skills, and flow of ideas across boundaries (Fortuin and Omta, 2009; Beckeman et al. 2013).

According to Csath (2012), lack of trust is the consequence of weak social capital within'. Mohannak (2007) notes that trust acts a “stabilizer” of network relationships in conditions of uncertainty, sweeps away organizational differences, brings participants closer and opens the door for information, ideas and skills to move across boundaries. Although networks seem to be an important channel for acquisition of resources and information not readily available internally and in the open markets, they can impede innovation through creation of over-dependence of the weaker members, increased coordination costs and leakage of innovation secrets (Varis and Littunen, 2010).

Another stream of prior studies indicates that the food manufacturer is unlikely to improve its innovation capacity alone; instead co-operation with other firms within and outside the value chain could provide the necessary leverage to significantly improve its innovative capacity (see Kühne and Gellynck, 2010; Mpangalile et al., 2008). Through networks the food manufacturers can develop ability and improve their capacity to innovate that leads to improved economic performance and competitive advantage.

2.2.1.5 Technological Innovation in Food Industry

There is an increasing need for collaboration in innovation activities due to complexity of innovation processes and dynamic business environment. The fact that

the SMEs are not sufficiently endowed with internal resources required for innovation and the food processing industry is a low-tech and low innovative industry, interactions with different actors within and outside the value chain for the purpose of innovation becomes a necessity (Kühne and Gellynck, 2010). Technological innovation is often seen as an introduction of a new or improved product/service and process in the market.

The concept of newness is subjective as what is considered new by the producer does not necessarily mean *new* to the customer (Rogers, 2004). The degree of newness is based on perceptions and is described in terms of radical and incremental innovations (Otero-Neira et al., 2009). The aim of technological innovation is to provide end users with new and unique experience that significantly enhances firm performance in the marketplace and can be duplicated from one customer to customer (Riddle, 2008). Product innovation, in the context of network, involves the integration of internal capabilities and resources and knowledge made available by network partners to create a new product (Lin and Chen, 2006).

Product innovation in food manufacturing industry incorporates a wide range of aspects, such as new or improved packaging, changes in product composition, new ways of product usage, new size or form and quality through selected ingredients and raw materials (Kühne and Gellynck, 2010). Process innovation is referred to as the improvement or introduction of new techniques which enable the production of new products or reduction of production costs of existing products (Lin and Chen, 2006). Grunert et al. (1995, pp. 4) define process innovation as “an investment into a company’s skills, resources, and competences, which allows the company to bring

about product innovations”.

Ar and Baki (2011), suggest two key ways of implementing product and process innovations simultaneously: development of external and internal connection by focusing on encouraging employees to develop new idea or solutions and integrating customers' needs and suppliers' skills into innovation practices. They also emphasize the importance of promoting a learning capability through training courses as means of achieving process innovation. Technological innovation starts with (new) ideas which, in a stage-wise process, are transformed into new or improved product/service or process (Baregheh et al., 2009). The new ideas can be generated internally by employees, or may come from different external sources such as customers, suppliers and knowledge-institutions (Varis and Littunen, 2010; Rodgers, 2004).

Rodgers (2004) suggests evaluation of the ideas in terms of economic and technological sense before they are integrated into firm's processes. Innovation is no longer entirely an internal process but a result of interactions between customers, suppliers, competitors and other organizations within a system and involves an exchange of knowledge and other resources needed for development of new products or process or improvement of the existing ones (Liu and Chaminade, 2010). For the food manufacturing industry, technological innovation is viewed as an important source of value addition that makes agro-products highly marketable, useful, easily stored and profitable (Mpangalile et al., 2008).

With regard to the degree of technological innovation the industry undertakes mainly incremental product or/and process innovation (Beckeman et al., 2013; Diederer et

al., 2003; Baregheh et al., 2012). In relation to types of innovation, Baregheh et al. (2012) find that the food sector SMEs in the UK undertake four types of innovation: product, process, position and paradigm innovation, with more and fewer resources allocated to product and paradigm innovations respectively. However, the research done by Diederer et al. (2003) in Dutch farmers indicated that 80% of the innovations were process innovations, implemented purposely to reduce cost and also develop process control, environmental performance and labour conditions.

2.3 Empirical Literature Review

2.3.1 Youth Firm's Participation in networking on Technology Innovation, that promotes Business Performance

Sakari (2012) in his study on how competitiveness can be generated by enhancing innovation competence and business opportunity with collaborate applied research including SMEs and the research groups. The research report shows the major research results of collaboration activities contributed in these projects and the companies. The main research results of collaboration projects involving an applied research team and SMEs. More than 50 companies involved in these projects, and the companies were mainly production-oriented SMEs. The research projects were performed at the areas of robotics, simulations and wireless automation.

The major outputs of the entire project were presented in 9 articles published previously. The results were analyzed from analytical perspective of innovation capability and business potential. The aim of the study was to explore what business opportunities have grown from the joint research projects of SMEs and an applied team of researchers, and how this collaboration enhanced the innovation capability

of the two areas. Danail (2015), shows the challenges of Food Processing Small-Sized Enterprises – from Bulgaria. The study was to identify, describe, and analyze the challenges and impact of SMEs in food processing, subsector enterprises, location in region of Bulgaria as it was selected for comparative case study. The bigger challenges for the growth of SMEs was integration of many responsibilities

In small food processing companies, they do not have a different workforce for marketing, operations management, human resources, financial management, and networking. It is done by the same people who started it. The need for finding a proper balance and playing many roles at once makes it very difficult. This requires constant learning, insight, and flexibility. The difficulties cannot be categorized as ‘more or less critical’. Rather they can be grouped into two subcategories: ‘potentially manageable’ and ‘potentially unmanageable’. Growth challenges are correlated and will be considered in their complexities. Case companies are impacted by challenges, both positive and negative. The positive takeaway is that they have been valuable vehicles of managerial learning along the pathway to growth; and the opposite that they have contributed seriously to stalling the rate of growth.

Matias (2012). Did a research titled “The Impact of network on firm performance, among the important research areas is associated to entrepreneurship researched how relationship network interfere the performance of the organization. However, the literature focuses on qualitative case studies and quantitative studies those merges and acquisition or permanent types of data. By analyzing connection and causality in activities co operational relationship and firm growth the study intend to seek to empirically address the question from the research. The analysis is based on data set

and interviews with 53 SMEs. Both a descriptive analysis and regression methods are used to analyse the connection between activity in co- operational relationships and firm growth or internationalization.

The size of firm is measured by both revenue and employment growth rate. In other way the activity in the co-operational relationships is in two components: increasing versus consistently high activity with network actors. To address possible causality issues, the researcher used activity measures that are based on the consequence of the relationships rather than simply the number of relationships. The findings indicate that increasing activity with network actors is positively connected with firm growth as measured in both revenue and employment growth.

2.3.2 Youth Entrepreneurs networked with Input Suppliers and the Markets of their Produce

Linda (2016), Networking and Entrepreneurial Success. We used the Google Scholar meta-database of peer-reviewed publications to begin to search. Forty-eight peer-viewed journal articles published between 1993 and 2015 were identified using the search terms "networking" and "entrepreneurial success", "networking" and "entrepreneurship", "network theory" and "entrepreneurial success", "network theory" and "entrepreneurship". From this group of 48 articles, only two address the arts and culture sector specifically. Searches using the following artist-specific terms yielded no additional results: "networking" and "arts", "networking" and "artists", "network theory" and "arts", "network theory" and "artists". Snowball sampling from the reference lists of the previously identified 48 surfaced more peer-reviewed journal publications, one of which specifically focuses on an arts sector for a total of

53 articles under review. Responses to an open call to the Cultural Research Network pointed toward the sociology literature on networking in “art worlds” and “fields,” but as this literature does not engage with entrepreneurship directly we have not included it here, while acknowledging its importance in examination of the role of network connections in understanding arts and culture as a field of social interaction.

Atlay, Anafarta and Sarvan (2013) in their study on firms in the automotive supplier industry in Turkey concluded that product innovation had a positive significant impact on firm performance. Belderbos, Duvivier and Wynen (2010) carried out a study on innovation and Export competitiveness in Flemish firms by examining the effect of innovation on export intensity and growth using both cross-sectional and panel data of 733 firms. They concluded that the implementation of innovations especially product innovations had a robust positive correlation with export intensity of firms.

2.3.2 Networks and Innovations in Product, Process and Market

Bozic and Sonja (2005) conducted a research on the effects of innovation activities in SMEs in the Republic of Croatia. The research was carried out on 498 SMEs in manufacturing and service enterprises and analysed using multiple regression. Study findings revealed that implementation of innovations led to increased market share, improved product quality and reduced material cost per unit. Lin and Chen (2007) in their study, on innovation and performance, explored the relationship between innovation and firm performance of SMEs in Taiwan. Their findings reveal that innovation had a weak link with firm sales and that administrative innovation was

the most crucial factor in explaining sales rather than technological innovations.

Mikaela (2016) did a study on the challenges Facing Food Processing SMEs in Tanzania. The aim of this study were identified and analysed different reasons affecting MSEs for the purpose of finding out the major growth challenges are. The case study is mainly relayed on individual semi-structured interviews with sunflower oil processors and farmers in Babati districts, the study was conducted in February and March 2016, The findings indicated that there are numbers of challenges facing the processor, and the constraints were found to be lack of capital; an issue causing or worsening a majority of the other challenges at hand. Other challenges were related to raw material, equipment & electricity for processing, regulations, market accessibility, and competition. These obstacles need to be overcome in order to enable the industry's expansion within and outside of Tanzania, and further research was recommended.

Navyashree et al (2014), Determinants of Information Technology (ICT) Investment Intensity. ICT is a General Purpose Technology (GPT) that has the possible for the important impact to the firm organization economy. The use of ICT has an advantage to the firms in the industries for the case of efficiency, effectiveness, innovation, growth and competitiveness. In India, food processing is as an important industry which contributes to the gross domestic product (GDP). However, the aim of the entire study was to identify the determinants of ICT investment intensity for the firms belonging to the food processing industry in India. Secondary data were collected from the Prowess database provided by Centre for Monitoring Indian Economy (CMIE), in period of four years from 2011 to 2014. Panel data regression

analysis was used. Results indicated that capital intensity was important determinant of ICT investment powered in this industry. Other consideration like age of the firm and size of the firm are also statistically significant in select econometric models.

Ar and Baki (2011) carried out a study on the “Antecedents and performance impacts of product versus process innovation in SMEs in Turkish Science and Technology parks” This study confirmed a positive and significant influence of product and process innovation on firm performance. Sidek and Rosli (2013) carried out a study on “the impact of Innovation on the performance of Small and Medium Manufacturing Enterprises in Malaysia” using a sample of 284 SMEs. Research findings indicate that product innovation influenced firm performance positively

Gakure, et al. (2013) carried out a study on the Role of innovation in Kenyan Electrical and electronic manufacturing enterprises using multivariate linear regression analysis. Their results revealed a significant positive relationship between innovation and firm competitiveness. The study results also indicated that R&D, Human Capital and learning/knowledge sharing contributed significantly to innovation. Najib (2013) carried out a study on the internal sources of competitiveness in small and medium Indonesian food processing companies. In the study he examined the potential of market orientation and innovation as sources of competitiveness in food processing SMEs.

Competitiveness in the study was represented by business performance. Business performance was operationalized as a composite variable of three measures; sales volume, profitability and 45 market share. Research findings indicate that innovation

had positive effects on competitiveness of SMEs. They concluded that innovation was one of the most important factors that can be used to enhance competitiveness. Njogu (2014) in her study of the effect of Innovation on the Financial performance of SMEs in Nairobi found that product, process and marketing innovation have positive significant effects on financial performance of SMEs in Nairobi, county.

2.4 Research Gap

In the section of literature review, the researcher saw the significance of youth firm networking and technological innovation in firm performance in Tanzania. Most of the researchers viewed the importance of youth firm networking such as the study by Sakari (2012) did a research on how competitiveness can be developed by enhancing innovation capability and business opportunities with collaborative applied research involving SMEs and applied research groups, Danail (2015) Growth Challenges of Food Processing Small-Sized Enterprises – Two Cases from Bulgaria, Mikaela (2016), Challenges Facing Food Processing MSEs in Tanzania, Navyashree et al (2014), Determinants of ICT Investment Intensity. Information and communication technology (ICT) is a general purpose technology (GPT) that has the potential for significant impact on many industries in an economy. Most of the studies focused on networking and not deeply on technological innovation, this is the gap this study intends to fill by conducting a study to determine factors that promote youth networking and can promote innovations in food processing industry in Morogoro Municipal

2.5 Conceptual Framework

The conceptual framework was developed to address the question of what

determines youth firm innovation network formation and how the networks influences technological innovations and business performance of networked partners. Innovation being a complex process that needs collaboration between youth firms of different characteristics and endowment of resources. However, participation in network formation is a function of interplay of firm-specific such as network competence, market orientation, entrepreneurial characteristics, and degree of trust and social relationship factors which leads to business performance.

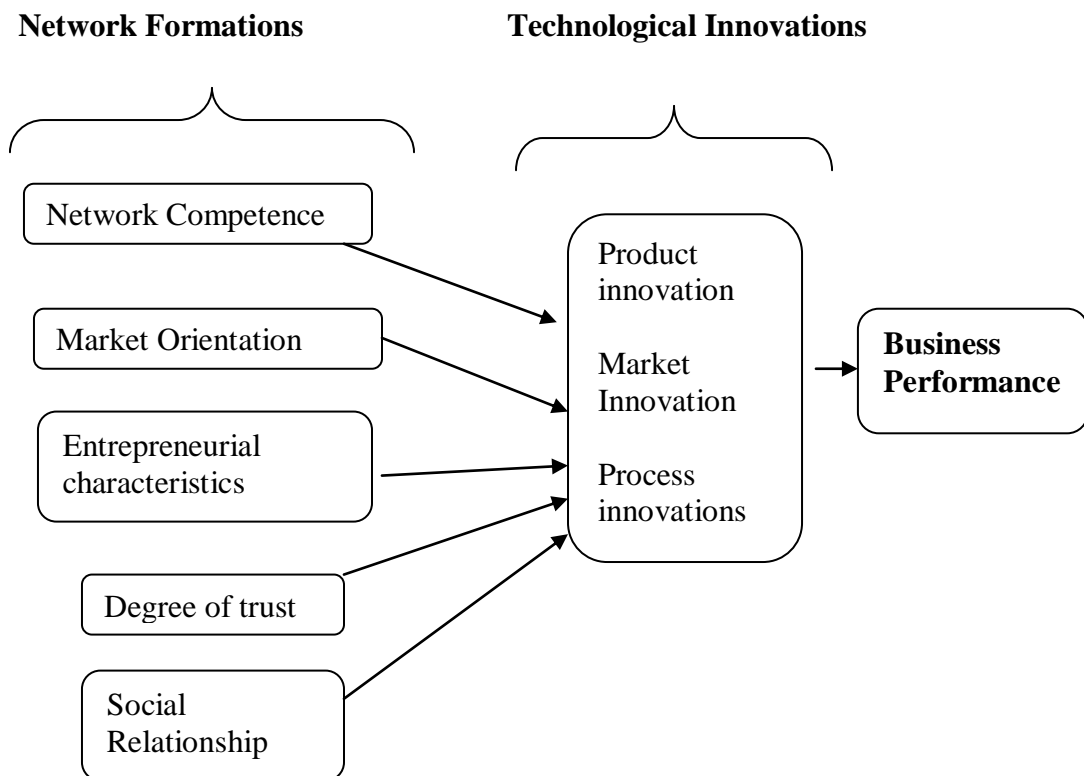


Figure 2.1: Conceptual Framework

Source: Researcher 2019

2.5.1 Network Competence

Innovation networking encompasses firm's diversity of networks and the extent to which the firm utilizes these relationships in enhancing its internal innovative

capacity. Rodgers (2010) points out that, as innovation process is not solely an internal process, firms must be aware of the ideas from customers and other external sources. However, participation in networks comes with challenges, costs and risks. According to Lefebvre et al. (2013), when the firm opens up its boundaries to external parties it is likely to face challenges related to opportunistic behaviours of other actors, differences of mentality between partners, increased coordination costs and leakage of vital information.

These and other challenges may explain firms' behaviours towards participation in innovation networks because they determine the benefits they could be retrieved from the network relations. The ability of the firm to successfully build and utilize the network relations for innovation purposes is referred to as network competence (Chiu, 2008). The network competence is used for network formation (to select partners and develop network relationships) and network management (to develop appropriate coordination and communication mechanisms) (Lefebvre et al., 2013).

The degree of network competence determines the firm's network location and innovation performance and is used strategically by highly competent firms to occupy central locations within the network (Chiu, 2008). Network competence installs confidence to the firm to establish collaborations with other firms because they are certainly sure that they can benefit from such relations. The highly network competent firms are characterized by active role in engaging in proactive communication and driving activities within the network (Chiu, 2008). Firms with a higher degree of network competence can optimally utilize the knowledge acquired from external sources because they can "recognize, evaluate, acquire and use

external resources” (Jong and Hulsink, 2012: pp, 284). The results of the study conducted by Lefebvre et al. (2013) in Belgian, French, Swedish, Irish and Italian food and drink firms shows an advanced level of network ability is really associated to firm’s ambidexterity and openness in terms of breadth.

From the open innovation view, ambidexterity is defined as the firm’s degree of developing new networks by balancing between exploration and exploitation of knowledge base. Breadth refers to the number of actors with which the firm has established relationships for learning and innovation (Lefebvre et al., 2013). The study of Chiu (2008) in optoelectronics cluster of Southern Taiwan Science Park examined the influence of network competence on firm’s location within the location and innovation performance. The results showed that the firms with a higher degree of network competence occupy central positions within the network and exhibit superior innovation performance compared to their counterparts with lower network competence and peripheral positions (Chiu, 2008).

2.5.2 Market Orientation

Market orientation is concerned with organization’s efforts in monitoring changes in customers and competitors’ behaviours and the way the firm fits its products and services to those changes (Grunert et al., 1995). Changes in customers and competitors’ behaviours have forced the agri-food sector move from production-driven supply chain to market-driven supply chain (Folkerts and Koehorst, 1998). These transformations are driven by new demands from customers (Folkerts and Koehorst, 1998), competition and environmental dynamism. The increasing industry risks, changing customers’ needs and demand for quality and safe products require

innovative response from the supply side. As these demands become more intense, the need for innovation arises as well (Capitanio et al., 2009). Firms tend to turn their attention to innovation strategies to gain competitive advantages and market shares (Gunday et al., 2011) by providing more value to their customers than competitors (Gray et al., 2004). The widely available innovation strategy for small firms is networking.

According to Beckeman, *et al.* (2013), any firm which does not embrace open innovation and collaboration with other actors within and outside the value chain is wasting its knowledge and competence. The implementation of innovation strategies needs devotion of efforts and resources to satisfy customers' demands (Fortuin and Omta, 2009; Laforet, 2010). This market-orientated innovation requires analysis and understanding of the customers' needs and preference, competition and environmental dynamism while the development of a new product should involve the whole value chain (Grunert et al., 1995) and other actors outside the value chain. Although, the concept of market orientation is popular in marketing literature and has been widely investigated, linking it to various organizational variables such as business performance and innovation performance (Grunert et al., 1995), previous studies linking it to formation of innovation networks are scarce.

2.5.3 Entrepreneurial Characteristics

The entrepreneurship literature highlights the importance of risk taking and proactiveness in innovation and network formation and considers them as key attributes of an entrepreneur. Entrepreneurial firms are risk takers and proactive in seeking innovation opportunities. Proactive firms are characterized by possession of

a wider variety of sources of ideas and knowledge for innovation. Networking with partners is considered as an innovation strategy (Hadjimanolis, 1998). Network relations can be formed and fostered when firms have the commitment to compete, survive, and succeed.

According to Wattanapruttipaisan (2002) firm's management initiatives to network and seek business opportunities are considered necessary entrepreneurial characteristics that can speed up the process of linkage formation. It is suggested that the existence of such outlook acts as a catalyst for firms to seek external collaborations as a means of expediting innovation through improved innovation capacity. Although networks seem to be an important channel for acquisition of resources and information not readily available internally and in the open markets they may be costly and risky (Varis and Littunen, 2010). Such risks can only be borne by an entrepreneurial firm which is known for embracing a strategic, growth- and outward-oriented outlook (Wattanapruttipaisan, 2002). Ideally, the entrepreneurial firm sees participation in innovation network as an opportunity to improve its competitive advantage because the networks are regarded as a rich source of new knowledge and information, and a place where innovation takes place through integration of internal capabilities and external resources.

2.5.4 Degree of Trust

The participants in innovation networks are inter-dependent and interact each other at various levels and bring their resources together to generate solutions. The existence of mutual trust among actors reinforces interactions and acts as incentive for increasingly flows of ideas and information within the network (Kühne and

Gellynck, 2010). Trust is a function of a long-term cooperation and its presence helps partners to lower the uncertainty of cooperation; reduce interaction costs and detect opportunistic behaviours (Mu et al., 2008). According to Ojasalo (2008), trust is an important element in product development networks and it is established on the basis of former experience of earlier cooperation.

Mohannak (2007, pp.238) notes that: “The presence of trust generates a willingness to overcome organizational differences, to work through difficulties, and encourages openness in exchanging ideas and information”. Although firm’s networking with outside organizations is facilitated by availability of resources, experience and capital backing but established reputation and trust are given more priority in partner selection and network formation (Mu et al., 2008).

The study of Beckeman et al. (2013) in Swedish food manufacturing industry found that the failure of food manufacturers to collaborate with other actors within and outside the value chain is due to low level of trust among partners and hence results in limited exchange of information, wastage of knowledge and competence, and absence of an open innovation. Mu et al. (2008, pp.91) observe that “trust breeds trust and the loss of trust makes it more difficult for the firm to find appropriate partners”. Although trust is an important factor in innovation, the empirical research linking it to network formation is scarce particularly in food manufacturing industry.

2.5.5 Social Relationship

Social relationship plays an influential role in establishing networking relationships and facilitates easy exchange of vital technical information, tools, knowledge and

raw materials (Dickson and Hadjimanolis, 1998). According to Dietrich (1994) internalized costs and benefits have less influence on cooperative arrangements than historical background of the networking firms. Innovation networks formed on the basis of historical background, common professional desire of network actors and entrepreneurship are strong and successful as they are supported and enforced by each actor's internal motivation (Ojasalo, 2008). The network actors know each other and try not to act in a way that would destabilize their relationships. Dickson and Hadjimanolis (1998) found personal links to be a driving force for formation of network links in Cypriot small firms.

2.5.6 Relationship between Networks and Technological Innovation

Performance

This area has limited empirical research because, as pointed out by Rodgers (2004) and Varis and Littunen (2010), it is a recent scientific inquiry. Technological innovation performance depends on organizational innovation effort. Innovation effort is defined to include investments in human, financial and information assets (Kühne et al., 2013), formation of external networks, adoption of an open innovation, short communication line and participatory approach (Yannis et al., 1999). The application of these resources increases the propensity for technological innovation.

The introduction of technology-based innovations by SMEs relies on networks relationships which contribute to acquisition of new knowledge and other resources which are important inputs for innovation. The key assumption is that innovation is a collaborative venture among firms because most of the firms especially the SMEs

can not sufficiently possess internal capabilities and resources to carry out innovation alone (Rodgers, 2004). According to Dickson and Hadjimanolis (1998, pp) “innovative firms that cannot rely on their own internal capabilities and resources may, therefore, seek formal or informal links and networks with external organizations possessing the appropriate resources and expertise”. The empirical evidence on the relationship between network participation and development and introduction of technology-based innovations is mixed, however.

Hayashi (2002) reports that network relations, acting as the locus of innovation for network participants, are found to have a positive impact on improving technological capabilities of SMEs. Similar results were obtained by Rodgers (2004) who found that innovation was higher for firms with network relations but the strength of networking effect appeared to move in an opposite direction with firm size for manufacturing firms. Liu and Chaminade (2010)’s study findings provide strong support for networks in improving technological innovation performance. Using the case of Grace Corporation in Southwest China they found that the company’s technological innovation relied more on knowledge sharing and transfer at its growing and plateau stages. They further found that the diversity of actors brings in diversity of knowledge for innovation (ibid).

In contradiction with several other scholars, Varis and Littunen (2010)’s findings showed that network relations with value chain actors were not associated with the introduction of product, process and market innovations. They also found that the knowledge institutions did contribute to the development of the three types of innovation. However, the network and knowledge institutions supported for the

introduction of organizational innovation (Varis and Littunen, 2010). These contradictory findings may be a result of the differences in context, time horizon or measurements of network relationships. The SME technological capabilities can be developed and improved over time and from trusted-based long-term collaborative arrangements (Varis and Littunen, 2010).

One interesting thing to note in the extant literature is that a considerable number of past studies have integrated market innovation with technological innovation (i.e. product and process innovations) when the latter is analyzed in terms of their determinants and effects on business performance (see Otero-Neira et al., 2009; Varis and Littunen, 2010; Lin and Chen 2007). The rationale for inclusion of market innovation in the analysis is that it is often assumed that the success of technology-based innovations resides in the marketplace (Lin and Chen, 2007). This implies that the limitation of markets adversely affect the profitability of product and process innovations. Otero-Neira et al. (2009) argue that profitable innovations could be obtained from coordinated innovation plans involving product, process and market innovations.

Lin and Chen (2007) state that: “Devising innovative marketing measures is essential to help organizations transform good ideas and good products into sales revenue and profit”. This implies that the introduction of product innovations requires search for new markets or new market segments (Varis and Littunen, 2010). Therefore, we include market innovation in our study. The networks which are important for technological innovation in food manufacturing industry are with customers, suppliers of materials and equipment (and knowledge organizations.

Networking with customers is crucial for market-based economies as it facilitates collecting information on customers' needs with the aim of developing unique and superior products (Ar and Baki, 2011).

Therefore, market knowledge plays a key role in providing more value to customers than competitors through innovation (Gray et al., 2004). Linkages with suppliers and knowledge organizations (R&D centres) like universities, research and training institutions is important for assisting in the choice of appropriate technology and equipment, acquisition and transfer of knowledge and skills for innovation and recognition of opportunities for diversification (Dietz et al., 2000; Iliopoulos et al., 2012). Iliopoulos et al. (2012) suggest that networking with universities and research centres is less costly and risky than investing in company-owned R&D centres and can easily improve technological competence. Hypotheses H8, H9 and H10 are developed to test the relationship between network and product, process and market innovations respectively.

2.5.7 The Relationship between Product, Process and Market Innovations and Business Performance

There is a substantial amount of literature on innovation network that tries to unravel the effect of network on firm performance (Ozman, 2009). The relationship between the two themes has been investigated using both qualitative and quantitative methods (see; Lin and Chen, 2007; Varis and Littunen, 2010). However, prior studies which examined the effects of product and process innovations on firm performance from the network perspective are scarce, with the exception of Varis and Littunen (2010). In general, regardless of the research methods applied or perspectives taken the

available empirical research evidence suggests that innovation positively influences business performance. However, empirical research linking business performance to specific types of innovations has reported contradictory results. Some scholars report that the introduction of product and process innovations is associated with improved business performance as innovative firms with new or improved products and process improvements exhibit higher sales, profit margins and employment growth than firms with less or non-technological innovation activities (Laforet, 2011; Ar and Baki, 2011).

In contrast, the study of Lin and Chen (2007) on innovation activities of SMEs in Taiwan finds that product, process and market innovations (both radical and incremental) are not significant predictors of company sales. Varis and Littunen (2010)'s study examined the effect of different types of innovation on business performance. Using business growth and profitability as measures of business performance, the findings indicated that the introduction of product, process and market innovations were associated with business growth but the results showed no association with profitability. They arrive at a conclusion that as innovation requires heavy investment, the returns may take a quite long time to be realized; hence the firm's goal of innovation is to secure continuing success and future survival (*ibid*).

What can be inferred from these studies is that variations in measurement of business performance may be partly responsible for these contradictory results. In fact, the consensus has not emerged among researchers on the measurement of business performance because the extant literature indicates that diverse measures of business performance have been used. Varis and Littunen (2010) point out that the

contradiction in research findings is associated with the heterogeneous nature of business performance. Therefore, the relationships between product, process and market innovations and business performance firm performance are tested.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Chapter Overview

This chapter is based on the research methodology used in this study, it covers research design, philosophy and paradigm the guide used in the study, sampling procedures, area and [population of the study variables and measurement, data collection methods, data collection techniques and data analysis

3.2 Research Design

Mark Saunders (2009), said that there are different research design such as experimental, case study, grounded, ethnography ect that are exploratory descriptive and explanatory research. Research design was guided by questions and objectives of the study, the extent of existing, knowledge, time and other resources available.

From this study the descriptive research design was used as per following reasons

The data were collected through case study as it is a flexible hence easier to make intensive research, it is easily verified on the spot through observation used by researcher. Interview and questionnaire are data collection techniques used in this study. These methods varied in context of money cost, time and other resources at the disposal of the researcher. A case study design was very useful in the study as it permit and draw presumption about the relationship between the two variables. Both qualitative and quantitative methods were used as it supplements each other. The qualitative research approach is manly used to explain subjective assessment, analysis and interpretation of attitude, opinions and behaviors of the respondents

3.3. Area of the Study

This study was conducted at Morogoro Municipal is among the Municipal which have a big number of SMEs mostly the youth. The selected place reduced the traveling distance hence, relief to the researcher and it was easily reachable and accessible during data collection period.

3.4 Survey of the Population

Ghauri and Gheonhaug (2005), stated that population is the aggregate of units to which one wishes to generalize the results of the research study population can be large or small depending upon the size of the group of persons of objective which the researcher plans to make inferences. The study population integrated SMEs who are dealing with different goods and food processing industry in Morogoro Municipal

3.5 Sampling Technique and Procedure

Sampling is the act, process, or technique of selecting a representative part of a population for the purpose of determining parameters or characteristics of the whole population. It involves the process of selecting a number of individual objects from the population to the extent that the selected group comprises elements representative of the characteristic found in the entire group, Kombo and Tromp (2006), as quoting Orodho and Kombo (2002), In this study both purposive and random sampling were employed.

3.5.1 Purposive Sampling Techniques

Babbie (1992), define purposive sampling is the one enable the researcher to give out sample based on his/her knowledge of population, research element and

objectives. Purposive sampling is also based on researcher's decision and reason of the study. This method is used in the study to select five (5) top management employees from Morogoro Municipal Business & Marketing department.

3.5.2 Random Sampling

According to Yates et al (2008), in random selection each individual is chosen randomly entirely by chance, such that each member has equal chance of being selected at any stage during the sampling process and each subset of individuals have the same probability of being chosen for the sample as any other subset of individuals. For this study, random selection was used to select 120 youth SMEs from Morogoro Municipal where by the researcher selected the respondents randomly to form a sample.

3.5.3 Sample Size

Table 3.1: Sample Size

| S/N | Type of Respondents | No. of Respondents |
|-----|---|--------------------|
| 1. | Youth SMEs (food processors) | 120 |
| 2. | Morogoro Municipal (Business Development office department) | 5 |
| | TOTAL | 125 |

Source: Researcher, 2018

Sample size is a subgroup of the population you are interested from the total population Kumar (2004). The sample size for this study was drawn from a study population of Morogoro Municipal. Kothari (2014) observed that the sample size of the study should be neither excessively large nor too small. An optimum sample size was one which fulfils the efficient, representative, reliability and flexibility

requirement. This study involved 120 youth SMEs from Morogoro Municipality out of 164 food processors, and five (5) top management employees from Morogoro Municipal from Business Development office department (Business & Marketing). The total number of 125 was used in this study as respondents.

3.6 Variables and Measuring Procedures

The research were collected both qualitative and quantitative information that will be gathered through semi-structured interviews, questionnaires, documentary reviews, and reflective journals. Both qualitative and Quantitative information from the research were used to help the researcher in gaining access and developing trust with the youth/respondents. The researcher intended to know the specific information collected from the respondents which was compared and constructed with information collected from various literature resources like Books, journals, dissertations and internets.

3.7 Methods of Data Collection

This study was used two types of data collection methods namely, Primary data and Secondary data to collect both Qualitative and Quantitative data.

3.7.1 Primary Data

This is the data were collected afresh for the first time, and thus happen to be original in quality (Kothari, 2004). These are the original information obtained directly from the respondents. The study obtained more of Primary data through interviews and questionnaires from various respondents. The data that were collected through primary sources was from youth SMEs

3.7.2 Secondary Data

The secondary data are the data that already exist Chuchil & Lucobucci (2002).

The secondary data as used in this study were collected from different sources such as youth SMEs and youth projects in Morogoro Municipality, Internet, books and Magazines.

3.8. Data Collection Techniques

The instrument which was used to collect data was structured questionnaires and interview. Both questionnaires and interview questions was in English version.

3.8.1 Questionnaires

The study used the Questionnaire that combined both questions i.e close ended and open ended questions. Open ended allows respondents to give any answer, while Close ended questions, requires respondents to provide fixed answers by choosing the right one or the appropriate one. Questionnaire also facilitates a quick collection of views or opinions from a larger number of respondents on a topic of interest (Creswell, 2007). By using questionnaire it was possible to solicit views of a substantial number of business owners (food processing) in Morogoro Municipal. The study used these methods so as to offer a chance of pace and help respondents to establish report in providing genuine information. The group of respondents that Questionnaires was distributed was to youth SMEs who were dealing with food production; it speeds up data collection process because the researcher reaches a large number of respondents in fairly short period of time. Since a large number of respondents were involved, questionnaire data may provide robust evidence on the subject investigated (Silverman, 2006).

3.8.2 Interview

The study was conducted by the researcher by the use of face to face interview top the participants of Morogoro municipal in Business development office (Business and Marketing Department). The information used from interview was used as supplement information gathered with the use of questionnaires.

3.8.3 Documentary Review

This study used documentary review in in data collection as Second hand source of information; it seek advice from studying written such as number of youth at Morogoro and youth SMEs reports.

3.9 Reliability and Validity of Data

Reliability is known as the extent in which data collection techniques or analysis process will yield consistent findings (Smith *et al.* 2008). This indicates that the measuring process should produce the same results on the other occasions and also observation produces from the findings should be equal to other observations. The reliability was ensured by the preparation of questionnaires with the same question to the respondents. Also, the analysis were suspiciously done to ensure the data obtained was the same as to what researcher thought and the time to the data collection through interview and questionnaire were to be neutral so as to avoid participant error

Validly means the extent to which a test measures what actually expect to measure, it indicates the degree to which an instrument measures what it is supposed to be measured (Kothari, 2004). Validity from an adequate coverage of the entire topic

together with choosing this study were obtained through providing an adequate coverage of the topic together with choosing the entire sample of the universe with 120 participants. The study was compared with the set of other studies done by various researchers work

3.10 Data Analysis and Processing

All participants to every questions were collected from the study on the research and were filled in the statistical software to ensure were recorded well. Data were analyzed using a statistical package called Statistical Package for Social Science (SPSS) and excel for drawings more specifically for quantitative data. By using SPSS in analyzing data, the study employed descriptive statistics because it was simple to draw graphs, charts and tables and easy to interpret. It also showed a complete analysis in terms of ratio, age, education and others. However Crosstabulation, T-test and Pearson Chi-square test analysis was done as well, the table below explains the mapping analysis.

Table 3.2: Analysis Mapping

| Research Question | Relationship to be analysed | Analysis techniques |
|---|-----------------------------|---|
| i. What are the factors of youth firm's participation in networking on technology innovation that promote business performance? | Ranking | Frequencies and percentages |
| ii. How do youth owned SMEs networked with input suppliers, product markets and other SMEs? | Comparison | T-Test (Independent sample test) |
| iii. What is the relationship between networks and innovations in product, process and market | Comparison | Crosstabulation (Pearson Chi-square test) |

Source: researcher, 2019

3.11 Ethical Consideration

Before data collection on this study permission was required from the office of Regional Administrative Secretary (RAS), District Business Officer, District youth officer and other related department who works closely with SMEs especially on youth. However confidentiality of information were ensured and seeking for more cooperation on data collection, either respondent for both questionnaires were filled and interview was done to participate by their willingness and comfortability on the study.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Chapter Overview

This chapter presents analyses and discussions of research findings in determine Impact of youth firms' participation in networks on technological innovations in business performance in Morogoro Municipal food industry. The findings were presented and analyzed in relation to the specific objectives of the stud which was to identify factors for youth firm's participation in networking on technology innovation, that promotes business performance, to explore how youth entrepreneurs networked with input suppliers and the markets of their produce and to examine the relationship between networks and innovations in product, process and market

4.2 Demographic Characteristics of Respondents

This section presents the demographic characteristics of the respondents. These include the age, gender and educational level of the respondents. These are presented in the subsequent sections. The findings are presented in different forms which are pie charts, bar graphs and tables in percentage form to facilitate easy interpretation and understanding.

4.2.1 Gender Distribution of the Respondents

Table 4.1: Gender of Respondent

| | | Frequency | Percent (%) |
|-------|--------|-----------|-------------|
| Valid | Female | 34 | 28.3 |
| | Male | 86 | 71.7 |
| | Total | 120 | 100.0 |

Source; Researchers' 2018

The study examined the extent to which respondent's gender. The findings show that 28.3% of respondents were found to be female and 71.7% of respondents were male. This implies that most of business owner are male see table 4.1 The findings from table 4.1 indicate that most of the SMEs who are in business are male as it was 71.1%, this implied that most males are more concerned in finding money because of their family responsibility and this leads them to be more involved and taking business as a main source of generating income compared to females.

4.2.2 Education Level

The study wanted to examine if there was a link between the level of education attained by the respondents and owning business/ youth are in business. From the figure 4.1, 81.67% of the respondents were University level, 10.63% were youth who completed secondary education and only 7.5% were youth who completed primary school. This shows that most of the respondents were youth who are knowledgeable also the respondents had different educational levels namely; University level, Complete Secondary level and complete primary level as shown in the Figure 4.1.

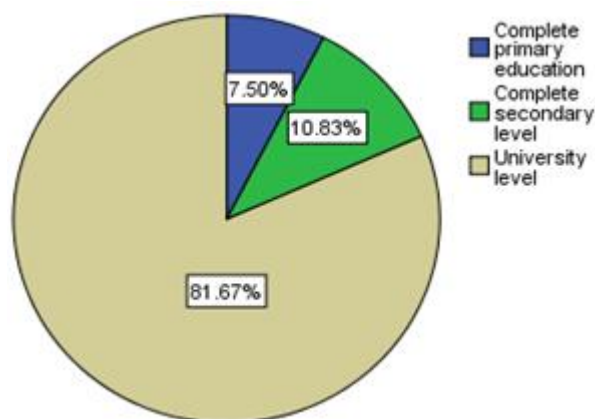


Figure 4.1: Education Level

Source; Researchers' 2018

The finding from Figure 4.1 indicates that most of youth graduates from universities and secondary people. They have taken decision of establish their own business and employ themselves and even employ other youth. This signifies that business now is leading by people who are educated. They have decided to involve themselves in business because this is helping them to find extra income to sustain their life.

4.2.3 Age of Business Owner

A researcher explores age of the respondents/business owner to know experience they had concerning factors influencing business performance, the result of findings was represented in table 4.1.3 that 60% of the business owner/ respondents were in age brackets of 26 - 35 years, 21.7% of respondents were in age bracket of 18 - 25 years while 18.3% of respondents were in age bracket of 18 years and below. From the findings most of the respondents were aged between 26 - 35 years his implies that respondents had enough experience concerning the business they are doing.

Table 4.2: Age of Business Owner/Respondent

| | | Frequency | Percent |
|-------|--------------------|-----------|---------|
| Valid | Less than 18 years | 22 | 18.3 |
| | 18 -25 years | 26 | 21.7 |
| | 26 - 35 years | 72 | 60.0 |
| | Total | 120 | 100.0 |

Source; Researchers' 2018

The finding from Table 4.2 indicates that most of the respondents are 26-35 years, this indicate that most of the business are owned by people with the age group above 25 years old. This group comprised of junior working group who are more exposed to modern information and mature enough to lead business, after a long period of facing different business challenges. Doing/own a business needs self-discipline which help to also have respect on whatever it is expended.

4.3 Factors that Influence Youth Firms in Participate in networking on Technology Innovation in promoting Business Performance

The first objective from this study aimed at examining the factors which influence youth firms in participate in networking on technology in promoting business performance.

4.3.1 Main Factors that Promote Business Performance

The respondents were asked on the main factors that promote business performance. The findings show that 35% of the respondents said that Entrepreneurs characteristics followed by 30% who said degree of trust, then 17.5% said social relationship promote business performance and 11.5% said network competence promotes business performance while few said Market orientation by 5.8 percent. This levels that business performance is depends more on the entrepreneurs characteristics, this is either it's inborn characteristics or by training/learning

Table 4.3: Main Factors which promotes Business Performance

| | | Frequency | Percent |
|-------|-------------------------------|-----------|---------|
| Valid | Market orientation | 7 | 5.8 |
| | Network competence | 14 | 11.7 |
| | Entrepreneurs characteristics | 42 | 35.0 |
| | Degree of Trust | 36 | 30.0 |
| | Social relationship | 21 | 17.5 |
| | Total | 120 | 100.0 |

Source; Researchers' 2018

The findings from Table 4.3 indicate that 35% of respondents said Entrepreneurs characteristics and degree of trust as 30% of respondents indicated. This implied that for the youth/people that are in business he/she should have at least an entrepreneurial characteristics and degree of trust. By having those shows that they

are real in business mind. Having entrepreneurial characteristics had helped to have innovative idea on their business and leads them to sustain more on the business line. The degree of trust has also make the youth to be trusted in most of the financial institution, without being trusted in business it is very hard to sustain for long time in business line.

4.4 Networking of Input Suppliers and Market of their Produce to Youth Entrepreneurs

The second specific objective of this study aimed at finding the linkage between the input suppliers and youth entrepreneurs leading to business performance. T-test was computed as per explanation below.

4.4.1 Relationship between Input Suppliers and Position of Youth Firm on value Chain

According to specific objective two, t- test was used to test above hypothesis and mean results of the youth firms and inputs supplier. The 4.4 shows that out of 120 respondent 54 are respondent from production node and 23 respondents are from processing node with their mean of 1.35 and 1.26 respectively. The results were presents in the Table 4.4.

Table 4.4: Relationship between Input Suppliers and Position of Youth Firm on value Chain

| | Position of youth firm in the node of the value chain | N | Mean | Std. Deviation | Std. Error Mean |
|-----------------------------------|---|----|------|----------------|-----------------|
| Relationship with input suppliers | Production | 54 | 1.35 | .482 | .066 |
| | Processing | 23 | 1.26 | .449 | .094 |

Source; Researchers' 2018

In table 4.4 the result shows that along the value chain, the food processors on production node are many compared to processing. This means that more efforts should be done to the government to train and create awareness on the processing node as well as on value addition to wide up the processing industry. If more people will concentrate much on production node will leads to no be able to compete with other countries on external market, therefore government and other development partners should look on the business opportunity available on the processing as part of implementing current manifesto of the ruling about industrialization.

Table 4.5: t-test on the Relationship between input Suppliers and Position of youth Firm on their Node of value Chain

| | | <u>Levene's Test for Equality of Variances</u> | | <u>t-test for Equality of Means</u> | | | | | | |
|-----------------------------------|-----------------------------|--|------|-------------------------------------|--------|-----------------|-----------------|-----------------------|---|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Relationship with input suppliers | Equal variances assumed | 2.867 | .095 | .773 | 75 | .442 | .091 | .118 | -.143 | .325 |
| | Equal variances not assumed | | | .796 | 44.457 | .430 | .091 | .114 | -.139 | .321 |

Source: Researchers' 2018

From the table 4.5 represent statistical significant data. According to Levene's Test for Equality of variances gives the T-test for equality mean with the value of t (75, 95) = 0.773 with the p-value of 0.095 which is greater than the level of significance, α (0.05). This means that we accept the null hypothesis and leads to conclude that the assessment of networking by youth entrepreneurs on the value chain is significantly different from that of input suppliers. This indicates that there is no differences on how processors and producers are linked /networking to input suppliers, which leads to low performance on their business. If they will well

strengthen their networks the business performance will be better and sustainable.

4.5 Relationship between Networks and Innovations in Product, Process and Market

4.5.1 Technological Innovation on the Food Processing Business

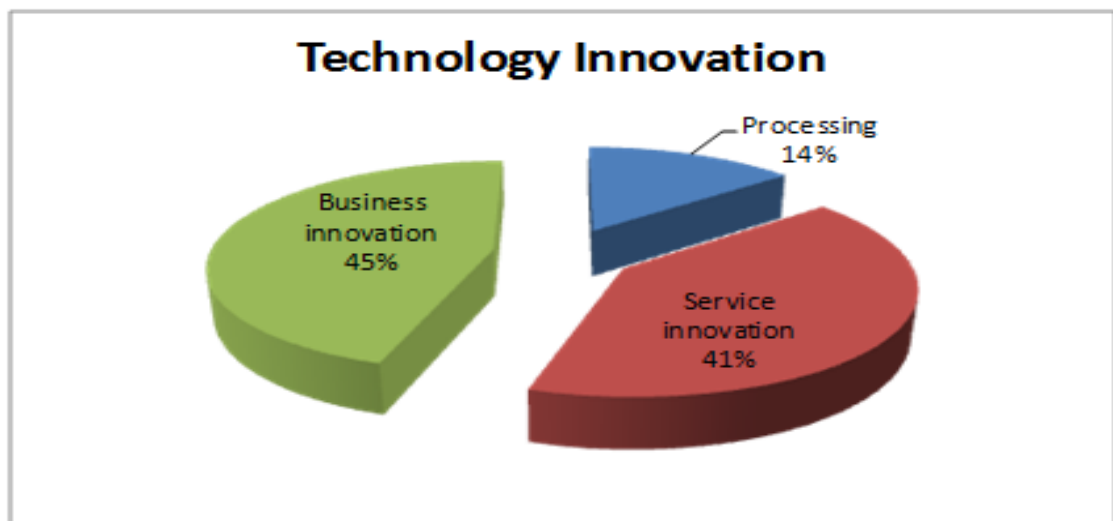


Figure 4 2: Technological Innovation on the Business

Source; Researchers' 2018

Technological technology was explained more in the figure 4.2 and table 4.4. The figure 4.2 the output shows the technology innovation on the business. Due to respondents interviewed, 45 % of the respondents said there are engaged on the Business innovation, 41% are in service innovation and 14% are in processing innovation. While there are no one who are in sustainable and incremental innovation. The findings from Figure 4.2 indicate that 45% of respondents said business innovation. 41% are in service innovation and 14% are in processing innovation. While there are no one who are in sustainable and incremental innovation. These reveal that most of the youth who are in business are in business service innovation node because of the simplest of the implementation as well as people are not exposed to new technology that can help them to expand their

business idea and business generally.

4.5.2 Relationship between Business and Technology Innovation used

In this study a researcher wanted to know if there is relationship between youth entrepreneur and technology innovation in their business. Cross tabulation has been computed as shown in Table 4.6.

Table 4.6: Relationship between Business and Technology Innovation

| | | | What technology innovation are you using on your business? | | | Total |
|---------------------------------|--|--|--|--------------------|---------------------|--------|
| | | | Processing | Service innovation | Business innovation | |
| Relationship between businesses | Good | Count | 12 | 14 | 12 | 38 |
| | | Expected Count | 5.4 | 15.3 | 17.2 | 38.0 |
| | | % within Relationship between businesses | 31.6% | 36.8% | 31.6% | 100.0% |
| | | % within Technology innovation | 70.6% | 29.2% | 22.2% | 31.9% |
| | | % of Total | 10.1% | 11.8% | 10.1% | 31.9% |
| | | Residual | 6.6 | -1.3 | -5.2 | |
| | | Std. Residual | 2.8 | -.3 | -1.3 | |
| | Average | Count | 2 | 16 | 21 | 39 |
| | | Expected Count | 5.6 | 15.7 | 17.7 | 39.0 |
| | | % within Relationship between businesses | 5.1% | 41.0% | 53.8% | 100.0% |
| | | % within Technology innovation | 11.8% | 33.3% | 38.9% | 32.8% |
| | | % of Total | 1.7% | 13.4% | 17.6% | 32.8% |
| | | Residual | -3.6 | .3 | 3.3 | |
| | | Std. Residual | -1.5 | .1 | .8 | |
| | Bad | Count | 3 | 18 | 21 | 42 |
| | | Expected Count | 6.0 | 16.9 | 19.1 | 42.0 |
| | | % within Relationship between businesses | 7.1% | 42.9% | 50.0% | 100.0% |
| | | % within Technology innovation | 17.6% | 37.5% | 38.9% | 35.3% |
| | | % of Total | 2.5% | 15.1% | 17.6% | 35.3% |
| | | Residual | -3.0 | 1.1 | 1.9 | |
| | | Std. Residual | -1.2 | .3 | .4 | |
| Total | Count | | 17 | 48 | 54 | 119 |
| | Expected Count | | 17.0 | 48.0 | 54.0 | 119.0 |
| | % within Relationship between businesses | | 14.3% | 40.3% | 45.4% | 100.0% |
| | % within Technology innovation | | 100.0% | 100.0% | 100.0% | 100.0% |
| | % of Total | | 14.3% | 40.3% | 45.4% | 100.0% |

Source; Researchers' 2018

From Table 4.6 shows the relationship between businesses and the technology innovation used by youth entrepreneurs in processing node. This explains that the relationship between processors and the technology innovation used to promote their business performance. Generally, the expected value in the table above is 119 which are equal to observed value (119), this means that the difference between expected value and observed value is zero which indicate that the two variables are not related to each other. This is also explained more in the Chi square Table 4.7.

4.6.3 Chi-Square Test on the Relationship between Youth Business and Technology Innovation

The Chi-square test measure whether the difference is large enough so that we can be confident that there is no relationship between youth business done and the technology innovation used by them, that means they are dependent to each other.

Table 4.7: Chi-Square Test

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 14.339 ^a | 4 | .006 |
| Likelihood Ratio | 13.527 | 4 | .009 |
| Linear-by-Linear Association | 6.973 | 1 | .008 |
| N of Valid Cases | 119 | | |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.43.

Source: Researchers' 2018

Table 4.7 shows the Pearson Chi-Square value which is 14.339. The p value (2 sided) is 0.06 which is greater than our level of significant ($\alpha=0.05$), this leads us to fail to reject the null hypothesis and conclude that there is no significant relationship

between youth businesses and technology innovation used by them in related to business performance. Therefore it also shows that, most of them they are not using much of the technology innovation in their business which may leads to not performing well.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Chapter Overview

The purpose of this chapter is to provide a summary, conclusion and recommendations of the study in terms of the data which have been collected and analyzed with regard to the research questions and objectives.

5.2 Conclusion

It is clear that many youth are struggling to employ themselves in agribusiness sector despite of the challenges they are facing, but they still like/wish to see many changes in their life hood through business. To reap the benefits of their life, the government should provide a wide room to accommodate and provide an integrated strategy which will improve the model of business most youth are involving in. In agribusiness value chain there are more opportunities only if the youth are not exposed to but if they will be exposed on they can do much on their business. While the evidence gaps from a researcher showed that most of business owner are youth with the age group range from 26-35 which is about (60%) but they have a big challenge of not networking among themselves and input suppliers. This gap leads them to not achieving most of their goals because of less interaction which can windup their business skills as well as getting raw materials easily.

However when looking at the factors which promote the business performance. The entrepreneurial characteristics, degree of trust and social relationship seems to be more important to any business. This leads to conclude that, it does not matter whether it is by training of it's an inborn thing but it is very important to have them

because they increase much on someone's business. Addressing formalization of the business, it seems most of the business which are done in Morogoro Municipal are not formal. This means that the district business officers has a lot to do to emphasize them to formalize their business so that they can real know and realize if they are making profit or not. So there is a need of these officers to provide training on the importance of the youth who are in business to formalize their business and even to insure them.

Looking at the relationship between business done (along the value chain) and the technological innovation, the results showed that there is no relationship between them. This means that, there is a lot to be done the make sure that the businesses done are innovative. Innovating the business will make the business to sustain for long compared to the business which does not. Being innovative in business does not need much effort, it only needs someone to look of his/her business and see how he/she can use the technology available to produce/process and sell the product. However being innovate will impress most customers in someone's business.

Generally the youth firms' (food processors) participation in networks on technological innovations in business performance it is still challenging to many of them and it is very important for them to get training/attending different workshops and seminars to be aware on the available technology, the use of it and the importance of networking among themselves to solve the problem and make their business perform well. The government, government agency and other development partners should create conducive environment more especially on technology skills including the use of ICT, processing machinery e.t.c which are affordable and user

friend to youth so that their livelihood can improve and leads to solve unemployment problem as well.

5.3 Recommendations

The following are the recommendations from the study;-

- i. Food possessor should establish a platform that can assist them in getting easy their requirement i.e training, workshops, seminars e.t.c. For example getting training on food safety, formalize their business will help them to improve their regulatory environment and operate easier on the industry. This will also help them to be realizing in the society that they exist and they can provide employment to more other youth.
- ii. Both district business officers and food possessor they should have realize that communication is very important part of business; they should strengthen among themselves so that to create closeness which will help to fill whatever gap and strengthen linkage among them.
- iii. The food possessors should work on contract farming model with the input suppliers, from farmers to distributor side. This can help them to produce quality products as well as to assure their customers on the availability of their products in the market.
- iv. The food possessors as other business they should create market channel and distribution networks among themselves, this can help them to wide up they market and network which will make them learn more from each other and share business experiences.
- v. Government should set up a strategy that will encourage food possessors to

use the technology available in producing their products more especially on the value addition node. On this node there is a lot of opportunity youth can lean and employ themselves. Technology innovation will help them to produce things which they will not only sell in internal market but they can go up to external market.

- vi. Food processors especially the youth should be given a priority on soft loans with the small interest rate and startup capital to invest on the new technology available to reach out the available market.

5.4 .Recommendations for Further Studies

This study was on the impact of youth firm's participation in networks and technological innovations in business performance especially to emphasize them to formalize their business so that they can real know and realize if they are making profit or not other studies should be done on the impact of youth firm's participation in east Africa community common market.

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APPENDIX

QUESTIONNAIRE FOR YOUTH FIRM/SMES (MOROGORO MUNICIPAL)

Dear Respondent,

My name is Veronica Kebwe, a student of Masters of Arts in Monitoring and Evaluation (M&E) from The Open University of Dar es Salaam. I am doing a study on the Impact of youth firm's participation in Networks on technological innovation in Business performance. Please assist me to respond few questions below to make this study successful. Confidentiality upon your information will be maintained and it is for research purpose only.

Questionnaire No.....

Section I: Demographic data

1. Name of the respondent.....
2. Phone No. of respondent.....
3. Location of business.....
4. What is sex of the business owner?
 - a) Female
 - b) Male
5. What is the education level of the business owner
 - a) No primary education
 - b) Complete primary education
 - c) Incomplete Secondary education

d) Complete secondary level

e) University education

f) Other,

specify_____

6. What is the age of the business owner

a) Less than 18 years

b) 18 – 25 years

c) 26 -35 years

d) 36 – 45 years

e) Above 45 years

SECTION II: Factors for youth firm's participation in networking on technology innovation.

1. What is the main position of your firm in the supply chain?

a) Production

b) Marketing

c) Processing

2. Is your firm a part of an enterprise group?

a) Yes

b) No

3. What technology innovation are you using on your business?

a) Process innovation.

b) Service innovation

c) Business model innovation

- d) Sustainable innovation
 - e) Incremental Innovation
4. Is technology innovation help your business to grow/perform well
- a) Yes
 - b) No
5. How many employees do you have in your business?
- a) 1-5 employees
 - b) 5 -10 employees
 - c) More than 10 employees
6. What is the market strategy are using in your business?
- a) Branding product
 - b) Print Advertising and Marketing Materials
 - c) Direct Mail to customers
 - d) Social Networking i.e whatsapp, Facebook e.t.c
 - e) Electronic Barcode Technology.
7. What is the relationship between your business and other firms?
- a) Very Good
 - b) Good
 - c) Average
 - d) Bad
 - e) Very bad
8. Which one of the following factor influences you in participating in networking on technology innovation? Please tick (v) one.

| | Strongly Agree | Agree | Neutral | Disagree | Strongly agree |
|---------------------------------|----------------|-------|---------|----------|----------------|
| Market Orientation | | | | | |
| Network Competence | | | | | |
| Entrepreneurial characteristics | | | | | |
| Degree of trust | | | | | |
| Social Relationship | | | | | |

9. Is your firm's goal to grow more than 50% in terms of employees or turnover over the next 3 years:

- a) Yes
- b) No

10. During the last two years, did your firm introduce any new technology?

- a) Yes
- b) No

If yes, please mention_____

SECTION III: Youth entrepreneurs networked with input suppliers and the markets of their produce.

1. Do you work closely with input suppliers?

- a) Yes
- b) No

2. How is your relationship with input suppliers?

- a) Very good
- b) Good
- c) Fairly
- d) Bad

- e) Very da
- 3. What is the size of your market per month?
 - a) 1-100 customers
 - b) 100-500 customers
 - c) 500 -1000 customers
 - d) More than 1000 customer
- 4. Are you using any ICT/technology in your business?
 - a) Yes
 - b) No
- 5. If Yes, what kind of technology are you using, please mention.....
- 6. How challenging is it to anticipate the technological advancement?
 - a) Very easy
 - b) Easy
 - c) Challenge
 - d) Very challenging
- 7. How many years are you in that business?
 - a) Less than 5 years
 - b) 5-10 years
 - c) 10-15 years
 - d) More than 15 yeas
- 8. Have you ever attend any marketing training?
 - a) Yes
 - b) No

If yes, where? _____

9. Can you assess how significant the domestic market is for your firm compare to international market?
10. Do you think there is much support on you firm from government?
- a) Yes
 - b) No

Thank you for your cooperation