ROLE OF FINANCIAL CAPABILITIES IN HARNESSING DIGITAL MOBILE PAYMENTS FOR ENTERPRISE SUCCESS IN STAREHE CONSTITUENCY NAIROBI COUNTY

By

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LIST OF ABBREVIATIONS

ADB   Africa Development Bank

CFI   Center for Financial Inclusion

FIs   Financial Institutions

FSD   Financial Sector Deepening

GDP   Gross Domestic Product

GoK   Government of Kenya

ICT   Information Technology

KNBS   Kenya National Bureau of Statistics

Ksh   Kenya shillings

KNBS   Kenya National Bureau of Statistics

MPESA   Mobile Money Platform by Safaricom

MSEs   Micro and Small Enterprises

ROSCAS   Rotational Savings and Credit Associations

UNDP   United Nations Development Program

YEDF   Youth Enterprise Development Fund

DEFINITIONS OF TERMS

Financial Capability- an individual's capacity to make financial judgments and decisions which should contribute to their immediate as well as their long-term financial security and financial success

Financial literacy- Knowledge, skills and the correct attitude desired to enable a person to be in a position to make sound financial decisions

Desirable financial behavior; Positive management and use of financial resources

Financial Products; instruments that are connected with the way in which a person manages and uses their money.

Financial inclusion; the access to useful and affordable financial products and services that meet a person's needs, making financial services accessible at affordable costs to all individuals and businesses.

Digital Finance; Financial services delivered over the digital infrastructure including mobile phones and internet

Digital Payments; A way of payment which is made through digital modes.

DEDICATION

To my beloved Dad for inspiring in me the confidence that as long as I work hard in life, I shall never lack someone to hold my hand. The struggle I saw you go through as we grew up, of attempting to run several enterprises unsuccessfully awoke in me a desire to know of solutions workable for micro and small enterprises. I am so glad God has kept you to this day to see me achieve this success.

To my treasured daughter; grow to be a strong woman and know you can achieve anything you want in life if you put your heart and hard work to it.

To my dear husband your love, sacrifices, encouragement, and support have remained steadfast.

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little girl Hadassah, thank you for bearing with my absence when I had to take all your time to study.

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ABSTRACT

This paper sought to find out the role of financial capabilities of managers/owners in harnessing use of mobile payments and the relationship this has with the enterprise success in Starehe constituency Nairobi County. This was done by establishing the elements of financial capabilities by owners/ managers of the MSEs; the elements of success of MSEs that operate within the digital finance platform of payments Lipa Na M-Pesa and the relationship between the financial capabilities and enterprise success. Despite MSEs critical role in the creation of employment and sustaining of livelihoods which thereby contribute to the well-being of entrepreneurs, the MSEs have been previously financially excluded due to their small size from the formal financial institutions and financial services. Digital finance has played a major role in increasing financial inclusion in MSEs. The range of financial products available to MSEs is now wide. In general, research shows that access to innovative products and their use thereof has enabled the growth of businesses and hence enhancing sustainable economic development. Financial capability theory matrix, which this study is anchored on, is however not complete with the products only, but there is a need for a person running an enterprise to have financial literacy and desirable financial behavior in order to achieve success. The study adopted descriptive research design. A quantitative survey through the tools of structured questionnaire interviews, was carried out to the owners/managers of MSEs. Qualitative data was collected by the information given during the survey, by further probing the respondents after the collection of the quantitative data. A total sample of 103 enterprise owners/managers drawn from a population of 344 were interviewed. The study found out that overall, financial capability measure of financial behavior had the greatest significance to enterprise success. The measures of the capability of financial knowledge, financial skills, and financial behavior had a significant correlation with the level of use of the digital financial service of Lipa Na Mpesa. Additionally, the findings showed that there was a significant relationship between financial capabilities and enterprise success at a confidence level of 95%. Therefore, the study rejected the null hypothesis that financial capabilities do not lead to enterprise success. The regression model was developed and the analysis of variance showed that the model was significant. However, the model indicated a weak relationship between financial capabilities and enterprise success; with the model having financial capabilities explain enterprise success at just 19.2 percent. This study therefore tentatively concluded that there are other factors that lead to enterprise success apart from financial capabilities.

CHAPTER ONE : INTRODUCTION

1.1.1. Introduction

This chapter contains the introduction to this study stating the background with an aim of justifying the importance of understanding the role of financial capabilities in the success of Micro and Small Enterprises (MSEs).

The classification of enterprises in the country is primarily by the number of employees engaged by firms and their turnover according to the (MSEs) Bill 2012. It defines a micro-enterprise as a firm employing less than ten people; its annual turnover not surpassing Kenya Shillings (Ksh) 500,000; total investments and registered capital not exceeding 5 million in the service sector and ten million in the manufacturing sector. A small-enterprise, on the other hand, is defined as; engaging 10-49 people in employment; annual turnover Ksh 500,000-5,000,000; manufacturing sector plant and machinery investment is 10 million to 50 million and in the service sector and farming 5 million to 25 million (GoK, 2012).

In Kenya, MSEs are habitually associated with the informal sector according to the baseline survey carried out in 1999. There was an indication from the survey that MSEs employ on average two people. It also showed that there were 1.3 million Micro and small enterprises employing 2.4 Million people and the sector contributing 18.4 percent of the Gross domestic product (GDP) (GoK, 2012). A more recent survey by the Kenya National Bureau of Statistics in 2016 has indicated that within the formal sector, MSEs Account for 6.3million and informal 8.3Million of the employment (KNBS, 2015). The critical role is also underscored in the blueprint of Vision 2030 (GoK, 2007).

Mobile money platforms have evolved since inception in 2007 and have entered a new phase of mobile money payments that have greatly increased financial inclusion (Demombynes & Thegeya, 2012). The payment options of the mobile money transfer were introduced in order to ease the payment modes of goods and services and have received great acceptance in Kenya (Saruni, 2017). Sherraden (2013) notes that when financial products are accessible, reliable, easy

to use, affordable, convenient, secure and financially attractive, they are more likely to appeal to low-income households and businesses. This has been part of the success story of Mpesa since it has greatly enhanced financial inclusion to those who had been marginalized initially from formal financial institutions (Lazzolino & Wasike, 2015).

1.1.2. Background of the study

The role played by MSEs is important in the economic growth and industrial development of many countries and in Kenya, the MSEs have a great contribution to the economic growth through employment creation and poverty reduction (Bowen, 2009). This is evident in the economic survey findings of 2016 which shows that the sector contributes to employment of 75% and to National Gross Domestic Product (GDP)18% (KNBS, 2016). However, MSEs experience the shortage of operating funds and even more broadly financial exclusion in many facets such as savings, deposits, lack of credit extension and inadequate facilitation of payments suitable to them (Trombetta, Calvo, & Casadio, 2017). Additionally, there is a lack of skilled manpower and being greatly characterized by informality; these being among major challenges they face, continues to affect growth and graduation of MSEs establishments countrywide (UNDP, 2015).

MSEs have been previously excluded in terms of both access and use of most of the formal financial products of savings, payment, and credit (Johnson & Nino-zarazua, 2007). Commercial banks rely on collateral funding to allow the access of funds by MSEs for startup or expansion of business activities (Peric, 2015). This has highly disadvantaged the enterprises and has been a great source of financial exclusion. The introduction of interest rates capping in Kenya has further deepened financial exclusion of MSEs in terms of access to credit from other Financial institutions and particularly commercial banks (Mugo & Kilonzo, 2017). This, therefore, is one way that indicates that lack of appropriate financial products and services are a great challenge to the MSEs (Olaka, 2017).

There has been a major challenge experienced in developing countries of the growth of MSEs to medium and large enterprises. This is called the "missing middle" and it causes the contribution of MSEs to the economy not be as big as it is supposed to be (Shibia & Barako, 2017). There is

empirical evidence of a huge size gap in developing countries that reflects limited growth of MSEs (Tryout, 2000). There have been many interventions to promote the growth of MSEs through formulated policies.

The government of Kenya' Economic Management for Renewed Growth Sessional Paper of No.1 of 1986 enlisted commitment for the promotion of MSEs growth. In 2005 sessional paper No. 2 was adopted and its main aim was on the development of MSEs for Wealth and Employment Creation for poverty reduction (GoK, 2005). Currently, the policy driving the development agenda Vision 2030, launched in 2008, seeks to enhance MSE growth through the development of skills and access to finance (GoK, 2007). Globally, the 2030 agenda for Sustainable Development has given MSEs growth a push as one of the key strategies for productive employment and inclusive growth (United Nations, 2015).

Micro and Small entrepreneurs, therefore, need to have financial capabilities that help them take up the opportunities availed to them by the policy frameworks set in place as well as make appropriate use of financial products available to them because of their limited size and income instability (Trombetta et al., 2017). Financial capability comprises of three elements; Financial literacy, desirable financial behavior and adoption and use of financial products (Sherraden, 2010). These concepts are discussed in depth in the literature review section.

According to the report by the World Bank, Kenya has gone through remarkable information and communications technology (ICT) revolution. At the 1990s culmination, the only percentage of Kenyan households that had a telephone was less than 3%. The ratio of the adults that had a mobile to those who did not have was 1:1000 (World Bank, 2013). The results of Kenya Afrobarometer survey on Kenyan households exhibited that by the close of 2011, 93% possessed a mobile phone. Indeed, in the greater Sub Saharan Africa, statistics show that money mobile accounts are more than traditional bank accounts meaning that financial inclusion has considerably developed (GSMA 2016).

With the global advancement in technology, Kenyan digital financial space has been developing at a fast rate; bringing with it the introduction of various products that have greatly enhanced financial inclusion (Lazzolino & Wasike, 2015). The country has been recognized as being a

pioneer of mobile money telephony and the largest in terms of users of money transfer services in the world (Peric, 2015). The use of Mobile payments is growing in Africa and its use is also in the form of financial transaction medium for money transfer, micro-payments or retail. Inspired to create a world-class platform to facilitate businesses to accept mobile payments and build relationships with their customers, Kopo Kopo Company in 2012 was launched and they partnered with Safaricom to bring Lipa Na M-PESA Buy Goods service to businesses all over Kenya. According to the statistics by the Communications Authority of Kenya (CAK) the value of the mobile commerce transactions in 2016 averaged to 400 Billion.

The following section describes the problem that this study sought to answer and the gap in knowledge that it sought to fill. It has the research questions, objectives, hypothesis justification of the study, scope and the limitations.

1.1.3. Statement of the problem

In order to be termed as financially capable, it's important to be endowed with financial literacy and desirable financial behavior and the access and use of the appropriate financial products (Trombetta et al., 2017; Sherraden, 2013). Previous studies majorly focused on financial literacy and financial behavior excluding the aspect of the financial product. Most studies on financial products for MSEs have focused on credit but this study sought to look at the financial product of payment. The MSEs had greatly in the past been over-reliant on of payments by use of cash for most transactions despite all the challenges posed by this like the risk of theft, impulse buying, lack of banking it etc. (Lazzolino & Wasike, 2015; Peric, 2015). The adoption of innovative technology by MSEs has been to take advantage of its benefits in order to enhance their business processes, therefore, to lead to success. Financial inclusion in terms of payments eases the use of cash payments and all the disadvantages brought by its use thereof (Financial Inclusion Database, 2015). There is a gap in the literature on the innovative digital financial payment's products for MSEs. Studies on digital finance have focused on the supply side and only a few on the demand side (Mbiti & Weil, 2011; Peric, 2015).

Financial capabilities are seen in literature as very imperative if one has to be good in the management of personal finance and enhancement of one's well-being (Sheen, 2012; Taylor,

Jenkins, & Sacker, 2011). Most studies on financial capabilities have focused on households and individuals. The few studies that have focused on financial capabilities have focused on literacy and financial behavior without much attention to financial products.

This study sought to fill in the gap in knowledge that exists in terms of exploring how digital finance payment products of Lipa Na Mpesa is part of the matrix that enhances the financial capabilities for MSEs owners and how this relates to the success Mses.

1.1.4. General research question

Have financial capabilities harnessed the use of digital payments for the success of MSEs in Starehe constituency Nairobi County?

1.1.5. Specific research questions

i.   What are the **elements** of **financial capabilities** of the enterprise owners/ managers?
ii. What are the **elements** of **success** of the MSEs?
iii. What is the **relationship** between **financial capabilities** and the **Success** of the MSEs that use Lipa Na Mpesa?

1.1.6. General objective

To find out if financial capabilities have harnessed the use of digital payments for the success of MSEs in Starehe constituency Nairobi County.

1.1.7. Specific objectives

i.   To assess the elements financial capabilities of enterprise owners/managers.
ii. To assess the elements of success of MSEs.
iii. To find out the relationship between financial capabilities and success of MSEs that use Lipa Na Mpesa

1.1.8. Justification for the study

The MSEs play a very substantial part in employment and economic growth particularly in developing economies (Peric, 2015). The reason for the choice of the study of MSEs is because most of the time they are excluded from formal financial services (ADB, 2017). The choice of financial capabilities theory is deliberate because the application thereof shows that when one is given choices and has the right modes of applying the correct choices given, this leads to the well-being of the individuals (Sheen, 2012). The choice of Starehe constituency as our study area is due to the concentration of the various MSEs that have taken up the Lipa Na M-Pesa services (Maina, 2017). Kenya is the world's hub of digital services when it comes to mobile money services when it comes to digital financial inclusion (Manyika et al., 2016). Payment products of digital mobile money have received very little attention in research that is why this study chose the product of Lipa Na Mpesa.

1.1.9. The significance of the study

The findings from this study are crucial to the body of knowledge as it brings in the unique aspect of the use of digital financial payment products for MSEs and whether this is harnessed by financial capabilities. This study is also significant as it recommends areas of further research for scholars. The study is of importance to the service providers of digital financial products as they would be able to know some of the missing links between adoption and use, as well as the level of use of the digital financial products. This study is also crucial for the policy-makers and stakeholders in the MSEs sector as it can guide in reviewing and developing new policies as well as in enhancing the financial capabilities of entrepreneurs. There is a highlight of the customer protection issues identified during the survey and this is going to be important in order to identify the gaps in enforcement, monitoring, and evaluation for MSEs sector. The current policy driving Kenya's development agenda Vision 2030 seeks to enhance MSE growth through the development of skills and access to finance. Globally, the 2030 agenda for Sustainable development by the United Nations, has given MSEs growth a push as one of the key strategies for productive employment and inclusive growth. This study, therefore, fuses very well with national and global development agenda for MSEs.

1.1.10. Scope and limitations of the study

This study focused on role of financial capabilities in harnessing the use of digital mobile payments and the effects this has on enterprise success in Starehe Constituency Nairobi County. On the financial capabilities the study focused on the elements of financial capabilities which are financial literacy, desirable financial behavior and use of financial products which in this case the study considered Lipan a Mpesa. The respondents were selected from the MSEs in Starehe Constituency selling electricals or automobile parts in Nyamakima and Kirinyaga road area. The respondents were the owners or managers of the MSEs. The choice of this area to be the scope was due to the concentration of the MSEs that had adopted and were using Lipa Na Mpesa Services.

Several limitations were met during the study. The first was the time constraint. More in-depth interviews of case studies could have been done to get more qualitative data. The study was done in busy enterprises set up and the researcher had to excuse the respondents each time there was a customer who wanted to buy and this was really time-consuming. Some of the respondents simply declined to answer the interview questions because they could not manage to spare the time needed because they were understandably very busy. The other constraint was that there were in some instances lack of disclosure of information needed for the survey as some respondents said the information needed was too confidential. Some of the examples of information that some respondents withheld included information about assets value and enterprise income.

1.1.11. Research hypothesis:

H0: Financial capabilities do not lead to the success of MSEs.

H1: Financial capabilities lead to the success of MSEs.

CHAPTER TWO : LITERATURE REVIEW

2.1. Introduction

This chapter reviews both the theoretical and empirical literature. The theoretical review looks at the theory relevant to guide this study defining what financial capabilities are. Additionally, the relevance of digital financial inclusion as a key environment in financial capability and how it is relevant in terms of development and success when applied to micro and small enterprises payments. The empirical assessment looks at; the features of the MSEs owners and what other studies show about financial capabilities leading to success in any other social-economic aspects the studies address. Then address how MSEs attain success and the various variables that measure success in the enterprises and what other studies have shown. Lastly, show how financial capabilities have been linked to success in other social-economic aspects assessed by various studies and whether that is still applicable to MSEs success.

2.2. Theoretical Literature

This study was carried out within the theoretical framework of financial capability. This theory was suitable for this study because it explains the endowment with financial capabilities of individuals managing or owning enterprises and how they utilize that to bring about enterprise success. This research seeks to comprehend the role of financial capabilities to the success of MSEs.

2.2.1. Financial capability theory

This section defines financial capability and outlines the various components that make up financial capability that is going to be adopted in this study.

Financial capability is multi-dimensional; it main proponent is the World Bank and defines it as the aptitude to a person's financial interest that is best for them, considering their environmental and socioeconomic circumstances (World Bank, 2013d). The tenets are defined in the characteristics that make a person to be said to be financially capable are those that are expected

to translate into increased welfare. Zollmann and Collins (2010), defined it as the capacity of an individual capacity to "make financial decisions and judgments that contribute to his or her immediate and long-term financial security" (Zollmann & Collins pg 9, 2010). The argument is that capability should play a vital role in deepening formal financial inclusion; ensuring markets are stable and generally increasing efficiency. When this is achieved, it consequently enhances welfare outcomes.

This is through better management of one's own resources, in addition to a greater or more effective use of financial services. Guy Stuart from Micro Finance Opportunities (MFO) puts financial capability as "the combination of attitude, knowledge, skills, and self-efficacy needed to make and exercise money management decisions that best fit the circumstances of one's life, within an enabling environment that includes, but is not limited to, access to appropriate financial services." (Bath pg.44, 2016). The emphasis was on the fact that financial capability is more than what you know and more about if the confidence, willingness, and opportunity to act is there.

Financial capability theory is derived from the broader capability theoretical approach which states that the achievement of the well-being of an individual is best understood by the real opportunities of the people to do what they have reason to value which should enhance their freedoms (Charlesworth et al., 2010). The theory tries to understand financial capability within the broad spectrum of human development in terms of gain to a means of income. This can be explained in how it expands people's choices and enhances both social and economic security. One of the indicators of the person's well-being is the economic freedom which is developed when a person has access to means of production and finance is one great means of production (Kuriakose & Lyer, 2015).

The emerging perception of financial capability incorporates the idea that people who have money management knowledge, skills, attitudes, and behavior contribute to their financial wellbeing in a specific social and economic context (FSD, 2014). Freedom to make sound financial decisions as a result of interacting with financial service providers and the achievement of financial goals is more likely. A person is, therefore, able to improve their household welfare

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and hedge against economic and financial risks (Bowen, 2009). The improving of financial capability is supposed to benefit people participate more fully in society and facilitate more financial inclusion (Mcquaid & Egdell, 2010). It pursues to permit people to take up sound financial decisions so as to increase their wellbeing (Accion, 2013). Arnold & Rhyne (2016) refer to financial capability interventions as those designed with clear attention to the path from intervention to behavioral change. Additionally, the authors note that financial capability encompasses the opportunity to apply those behaviors to financial choices.

The first component of financial capability this study looks at is financial literacy. Financial literacy aspects the study focuses on are; knowledge and skill (Arnold & Rhyne, 2016). To be termed as capable it's important for people to know about money management practice that benefits them (CFI, 2013). Additionally, a person needs to have the skills necessary to disseminate the knowledge into its appropriate use, examples of skills are keeping some form of record to help track money, keeping payment statements, banking money that been paid by customers etc (Storchi & Johnson 2016).

There is also the aspect of ability ties to skills and it helps people to manage their money efficiently and make decent financial choices given their particular circumstances (TNS-BMRB, 2015). Micro Finance Opportunities (MFO) in their blog-post in 2013 looked at financial literacy as a way to equip knowledge and skills to people and furthermore the strengthening of their ability and self-belief. This is in order to enable them to make as well as exercise timely, confident and informed money management choices.

The second aspect is the desirable financial behavior which has the aspects of self –efficacy, and attitude (Sherraden, 2013). It is when the knowledge and skills are incorporated into the right mindset of attitudes motivation.

Financial capability is high when financial literacy and desirable financial behavior are in an environment that has key components in terms of appropriate financial products that have ease of access (Mcquaid & Egdell, 2010). Literacy and desirable financial behavior count for little if the opportunity is missing (Sherraden, 2013). This view opens the concept of capability to include efforts to make financial services available to new customers and therefore it brings in the

concept of financial inclusion generally (Arnold & Rhyne, 2016). Nevertheless, customers are recognized by Arnold & Rhyne (2016); as active agents who come to financial services with their own pre-existing capabilities and objectives.

Some environments are more facilitating as compared to others and therefore it impacts on the degree to which a person can be financially capable. The opportunities offered to act are different. Someone's motivation or intention to act is furthermore influenced by how a person thinks, the expectations other people have and the past experience of societal pressure to behave in a certain way. An enabling environment can be created by the providers of financial services. Additionally the enabling environment can be provided by activists who try to transform the rules of the game the regulators who set the rules and other stakeholders (Zottel, Perotti, & Bolaji-Adio, 2013)

In summary, this study looked at the aspects of the theory financial capability: financial literacy and desirable financial behavior and how these harnesses the use of mobile payments Lipa Na Mpesa and if this leads to MSEs success.

2.3. Empirical literature review

The reason why financial capability has become a policy priority for policy-makers is because it promotes beneficial financial inclusion, ensures financial stability and the functioning of financial markets (World Bank, 2016). This section provides a breakdown of the concept by highlighting what various authors have found in their research. First, the empirical findings are on financial literacy then an exploration of the studies done of desirable financial behavior. Additionally, the section gives a review of what other authors have said about financial capabilities leading to success in any social and economic aspects studies undertook. Also, an exploration of the contextualization of success to MSEs indicating the gap and variables that this study adopts to measure financial capabilities and success.

2.3.1. Financial literacy

In much of the literature on financial capability, financial literacy is a key concept. It is suggested broadly as an operative approach to preparing people to manage their finances (Jones, 2008). Financial literacy refers to the knowledge, skills and the correct attitude desired to enable a person to be in a position to make sound financial decisions (Sherraden, 2013). This aspect enables a person to be aware of financial opportunities, is able to make informed choices, knows where to go for help and can act to improve their own well-being.

Research carried out on credit unions to find out the way they organize their money for members indicated that when members are helped with organizing their money daily, they have greater efficacy. It also showed that they were less stressed since proper management of finances because of adequate financial literacy has the propensity to enable success (Taylor et al., 2011). Holzman, (2010) notes that at the end of the day, financial capable people should demonstrate a desired financial behavior such as drawing up a budget, planning and risk mitigation; these are aspects of financial literacy. The environment and context one is operating in should, however, be conducive and enabling for literacy to yield the expected end results (Holzmann et al., 2010).

Financial literacy in this study is broken down into two components; the knowledge and the skills. We start by looking at the empirical work done on knowledge.

2.3.1.1. *Knowledge*

Knowledge is defined in the context of financial literacy as the theoretical or practical understanding of finance (Kawamura, 2016). It is the awareness that is needed in order to successfully access financial markets and other information sources. This enables a person to be able to take up worthy financial decisions that are appropriate to a particular situation. This includes understanding financial products, concepts, and services as well as people's understanding of their own financial situation (Consumer Protection Bureau, 2015; Sherraden, 2010). Additionally, it is the understanding in terms of financial situation, money management, financial products and concepts (Consumer Protection Bureau, 2015).

An indication of education as the means of building that capacity of knowledge has been put forth (McCormick, 2009). This study by McCormick (2009), indicates that the programs tailored for adults and children in an attempt to ensure that there is elementary knowledge of money management when it comes to banking, credit, investments, savings and so forth; assists in in meeting individual or household goals. The study, however, focused more on personal gains of education on financial management and not on enterprises.

The study of Hogarth (2006), the constant themes of financial education include being informed on the issues of managing money and assets, banking, investments, credit, insurance, and taxes. Additionally, the understanding of the basic concepts which are core to the management of money and assets for example; the time value of money in investments and the pooling of risks in form of insuring them. However, there is the argument that the effects of classroom training on behavior on a long-term basis in some cases, fewer adults have an interest in participating (Arnold & Rhyne, 2016).

The authors surveyed uptake of online training and found it to be very low in the USA. Mexico City also had similar outcomes on courses offered by the financial Institutions fewer people agreed to attend training through the phone call and personal imitations even with gift cards and personal invitations only a 28% increment was experienced. The training only had increased financial knowledge but behavior change as minimal. Further Arnold & Rhyne (2016) suggests that people operating in the informal sector may only be interested in knowledge interventions that enable them to be able to be able to adequately use kinds of products or fortify discipline. Therefore, to lead to higher impacts traditional financial educational models of imparting financial knowledge need to have substantial changes (Arnold & Rhyne, 2016).

In a study by Kawamura (2009) the author surveyed an online audience of between 18 years to 79years who have been chosen in proportion to Japan's demographic structure. Understanding of basic finance transactions was one of the key outcomes of financial knowledge. The assessment was on the understanding of financial and economic circumstances, and appropriate selection /use of financial products. Results showed that financially capable persons have the habit of assuming a fundamentally careful attitude toward contracts (Kawamura, 2016). This leads to

success in terms of ensuring one does not sign the contracts whose obligations they are unable to meet. The use of the concept of knowledge of contracts is adopted as one aspect to measure the variable of knowledge.

The training which gives knowledge helps owners and managers to be able to recognize opportunities out of threats and challenges (Kinyua, Ogollah, Mburu, Esther, & David, 2015). The knowledge that leads to success can also be in terms of understanding and mitigating risks. This is the understanding which contingencies for example risks of fire, road accidents, illness, death etc a person should seek insurance coverage for. The understanding should also be of the amount of economic security required should a covered contingency occur. The knowledge possessed by SMEs owners/managers determines the insurance cover undertaken by their business with the aim of reducing their risk (Kinyua et al., 2015). The study carried out in Zimbabwe revealed that 90% of MSEs have a poor knowledge of the concept of risk and consequently do not have insurance. The majority of SMEs did not have risk management strategies in place to address risk management issues leading to the lack of success of the enterprises. We, therefore, can use knowledge about risk as one of the measures for assessing financial literacy.

If education fosters comprehensive literacy, this would help owner or managers to integrate relevant information to do effective planning and to make well-informed choices, which would ultimately boost the organization's success (Thapa et al., 2008). There is evidence from studies that the combining of financial education and experience with financial products is of importance. Safaricom company the has been carrying out adequate promotion of their products with the greatest budget of the company being dedicated to sales and promotion (Jones, 2016). The experimental approach of assimilation of financial information through the addition of the product may be more effective. This can be programmed by the financial literacy being preceded by a financial product or a combination of both (Holzmann et al., 2010).

Micro Finance Organization (MFO) specializes in financial education and works with financial Institutions taking advantage of each customer contact to reinforce the money management key messages. In studies done by MFO in Zambia and Philistines, the results were that education

provided success because of being tailored towards unique customer touch points improving skills knowledge and attitude on money management. This led to more financial planning and prudent financial behavior. Frequent use of the service the person is trained on.

A study in Ghana by Baidoo et al., (2018), looked at the importance of financial literacy in enhancing of domestic savings. In its review, it noted the great inter-domestic savings mobilization and the positive effects that this has on economic growth. In addition, low savings is regarded as a very great constraint to investment and prospective economic growth of economies. The study indicates that the level of financial literacy is a key determinant in the use of financial products of savings for household's individuals. An indication that those with formal education, more income and those that are younger are more likely to take up the financial products of saving than those without (Baidoo et al., 2018).

Table 2.1: Summary of empirical work on financial knowledge

Author	Methodology and where the study was conducted	The Objective of the Study	Findings of financial knowledge
McCormick (2009)	A Quantitative and qualitative study done in the USA.	To find out the effects of training for children and adults	Programs tailored for adults and children in an attempt to ensure that there is elementary knowledge of money management when it comes to banking, credit, investments, savings and so forth; assists in meeting individual or household goals
			Themes on financial knowledge are savings, proper credit management, investments in the present and future
Comment: The study focused more on personal and household gains of education on financial management and not on enterprises.			
Hogarth (2006)	A survey was done in the USA	To find out the current state of education in relation to community	Better financial decisions for themselves and their families, increasing their economic security and well-being. They are in a position to obtain better jobs and create a desirable pool of labor for employers.

Author	Methodology and where the study was conducted	The Objective of the Study	Findings of financial knowledge
		and economic development.	Themes that stood out about financial knowledge outcomes are financial practices that are credit, cash-flow management, saving, and investing behaviors.
Comment: Basic concepts which are core to the management of money and assets are the pooling of risks in insurance and the time value of money in investments.			
Arnold & Rhyne (2016)	Quantitative study one in India and Mexico	To find out effective financial capability interventions.	Training only had increased financial knowledge but behavior change as minimal. Furthermore, only fewer people agreed to attend training. The informal sector may only be interested in knowledge interventions that enable them to adequately use kinds of products or fortify discipline.
			The interventions of financial capabilities of interest to customers when they are useful to reach their goals solve problems and help get things done.
Comment: Need for change in the traditional way of education model study does not show how the new model has been applied in new technologies introduces to MSEs. The study did not show the extent and effect of the application of the new model to enterprises			
Kawamura, (2016)	Quantitative research survey carried out in Japan.	To understand the current state of financial literacy; o individuals over 18 years and above that is financial knowledge and financial decision-making	There existed a positive relationship between financial knowledge and investment behavior. The educated had infrequent use of consumer loans, lower loan burden, high resistance to economic shocks, more investment in risk assets due to the anticipation of high returns and careful during contracts assumptions
			Key themes to be applied in the study are knowledge on contracts, loan burden, resistance level to economic shocks and investments
Comment: The study was carried out on university students, young adults, adults and senior citizens on family budgets and life planning. This study seeks to find out if the results are also applicable to MSEs in Kenya.			
Kinyua et	A quantitative study	To establish the effects of	From the findings, the study determined that there was a positive

Author	Methodology and where the study was conducted	The Objective of the Study	Findings of financial knowledge
al., (2016)	in Nairobi, Kenya.	risk management strategies on the performance of SME in (ICT) enterprises.	significant impact of project risk identification and on SME in ICT. Planning to ensure completion of tasks in time and meeting the customer's timelines, the uptake of risk avoidance techniques.
			Key themes of knowledge from the study that this study adopts; risk identification, planning, communication and risk mitigation by avoidance.
Comment: The study did not consider digital financial products as an enabling environment for financial capabilities.			
Micro Finance Organization (MFO)	Qualitative and quantitative research Results on Education on financial products in the Philippines and Zambia	The organization specializes in financial education and works with FIs taking advantage of each customer contact to reinforce money management key messages	Education provided success due to it being tailored towards unique customer touch points improving skills knowledge and attitude on money management. This led to more financial planning and prudent financial behavior.
			Indicators used that we are adapted to measure the variable of knowledge are: Financial planning and prudent financial behavior
Comment: The training was majorly done to customers of Financial institutions, did not show the results of such to digital payments platforms.			
(Baidoo et al., 2018).	Qualitative and Quantitative in Ghana	To find out whether literacy matters in taking up of savings products.	Formal education was helpful in assisting the uptake of savings. Other factors that determined the level of savings included age and wealth status
			key themes Savings
Comment on gap: Study just focused majorly on savings products but not on financial products of digital payments; also, individuals and households, not MSEs			

(Source: Author's Conceptualization)

Therefore, in summary, the main outstanding themes that this study draws from the reviewed literature on knowledge are; whether the owner of the MSE/ manager has acquired knowledge through traditional system of financial education or through the modern specially customized education for the needed he has in the enterprise; information on planning; knowledge on identification and mitigation of risks; knowledge of contracts and their implications; cash flow management. This study emphasizes these criteria as they have featured prominently in these studies reviewed on knowledge.

Next, we now look at what other studies have said about skills as a component of financial literacy

2.3.1.2.   *Skills*

These are the proficiencies developed either through training or experience (Zottel et al., 2013). This includes cognitive or emotional skills needed by a person to engage in while doing financial management. Having the right skills can enable the owners or managers of MSEs make their enterprises to be more competitive. Skills can be learned therefore we can transfer skills through the transfer of knowledge by training (Kipkinyor, 2016). People acquire financial skills through training, financial socialization, financial advice on financial education and guidance. Financial inclusion can consequently be attained through financial services that are accessible, financially attractive, secure, easy to use when one acquires the skills of using, reliable and affordable (Sherraden, 2013).

There are several studies done that have emphasized why business skills and abilities are important on top of capital for the enhancement of growth and success of MSEs. The indication is that, there are several affirmative effects of training on adherence to standards and processes or example adherence to safety regulations, obtaining of licenses, having written business plans etc. (Haider et al., 2017). It is evident from studies that the availability of credit only is not sufficient and the training and teaching of the application of business skills is vital. The skills can be checked in the enterprise processes, including numeracy, literacy and problem-solving abilities of the business owners or the enterprise manager (Haider et al., 2017).

According to Zollmann and Collins (2010), respondents in low- and middle-income countries considered planning for day-to-day as well as for the future as the greatest skill in good financial management. Additionally, the authors described financial literacy as what had led the respondents to be successful in their daily lives and in their households and termed it as a good indicator of being financially capable. The survey found out that budgeting skills are not applied despite people having the knowledge.

Savings are for day to day expenses rather than long-term for most of those interviewed. There was the lack of assets to deal with emergencies by more than half of the adults to cope and recover from shocks still low. Spending more than a person earns was also noted and by borrowing to spend rather than to invest. There was the recommendation of using financial tools to have control over one's money. This was to be through the appropriate use of financial products and services.

Moreover, the study by Zollmann and Collins (2010) indicated that in the use of financial products, the skill of being able to seek redress is important for a person to be able to successfully participate in a financial system. The Fin-Access survey data that they used considered redress sought by users on Mpesa money transfer product. Of the 40% that had been interviewed and were using Mpesa, 12% only had ever lost money of which among them that lost 25% had managed to recover it.

Teal, (2016) did a study in Addis Ababa Ethiopia on the changes that training of micro-entrepreneurs made in their savings habits. There was the observation that doing training alone was not very effective. The findings were that constant probing and reminders encouraged better-saving behavior. Savings increased the chances of the enterprises receiving credit from the banks (Teal, 2016).

Bowen (2009) did a quantitative study in Kenya to understand how MSEs owners manage the challenges that they face. Training was found to be important in the acquisition of skills like communication, access, and use of credit. The strain on credit was identified to be easing up as a result of training in comparison to previous studies.

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According to Kipkinyor (2016), in his study to establish the determinants of youth enterprise development fund loans repayments in Ol Kalau Constituency, Kenya. Training of the members of the youth groups was found to be a very key component. The training enhanced the entrepreneurial skills of the youth group members. The skills of business planning and actual implementation of the business plans and actual financial management skills were found to be necessary pre-cursor to the disbursement of the funds (Kipkinyor, 2016).

Table 2.2: Summary of empirical work on skills

Author	Methodology and where the study was conducted	The objective of the Study	Findings on skills
Haider et al., (2017)	A quantitative study carried out in Punjab, Pakistan	Establish difference in MSEs who owners have been given training against those whose owners have never.	Significant differences between those MSEs owned by trained owners and those not trained in terms of increase in sales, income, assets, number employees, and meeting household expenses. The growth is seen in the introduction of new technologies and investments
			Key indicators of skills include adherence to standards and processes or example adherence to safety regulations, obtaining licenses, having written business plans.
Comment: Pakistan is significantly developed. My study seeks to establish whether similar circumstances apply to train in Kenya is skills attainment and subsequent achievement of growth.			
Zollmann and Collins, (2010)	A quantitative study carried out in Kenya	State of financial capability in Kenya. Using existing data set collected as part of Fin Access 2009	Budgeting skills are not applied despite people having the knowledge. Savings are for day to day expenses rather than long-term. Lack of assets to deal with emergencies by more than half of the adults to cope and recover from shocks still low. Spending more than a person earns; borrowing to spend.
			Key themes on skills planning both short and long-term, budgeting, coping with shocks, having a strategy to cope with emergencies, the ability to save for longer-term needs and seeking redress.

Author	Methodology and where the study was conducted	The objective of the Study	Findings on skills
Comment: It's not possible to measure skills and abilities with a single score due to its multi-dimensional nature. What applies to developed countries might not necessarily work for a developing country. The need is therefore there to contextualize the assessment and this study moves from the household level to the enterprise level.			
Teal, (2016)	Qualitative and quantitative research in Addis Ababa Ethiopia	Was to find out the impact of financial literacy training and reminders on micro-businesses.	financial literacy that had been developed by training and constant probing with reminders enhanced success in terms of the level of saving that business owner we able to make hence enhancing their chances of being advanced for credit from the banks. How entrepreneurs manage savings depends on their levels of financial literacy.
			Themes that stand out from this study are savings management, probing.
Comment: The savings done by the enterprise owners seemed to enhance the acquisition of credit from formal financial institutions. The study does not, however, indicate whether the use of digital payment can enhance credit scores			
Bowen, (2009).	A quantitative study in Kenya	To understand how MSEs manage the challenges they face.	Training was found to be important in the acquisition of skills like communication, access, and use of credit. The strain on credit was identified to be easing up as a result of training as compared to previously studied.
			The themes that stood out in terms of skills is the adequate use of credit to ease the burden of debt and communication skills
Comment: The study did not look at the aspect of digital payment as one of the ways of assisting MSEs manages the challenges they face.			
Kipkinyor, (2016).	A quantitative and qualitative study in Olkalau Constituency Kenya	To establish the determinants of youth enterprise development fund loans repayments	Training of the members of the youth groups found to be key in enhancing entrepreneurial skills
			Key themes on financial skills; Business plans, implementation of business plans and financial management.
Comment: The study looked at financial inclusion only on the provision of funds. The element of digital finance in form of payment mode that the enterprise receives was lacking.			

(Source: Author's Conceptualization)

To summarize the work on the studies reviewed, the main outstanding indicators of financial skills that this study adopted included; having written business plans and implementing them; formulating and implementing budgets; adherence to standards set for running the SMEs for example licences; easing of the burden of debt by the use of credit adequately according to what it as intended for and coping with shocks and emergencies.

Next is a look in the following section at the other aspect of financial capability that this study sought to measure; desirable financial behavior.

2.3.2.   Desirable financial behavior

Good financial behavior helps to improve one's sense of financial well-being and feelings of security (Taylor et al., 2011). Arnold & Rhyne (2016) talked of a good litmus test for financial capability programs overall is asking whether they move beyond knowledge gains to spark behavior changes, such as increased savings or loan performance thereby improving the person's financial health. There is a general expert's opinion and agreement that financial knowledge and financial skills seem to be very much linked to self-beneficial financial behavior (Hilgert et al., 2003)

Nevertheless, there is a lack of sufficient evidence that financial literacy alone in terms of knowledge and skills does certainly improve financial decision making. This limited evidence suggests that literacy defined in terms of knowledge and skills is a somewhat limited approach to the financial behavior of people especially the poor (Storchi & Johnson, 2016). The suggestion, therefore, is that financial literacy is an input into financial decision-making and that there are other factors that contribute to poor financial management such us impulse buying, behavioral biases and other external circumstances (Huston, 2010).

Living without financial stress enables a person to better meet their goals. Low financial well-being leads to stress and poor quality of life and can prevent people from realizing their goals (Sheen, 2012). The desirable behaviors for MSEs can be evaluated in terms of cash flow, savings and costing, investments, loans and general financial knowledge (Fafaliou, 2011), highlighting that MSEs have irregular and unpredictable financial inputs.

Desirable financial behavior can be categorized into four key domains:

How one tackles the problem of debt which relates to only those that are already in debt or are on the brink of the problem of debt. The desirable behaviors that relate to this category include reducing debts by taking steps as well as looking for help and advice (Lusardi & Mitchell, 2014). The management of money is the second aspect which is the ability to follow a budget and understand the consequences of failing to follow it. In a study on the economic importance of financial literacy, Lusardi & Mitchell (2014) found out that financial literacy has an effect on financial behavior. This includes setting and sticking to a pre-made budget; being able to keep track of income and expenditure; minimizing cost and maximizing income; timely payment of bills and in full; window shopping to compare costs in order for a person to obtain the best deals (Lusardi & Mitchell, 2014).

The next component is the building of resilience. This includes building a savings buffer for any form of unforeseen occurrences. Saving can be for short, medium or long term planned expenses. Finally is the preparation of the life ahead which includes the mitigating of risks by uptake of insurance, retirement, putting employees on pension etc. (Lusardi & Mitchell, 2014).

In the financial decision-making process, the influence is by personal characteristics such as self-assurance, preparedness, and intents. Behavioral economics studies, for instance, highlighted how due to previous experience, emotions and instinct people incline to develop of shortcuts that result into suboptimal outcomes because of uptake of quick decisions (De Meza, Altman 2012). These trends of behavior are pertinent when considering financial decisions. Actually, this literature appears to agree that people using shortcuts are greatly expected to take on reactive irrational behavior to external circumstances as opposed to proactive and more rational behavior. A well-informed and rational person will in times of his high earnings consume less than his income and consequently save for support consumption smoothing during the time of shortage (Lusardi & Mitchell, 2014).

 Hilgert & Beverly (2003) did a national wide survey analysis of the consumer finances carried out in the USA by the University of Michigan. The study sought to find out the gap between what consumers know and what they do in reality. They added financial behavior and financial

literacy questions to the nationwide household. They then established a Financial Practices Index based on behavior using variables that even this study adopts: "savings, credit management, cash-flow management, and investment practices" (Hilgert & Hogarth, 2003 pg 1). They did a comparison of the scores of financial literacy analysis and the results of this index. They concluded that the people who had higher scores were more financially literate. This demonstrated well that financial literacy is related to financial behavior (Hilgert & Beverly, 2003).

Table2.3: Summary of empirical work on desirable financial behavior

Author	Methodology and where the study was done	The objective of the Study	Findings on Desirable financial behavior
Lusardi & Mitchell, (2014)	A quantitative study in the United States and elsewhere.	Examination of the impact of financial literacy on economic decision-making behavior	Findings were that one ought to understand the follow a budget and understand the consequences of failing to follow it. Tracking of income and expenditure minimizing costs and maximizing incomes, payment of bills in time and window shopping.
			Key themes on desirable financial behavior include; payment of bills on time, shopping around for best deals and minimizing costs while maximizing income
Comment: The emphasis on the research is so much about education and how this leads to the decisions of a person in terms of their finances. The study fails to integrate the context of a developing country and the use of specific products of payment which is one way that the MSEs he been excluded and my study seeks to fill the gap.			
Mbiti & Weil (2011)	A quantitative study in Kenya	To find out the use of Mpesa and its economic impacts.	Use of the digital money in form of Mpesa increases the propensity of people to save less in the informal savings mechanisms such as ROSCAS and increases being banked with formal financial institutions. An increase in the number of employees at the farm level. Decreased prices of competitors of other money transfer services.
			Themes from the study about desirable financial behavior; Banking in financial institutions.
Comment: The study focused more on the Mpesa money transfer product. My study looked at the payment product of Lipa Na Mpesa and assess whether its successful use leads to similar outcomes of saving in formal FIs.			

Author	Methodology and where the study was done	The objective of the Study	Findings on Desirable financial behavior
Hilgert & Beverly (2003)	Nationwide household surveys of consumer finances carried out in the USA	Sought to explores the connection between knowledge and behavior	Found out that the people who had higher scores were the ones that were more financially literate. This demonstrated well that demonstrating that financial literacy is related to financial behavior
			Activities that are key indicators of desirable behavior that are financial-management activities: "cash-flow management, credit management, saving, and investment."
Comments: The study was done for households and my study sought to find out if similar outcomes using the indicators of the desirable indicators also apply to SMEs in a developing country; Kenya			

(Source: Author's Conceptualization)

To summarize, from the literature reviewed, this study adopted desirable financial behavior aspects of; investments; saving; tracking of income and expenditure minimizing costs and maximizing incomes; payment of bills in time; and window shopping.

2.3.3. Digital Finance –payments

Financial products and services are seen as the lifeblood of any economy as they enable savings investments and mitigation against risks (Manyik, 2016). Approximately two billion individuals and 200 million businesses in emerging economies today lack access to savings and credit (Manyika, 2016). Additionally, Munyika, (2016) says that those with access had previously had a challenge due to a limited range of products. Fortunately, the rapidly spreading digital technologies now offer prospects to provide financial services at much lower cost, and therefore raising profitably, boosting financial inclusion and enabling large productivity gains across the economy (Manyika 2016). This study made the enquiry of if the use of Lipa NA Mpesa facilitated enterprises better be able to make payments to their creditors.

Mbiti & Weil (2011) discuss that transfers of money is the major use of M-PESA. The study discusses that in its use for transfer of money purposes, there is barely storage of value. However, this study shows that findings there is a noteworthy number the respondents who show

that they used their M-PESA accounts as a channel to them saving. Evidence was found that the use of M-PESA transfer services decreases the usage of informal savings machinery such as ROSCAs. The respondents said that the alternative they took was being banked in a formal financial Institutions (Mbiti et al., 2011). There has been the introduction of savings through the use of Lipa Na Mpesa by the Co-operative bank and this study sought to find out the success of such like savings to increase savings in MSEs.

A study conducted on Kenya's mobile revolution and the promise of mobile savings. It examined the patterns of use of bank-integrated mobile savings in Kenya (Demombynes & Thegeya, 2012). It showed that people are able to keep funds as mobile money, rather than at home in cash. Men in the Kibera slum in Nairobi focused on the aspect of physical danger due to mugging, which has decreased because fewer people carry large amounts of cash. Likewise, other respondents in the study indicate that local businesses and street vendors often convert their cash to M-PESA at the end of the day for safekeeping. Additionally, mobile money empowers women by giving them an independent place to store and manage funds that are private and inaccessible to other family members.

Table 2.4: Summary of empirical work on digital finance

Author	Methodology and where the study was done	The objective of the Study	Findings on Digital finance
Mbiti & Weil (2011)	A quantitative study in Kenya	To find out the use of Mpesa and its economic impacts.	Use of the digital money in form of Mpesa increases the propensity of people to **save** less in the informal savings mechanisms such as ROSCAS and **increases being banked with formal financial institutions.** Increased employees decreased prices of competitors of other money transfer services.
			Key themes from the study about desirable financial behavior; **Banking informal financial institutions**.
Comment on gap: Economic impacts studied were for individuals not enterprises			

Manyika et al 2016).	Qualitative Study in developing economies countries	Digital finance and how it empowers inclusive growth	**Access to credit** beyond informal lenders as the use of digital leaves data trails that are a source of information to formal credit providers.
			Key themes Access to credit, Information
Comment on gap: Studies do not incorporate the whole matrix of financial capabilities			
(Demombyn es & Thegeya, 2012).	Qualitative and Quantitative in Nairobi	Assessing how Mpesa had helped transform the lives of the individuals living in informal settlements.	Helped the women have confidentiality with their money, Men had security and could not be robbed, could be able to make **payments** to their creditors at the end of the day when they finish selling.
			key themes Security, confidentiality, Credit repayments
Comment on gap: Study just focused majorly on financial inclusion through digital but not financial capabilities.			

(Source: Author's Conceptualization)

In summary, the adoption and consequent use of digital financial products are useful in many ways. This study adopted three key features of; savings, access to credit and payments to creditors.

2.3.4. Measures of success of MSEs

The unit of analysis in this study is the MSEs. The concept of firm success has not found a single agreed-upon definition but generally, in business studies, it is often used to refer to a firm's financial performance (Fanta et al., 2017). Success, therefore, is referred to as the business performance can also be measured in terms of financial aspect using measures such as profit margins and return on investment. Albeit analytically correct, there are also other measures that can be used. Additionally, success can be measured in terms of market performance; market share and sales volumes. Another form of success that this study adopted is the increase in the number of employees, and improved (Jaakkola, Möller, Parvinen, Evanschitzky, & Mühlbacher, 2010). Success can be looked at in terms of short versus long-term success.

A study by Fanta et al., (2017) in the SADC region for five countries Lesotho, Zimbabwe, Malawi, Mozambique, and Zambia. The findings indicated that the main hindrance to MSEs

growth is lack of access to finance. The ability to access finance is consequently a key indicator of business success. Modigliani & Miller (1963) demonstrated in their theory of capital structure that debt financing has an interest tax shield that increases the value of the business. This argument thus makes us expect that access to bank credit shows a positive effect on the performance of enterprises. The study by Fanta et al (2017), also found that in the presence of efficient collection and quality customers, trade credit played a major role in increasing trade volumes (Fanta et al., 2017). Trade volumes and the frequency of stock turnover is a theme that that indicates enterprise success. They, however, failed to show payment mode innovation effects on the level of stocks turnover.

One way of measuring success proposed by various studies is by the use of sales volume. An increase in the sales volume is one of the key indicators of growth of an enterprise. In a study of the determinants of MSEs growth in Kenya, Shibia & Barako, (2017) analyzed sales growth as the dependent variable to test the hypothesis; investment climate affects MSEs growth. The findings were that how the owner of an enterprise perceives investment climates of adjudications in court; access to credit; entrepreneur education; utilities etc. positively affect enterprise growth in terms of sales. The study did not, however, show digital payment effects on sales.

A study by Jaakkola et al., (2010) indicated the importance of market share as an indicator of business success. The Market share achieved is determined relative to the main competitors. From the empirical findings of the study, there was the indication that there is a strong positive link between the share of the market that a business has and its returns on investments. The linkage further indicated superior market performance likelihood resulting in good financial performance and thus drew a conclusion that market performance is linked to financial performance (Jaakkola et al., 2010).

Cooney, (2012) did a study on the entrepreneur skills required for growth-oriented businesses and how those skills can be enhanced. The study identified that the measures of growth of an enterprise were; return on investment; growth of the number of customers; growth of revenues. Additionally, employment was a generally acceptable method of measuring growth. The measure of growth by use of employment is good because data can be easily gathered, determined and

categorized. This system is what is basically acceptable to ordain the size of the firm. The study also stated that for a firm to achieve sustained expansion, the other aspect that is an indicator is having access to additional resources and this can be in terms of expansion of stocks/inventory/assets (Cooney, 2012). The study just concentrated on skills which are just one facet of capabilities but this study seeks to explore the other aspects of financial capabilities; financial knowledge; desirable financial behavior within an enabling environment of financial products of mobile digital payment.

Another way of measuring growth is by evaluating the assets accumulation of a business. Assets can be categorized into fixed assets/current assets tangible/intangible. In this study the evaluation of an MSEs, tangible assets as what can be touched, would include cash both at hand and in the bank, inventory, land, etc., As for the intangible assets, they are non-tangible and would be exemplified by software purchased to help in the running of a business, a business website page or a social media account and goodwill (Dean, Bradford, & Krugman, 2005). Accumulation enhances return on assets especially through economies of scale (Dean et al., 2005)

Table 2.5: Summary of empirical work on measures of enterprise success

Author	Methodology and where the study was done	An objective of the Study	Findings on measures of enterprise success
Fanta et al., (2017)	Fin Scope surveys of 5 countries in the SADC region Zambia, Lesotho, Malawi, Mozambique, and Zimbabwe	Determinants of finance for MSEs and link between access to credit and performance	Sales on credit for MSEs credit good in increasing sales volumes and hence profit levels; key indicators of enterprise success, dependent on collection efficiency and quality of the credit customers. Access to finance accelerated growth
			Key themes on success indicators: sales volumes, access to finance and profit levels
Comment: Evaluated credit sales increasing performance my study considered payment on the sales using a mobile platform and whether this increases the volume of sales			
Cooney, (2012)	A report about the UK in a workshop in Denmark	To find out the entrepreneur skills required for growth-	Measures of growth of an enterprise; return on investment; growth of the number of customers; growth of revenues; employment and sustained expansion of the firm.

Author	Methodology and where the study was done	An objective of the Study	Findings on measures of enterprise success
		oriented businesses	Themes that were adopted to measure success; Employment, the growth of the number of customers and sustained expansion of stocks/inventory/assets
Comment: The study just concentrated on skills which are just one facet of capabilities. This study explores the other aspects of capabilities: financial knowledge and desirable behavior			
Dean, Bradford, & Krugman, (2005).	A Quantitative analysis in the USA	To determine the influence of returns on assets on economic growth	Found out that increased assets cause the returns to increase in terms of labor and capital accumulation hence leading to growth.
			Concepts to be adopted: Assets accumulation, the growth of inventory, increase in intangible assets
Comment: The study focused on return on assets accumulation on the economy but did not focus/contextualize it to MSEs			

(Source: Author's Conceptualization)

In summary, the performance of the enterprise is measured in many ways but this study adopted five key measures because they are more suited to the context of a micro or a small enterprise. These measures include; sales volumes, profits, increase in employment, improvements in livelihoods and consider any other self-assessment method that the entrepreneurs might site as their definition of success.

2.4. Conceptual framework

Figure 2.1: Conceptual Framework (Researcher's conceptualization)

<u>**INDEPENDENT VARIABLE**</u>   <u>**DEPENDENT VARIABLE**</u>

FINANCIAL CAPABILITIES

Financial Literacy	
Financial knowledge *(Know about it)*	Finanacial skills *(How to; Experience)*
Education	Business plan
Planning	Budgets
Risk identifiaction	Standards adherance
Contracts	Credit management
Cashflow management	Coping with emergencies

Desirable financial behavior *(Actualy doing it)*
Investments
Savings management
Tracking income
Timeliness
Comparing prices

Digital payments *(Level of use)*
Receipts
Payments
Savings
Bank loans
Digital loans

MSEs SUCCESS

Sales volumes
Profits
Employment
Livelihoods
Self assessment

<u>**CONTROLLING VARIABLES**</u>

Age of enterprise
Size of enterprise

(Source: Author's Conceptualization)

2.4.1.Explanation of the conceptual framework

The independent variable is financial capabilities and here the evaluation was done on the financial literacy and desirable financial behavior and on the context of availability of the digital payment mode of Lipa Na M-Pesa payment service. The intervening variables were; age and the size of the enterprise. The dependent variables that are determinants of success of an MSEs; sales volume, profits, employment, livelihoods, and self-assessment. The underlying assumption of the relationship between the independent and the dependent variable is that the elements of financial capability by firm owners/ managers have a great determination on the success of the enterprise.

As for the controlling variables of age and size. Henshel, (2008) indicated in his study that the stages of the MSEs go through from inception include 1) conception and development 2) commercialization 3) growth, and 4) stability. Further studies confirmed that MSEs in developing countries have difficulties in graduating from conception and development to stability. Fanta et al., (2017) showed that enterprises accumulate experiences as the business progresses resulting to increase performance. The results of their empirical study indicated that in Mozambique, Malawi, and Zimbabwe there was an increase in performance but up to only a certain age beyond which there started to be a decline.

Size is a key determinant of how an enterprise performs through the concept of economies of scale (Fanta et al., 2017). The study found out that the larger the size of the enterprise, the better the performance through cost reduction. It is believed that the firm's fixed costs are utilized better since no matter the volume of output the fixed costs remain the same so the only thing that varies is the variable costs which are in proportion to the production output. They also found out that at times bigger may not always mean better. This is because there might be a strain placed on the management hence leading to inefficiencies. The results from the study showed that an increase in performance due to size was experienced in Zimbabwe, Malawi, and Mozambique (Fanta et al., 2017).

In this study, therefore, the controlling variables suggest that for MSEs to be capacitated into success by financial capabilities, aspects of size and age of the enterprise have to be put into

careful consideration. This way, the enterprise will be able to grow from one level to the other and the missing middle can be easily identified.

CHAPTER THREE : METHODOLOGY

3.1. Introduction

The research methodology is, fundamentally the steps to be taken so that reliable and valid answers can be derived from the research questions (Bhattacherjee, 2012). It is described as a way of systematically solving the research problem (Kothari, 2004).

This chapter entails the research design that was used, study population and sampling, data sources, data needs table, data analysis and ethical considerations of this study. Basically, it is going to detail how the research was undertaken.

3.2. Research design

It is defined as the comprehensive plan for data collection and the blueprint for research (Brynman, 2012). It is aimed at testing the hypothesis or answering the particular research questions. It must entail the processes of; data collection, the instrument that is applied in data collection and the sampling process (Bhattacherjee, 2012). A research design is important for facilitation of a smooth sail of research operations and making research efficient therefore, helping a researcher to yield maximum information at the minimal expense of effort time, effort and money (Kothari, 2004).

This study adopted descriptive research design. Kothari (2004), asserts that this method is relevant while attempting to describe the state of affairs that exists at present. A survey was

conducted and the required data collected by the use of mixed methods of quantitative and qualitative data. According to Bryman et al (2015), quantitative data entails the collection of numerical data and it at exhibits the view of the relationship between theory and research as deductive with a conception of the existence of social reality. As such the study, on one hand, had an objectivist perspective and sought to generalize the research findings into the theory that financial capabilities lead to enterprise success. As for the qualitative data collection, there was the use of the questionnaires which were administered to the sampled MSEs through and in-depth interview done. The respondents give examples on further probing of the various answers they had given at the quantitative data collection stage.

3.3. Study site

This study was carried out in Starehe constituency. The constituency hosts a high concentration of MSEs that have adopted the Lipa Na Mpesa mode of digital payment. It is also noteworthy that the constituency hosts the central business district of the capital city of Kenya and literature has it that the number of businesses located in the urban areas is higher as compared to rural areas (Fanta et al., 2017). Many studies have shown that successful adoption and use of Lipa Na Mpesa is in the urban areas (Hosea Mwangi & Hannah Orwa, 2015; Maina Saruni, 2016; Stepcic, Kabanda, Stepcic, & Salah, 2016). The respondents were selected from the MSEs in Starehe Constituency selling electricals or automobile parts in Nyamakima and Kirinyaga road area. The study site selection is by virtue of concentration of many MSEs that have adopted and were using Lipa Na-Mpesa.

3.4. Population and sampling

The population universe of the study was the MSEs that have already adopted and were using the digital payment platform of Lipa Na M-Pesa. MSEs were the unit of analysis also known as the sampling unit with the main respondents being the owners/managers of the MSEs.

During the mapping stage, a total of 344 enterprises were identified that had a "Lipa Na Mpesa Accepted Here" sticker. Two clusters were considered in the study the Nyamakima electrical shops and the Kirinyaga road auto spares shops since they had a high concentration of adoption

and use of Lipa Na Mpesa. Clustering entails grouping the population and then selecting the respondents for inclusion in the sample (Kothari, 2004).

Bhattacherjee, (2012) defines the target population as the specific segment that is in the broader population best placed to serve in a research as the primary data sources. The sampling frame is chosen as a subset of the target population to contribute to the research. Sampling frame can be explained as a list of people within the target population who can contribute to the research. For a population of between 100-500 according to Borg and Gall (2003), a sample of at least 30% is a good representation for a quantitative study. The sample size/frame targeted for this study was therefore 103 MSEs.

Systematic random sampling was employed during data collection in the selection of respondents identified during the mapping stage whose enterprises were using Lipa Na Mpesa. This method of sampling was advantageous because the aspect of random sampling guaranteed that the law of Statistical Regularity of; "if on an average the sample chosen is a random one, the sample have the same composition and characteristics as the universe" (Kothari, 2004 Page 60). In the systematic random sampling, the first item was selected randomly and the consequent items selected at fixed intervals of a skip of two shops. The non-respondents were replaced by having the next enterprise on the list automatically selected. This method was beneficial since it was easier and lower in terms of costs and time.

3.5. Pre-test and data collection

A pre-test for the data collection instruments, methodology, and other field logistics was done prior to the data collection. The pre-test targeted five enterprises from the study area and this assisted to refine the questionnaire and slot at least 20 minutes time per interview session. This was also to ensure the validity of the research instrument whether it actually measured what it supposed to measure. The reliability of the research instrument; its dependability, was ensured by having a discussion with the supervisor and the key informants to refine the instrument both before and after the pretest was done.

The gathering of the research data was done by the use of a self-designed questionnaire which consisted of four parts. The first part was demographic, profiling the information of the respondents. The second part was the information about the enterprise. The third was the elements of the financial capabilities of the enterprise owners; this was the independent variable. The fourth section was the elements of MSEs Success; this was the dependent variable.

The data was collected in a span of three weeks from 18th August to 5th September. The collection of both the quantitative data and qualitative data was done concurrently. The marking of the answers on the Likert scale was done for the quantitative data while note taking for the qualitative data of the examples the respondents gave was also done. The researcher collected data for all the questionnaires in person. Data cleaning could be done at the end of each data collection day. The review of the data and the notes helped the researcher to prepare for the data collection the next day. A research assistant was involved during the coding and the entry of data into SPSS software.

3.6. Data sources

Both primary and secondary sources of data are used in this study. Kothari, (2004) indicated that it is important to use primary data because; the very reason of being collected afresh and for the first time, it is original in character. This was through the structured interviews for the quantitative data and non-structured interviews by note taking for the qualitative data administered through the use of questionnaires to the owners/managers of the MSE. Secondary data was from previous studies, articles newspapers, databases on the website of Word bank and Kenya National Bureau of Statistics about MSEs and financial capabilities. The advantage of secondary data is that it had already passed through the statistical process hence had greater validity (Kothari, 2004).

3.7. Data needs table

A data needs table assists a researcher in aligning the research questions to the methodology indicating the specific sources of data needed. Below is the data needs table for this study and the source of all the data was from the owners/managers of the MSEs. The data collected was

both qualitative and quantitative data. The table details are the research question, data needed and the measurement scale.

The main research question is; **Do financial capabilities harness the use of digital payments for the success of MSEs?**

Table3.1: Data needs table

Research Question	Data Needed	Measurement scale of the Quantitative data
What are the elements of the financial capabilities of the enterprise owners/managers ?	**2. Financial Literacy** **(a) Financial knowledge (Know About)**	
	Education customized for enterprise	Qualitative & quantitative
	Information on planning	Qualitative
	Risk identification and mitigation	Qualitative
	Contracts and their implications	Qualitative
	Cash flow management	Qualitative
	(b) Financial Skills (The how to; Experience)	
	Implementation of written down business plans	Qualitative
	Implementation of formulated budgets	Qualitative
	Adherence to standards set for running the enterprise	Qualitative
	Debt management skills	Qualitative
	Coping with shocks and emergencies	Qualitative
	3. Desirable financial behavior (Actually	

Research Question	Data Needed	Measurement scale of the Quantitative data
	doing)	
	Investments	Quantitative
	Savings management; short-term and long-term	Quantitative
	Tackling income and expenditure	Quantitative
	Timely payment of bills	Quantitative
	Window shopping	Quantitative
	4. Use of Lipa Na Mpesa / Digital Money	
	Level of use for receipts	Quantitative
	Level of use for payments	Quantitative
	Savings	Quantitative
	Bank loans	Quantitative
	Digital Loans	Quantitative
What are the elements of success of the MSEs?	Sales Volumes	Quantitative
	Profits	Quantitative
	Investments	Quantitative
	Employment	Quantitative
What is the relationship between financial capabilities and the Success of the MSEs?	Amount sales volume	Qualitative & quantitative
	Amount of increase in profits	Qualitative & quantitative
	Value of assets obtained	Qualitative & quantitative
	Numbers of people employment	Qualitative & quantitative

Source: Author's conceptualization

3.7.1. Data analysis

Data analysis is a detailed examination of the collected information for the purposes of discussion and interpretation. It is the process of inspecting, cleansing, transforming and studying data with the goal of discovering useful information, suggesting conclusions and supporting decision making (Kothari, 2004). The quantitative data obtained was by ranked using Likert scale into categories. The data was then quantified analyzed through cross-tabulations to

test significance by use of chi-square, Pearson correlations. There was also a regression analysis done to test the relationship between the dependent and independent variables as well as form a regression equation and test the hypothesis.

The aim of the qualitative analysis is to establish the existence of pathways in the outcome of quantitative results obtained by observing the existence of common patterns and/variations within the responses given at the quantitative data collection stage. The qualitative data was presented as in-text examples and verbatim quotations from the notes taken in the survey questionnaires. This was helpful as it facilitated the identification of systematic patterns and interrelationships then interpreted to draw the conclusions.

The biographical data of the respondent and the basic information of the enterprise gave quantitative descriptive statistics. A univariate analysis where each variable was analyzed independently into percentages. The various characteristics percentage distribution was presented using graphs or tables.

The research questions were analyzed as shown below:

Question One: What are the elements of the financial capabilities of the enterprise owners/managers?

Question Two: What are the elements of success of the MSEs?

Question Three: What is the relationship between financial capabilities and the Success of the MSEs?

Both qualitative and quantitative descriptive statistics were generated from these questions.

3.7.2. Ethical considerations

This study was carried out upholding the research ethics. This is the conformance to the standards and conduct established for carrying out social science research (Bhattacherjee, 2012). The researcher took time to introduce herself, explain the purpose of the study and how long the

interview was to take. This was in order to get informed consent from the respondent of whether the respondent was okay with proceeding to be interviewed. There was no coercion to participate in the interview whatsoever, as it was completely voluntary and those that declined were respectfully thanked for their time and the researcher proceeded to the next enterprise. Those that participated were also thanked at the end of the interview for their valued time and responses.

There was a promise that the data gathered was purely for the purpose of academic research. The researcher also ensured privacy and confidentiality of the data collected and the information given was not to be shared without consent. There were some few cases where the respondents were not comfortable in disclosing some confidential information such as income and investments value; this was respected by the researcher and could proceed to the next question. The principle of anonymity is also upheld in this study and the personal identity given in the interview was as promised not divulged in this report. The data was also analyzed and reported ethically, any unexpected negative or positive finding have been fully disclosed.

CHAPTER FOUR : RESULTS AND DISCUSSION

4.1. Introduction

The previous chapter discussed the methodology for this study. Chapter four has sections that discuss the characteristics of the respondents, characteristics of the enterprises and gives a report of the findings from the fieldwork on the basis of the specific research questions as listed in chapter one. The arrangement of the work is segmented into sections. Section one is on the characteristics of the enterprise's owners/managers, section two gives information about the enterprise. Section three is on the various aspects of financial capabilities; financial literacy; knowledge and skills, desirable financial behavior, level of use of Lipa Na Mpesa and section four is on the success measures of MSEs measures of success. Where there is an appropriate

need for the use, tables or graphs have been made use of for illustration of the findings of the study.

The age and size of the enterprise are the controlling variables of this study and are found in the first section on the discussion about the characteristics of the enterprise.

4.2. Characteristics of the enterprise's owners

In order to understand the role of biographical data of the respondent as part of the determinant of the success of an enterprise, the questionnaire was designed with certain questions; number of years in the enterprise, gender and highest level of education.

In this section, there is the discussion of these features

Number of years in the enterprise

The experience of a manager could be deemed to be an important factor in determining whether be enterprise is run well or not. For the survey findings, it is evident that most of the respondents had been in the enterprise for less than 10years. The mode was for those who had been in the business for less than 5 years which was 39%. The median was also those who had been in the enterprise for less than 5 years while the average/mean was 6-10years.

The figure 4.1 below summarizes the number of years the respondents had been in the enterprise.

Figure 4.1: Years in the Enterprise
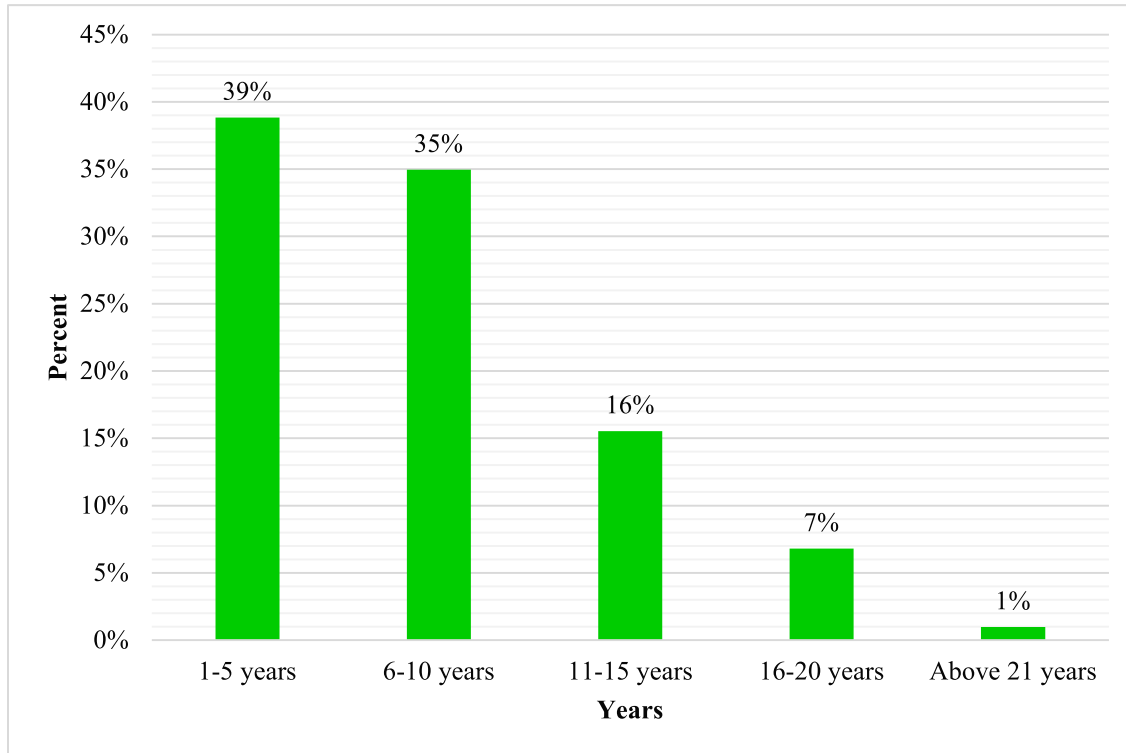
Source: (Field survey data, 2018)

Gender

From the surveyed data gender was observed; male or female. The results were analyzed by use of simple descriptive analysis. From the data analyzed, the larger percentage of those interviewed were male at 67% while the female was 33%. It was observed that most women co-owned the businesses with their husbands. While it's not possible to tell the mean and the median of the gender the mode is male for the respondents interviewed

Figure 4.2 below is the summary of the gender.

Figure 4.2: Gender
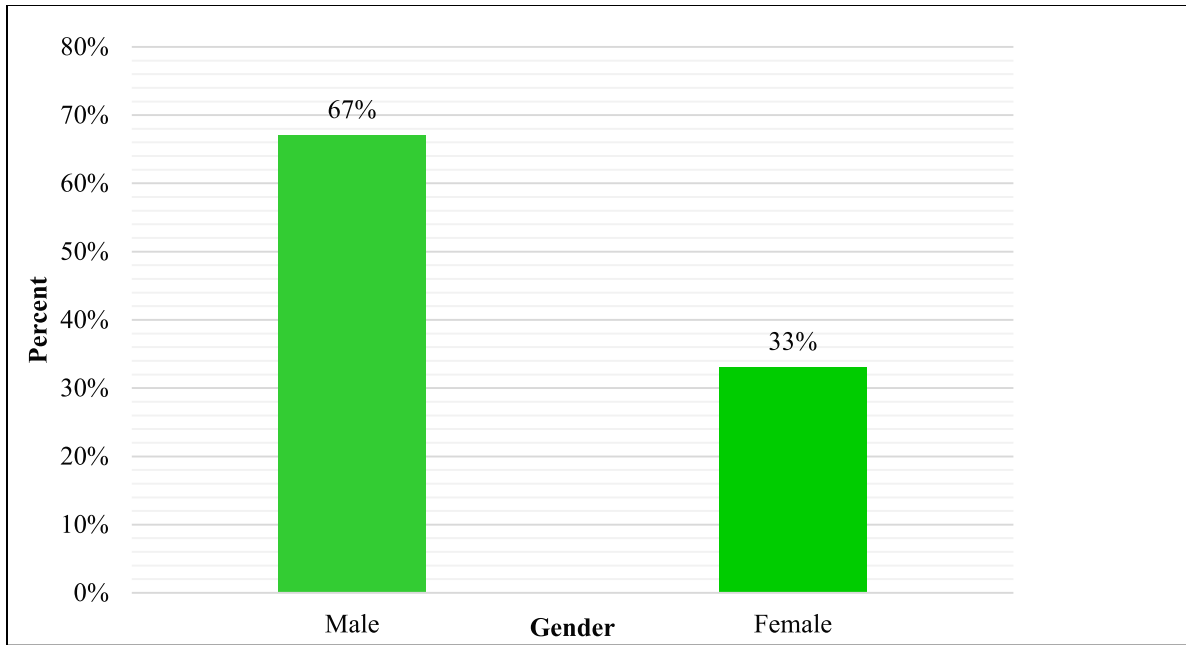
Source: (Field survey data, 2018)

Highest level of education

The respondents were asked of their highest level of education from the survey and the responses were as shown in the table. Level of education is an important part of financial capabilities as the education received determines the level of knowledge and skill to a great extent (Sherraden, 2013). 68% of the respondents had attained tertiary education and to the greatest surprise, those with university degrees and above including masters were 25%. Only 2% had not attained secondary education but all the respondents had gone through primary school. The mean, the median, and the mode were for those who said they had diplomas.

The summary of the level of education is shown in figure 4.3 below.

Figure 4.3 Highest Level of Education
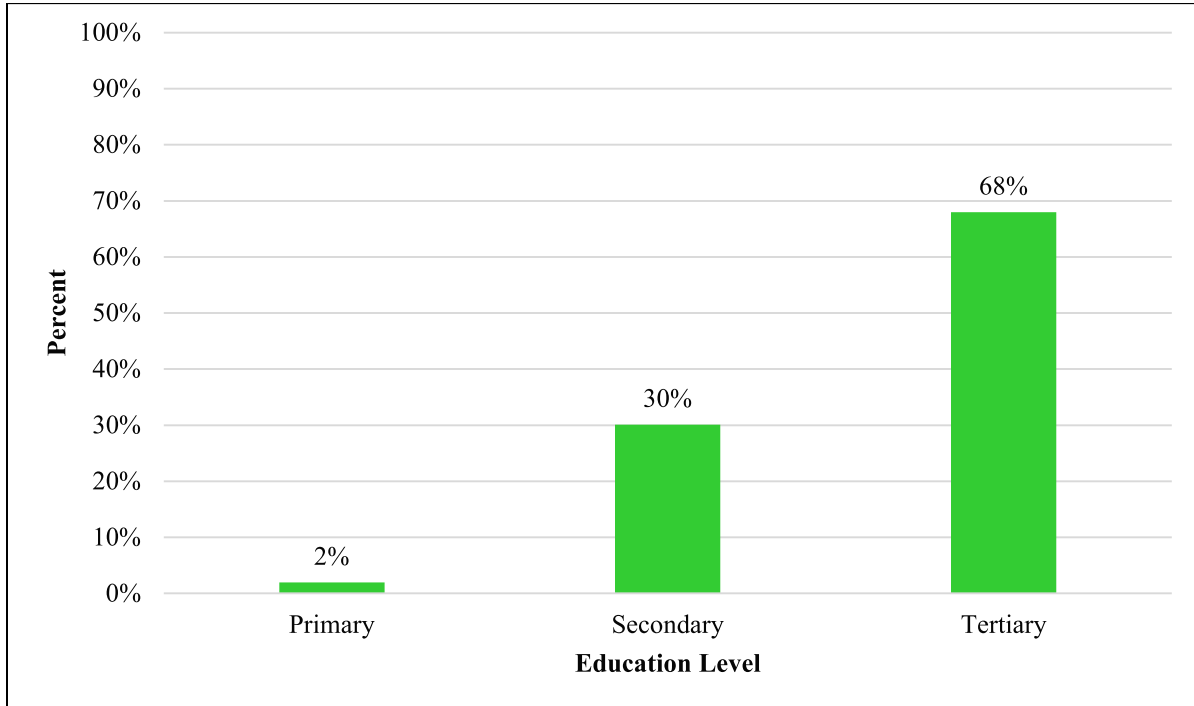
Source: (Field survey data, 2018)

4.3. Information about the enterprise

The proceeding section has looked into the features of an enterprise owner, this section looks into the features of the enterprise. This is in terms of Year of establishment, type of business, number of employees, total income per year and total assets value.

Year of establishment

Age of the enterprise is a significant factor that this study considers as a controlling variable. Literature relates the age of the enterprise with the attaining of requisite experience and the assumption is that the older the enterprise the more successful it is dimmed to be. The year of the establishment was from the data obtained compressed into the categories and from the table below; The age of the enterprises with the highest frequency were 8-12 years and 12-17 years with a 26% frequency in each. Above 38years was only 1% while the 2% respondents who did

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not know were managers who said that information could only be with the owners. The mean and median age of the enterprises sampled was 13-17 years while the mode was 8-12years and 13-17years.

Figure 4.4 below is a summary of the age of the enterprises surveyed.

Figure 4.4: Age of the Enterprise
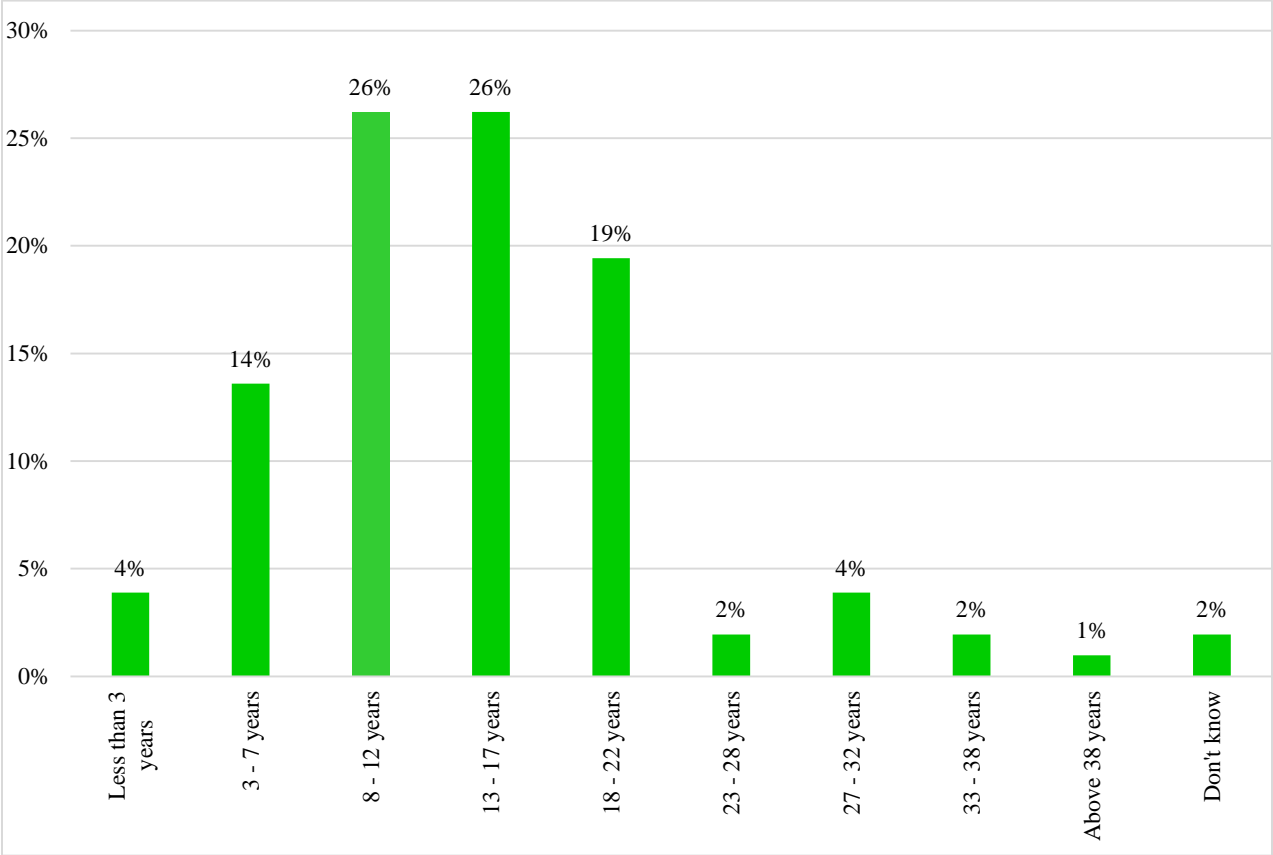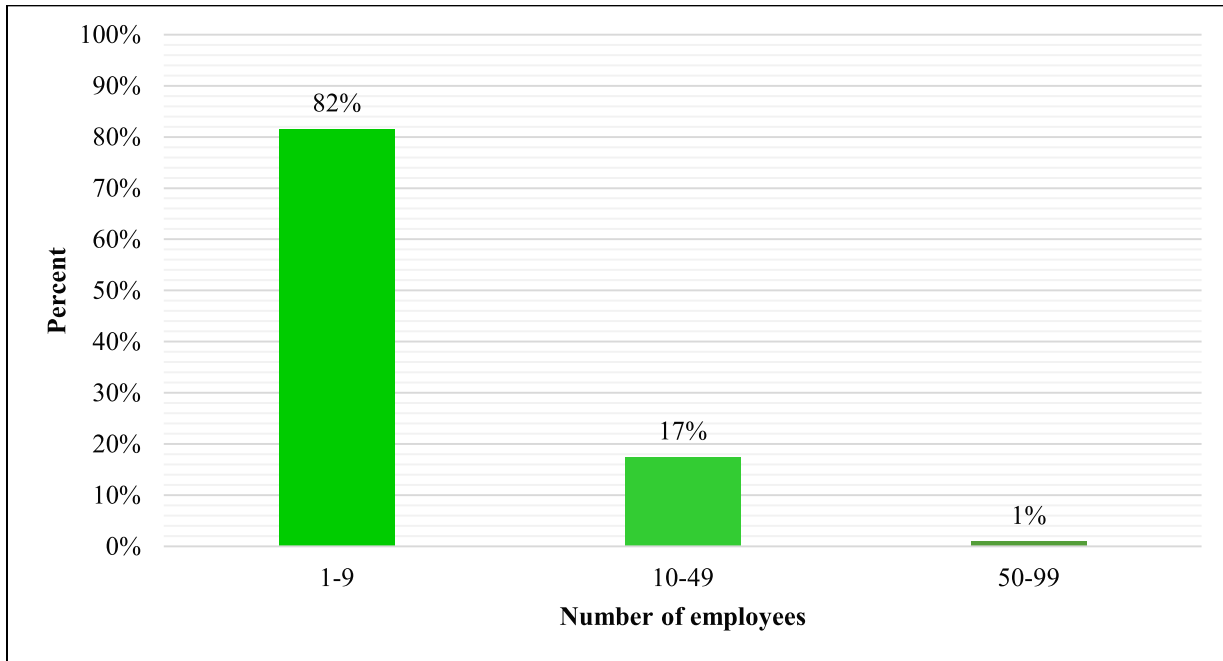

Source: (Field survey data, 2018)

Number of employees

In Kenya, the categorization of MSEs is considered in terms of the number of employees. From the categories given during the survey the largest range of the number of employees from the enterprises surveyed was in the range of 1-9 at 82%. This is indicative of the fact that most of the

sampled enterprises if looked at in terms of employees, were micro enterprises. The mean, mode, and median of the data analyzed was in the range of 1-9 employees.

Figure 4.5 below is a graph representing the number of employees.

Figure 4.5: Number of Employees

Total income per year

The highest indicated level of income per year was in the range of between 500,000-5,000,000 at 45% with only 8% of the respondents saying that their income was below 500,000 per annum. This according to the MSEs bill of 2012 the indication from the collected data is that most of the sampled enterprises were small and medium if we apply the rationale of income per year. There was a high number of respondents 17% who did not respond to this question stating that the information about their income was highly confidential. The mean, mode, and median of the analyzed data indicated that these measures lied in the range of 500,000-5,000,000 of the Likert scale used.

Figure 4.6 below gives the summary of the annual income.

Figure 4.6: Annual income
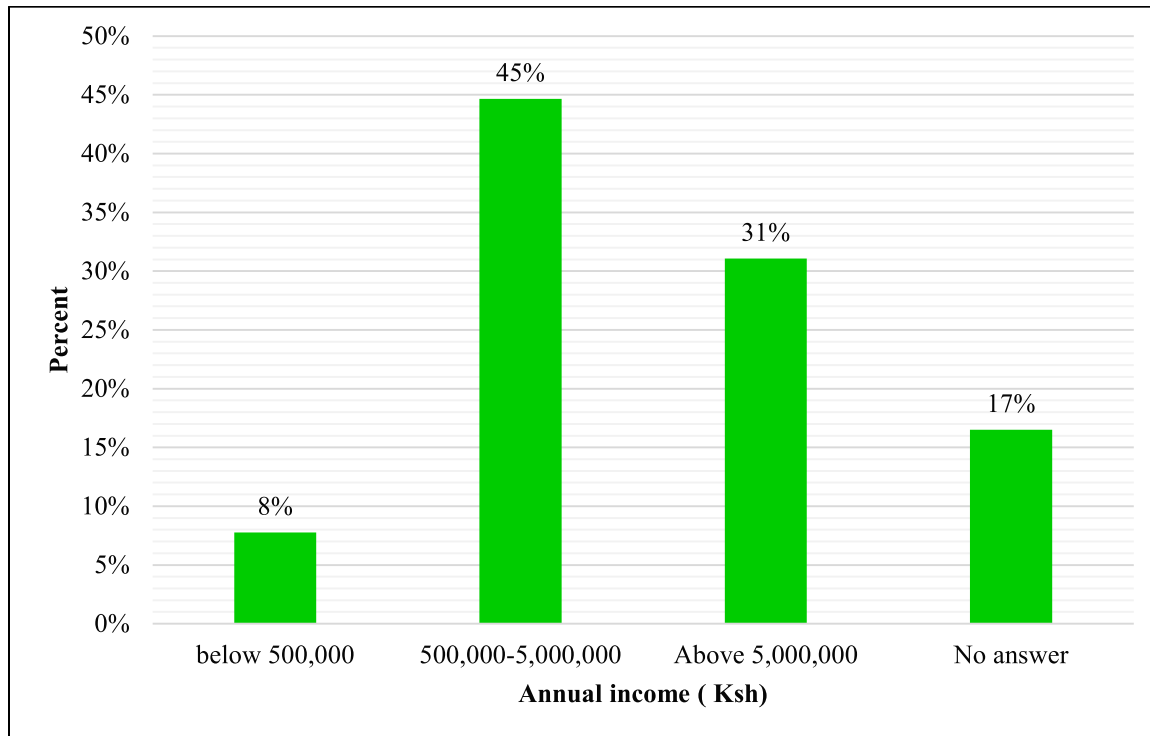
Source: (Field survey data, 2018)

Total assets value

The size of the assets an enterprise has is a key determinant of whether it is a micro, small, medium or large enterprise. From the survey data, the highest range of the value of the assets at 34% was in the 5-25 million. On the other hand, there was equally a large number of respondents that did not give an answer to this question. The mean, mode, and median of the analyzed data indicated that these measures lied in the range of 5,000,000-25,000,000 of the Likert scale used. Figure 4.7 below gives a summary of the total assets value.

Figure 4.7: Total Assets Value
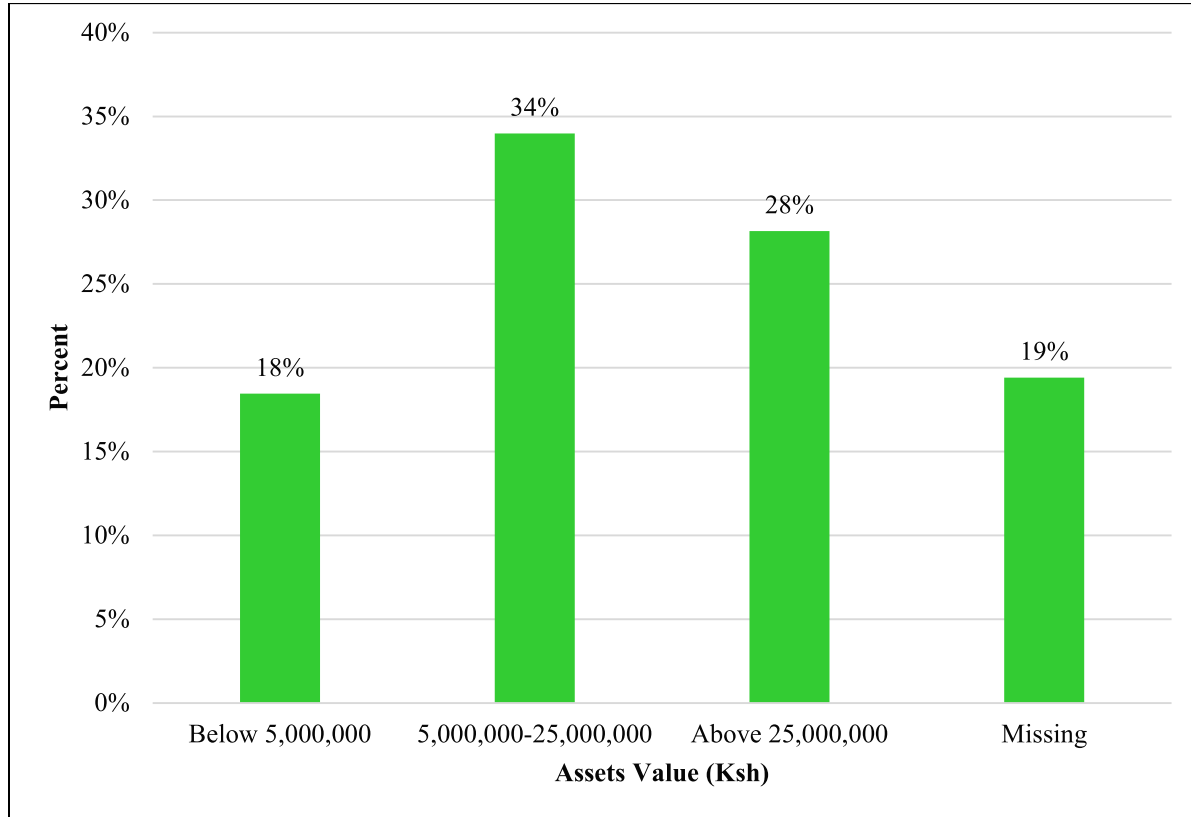
Source: (Field survey data, 2018)

4.4. Financial capabilities

The previous section discusses the characteristics of the respondents and the enterprise. This section looks at the elements of financial capabilities. The section seeks to answer the question what are the elements of financial capabilities by the enterprise owners/managers? To answer this question this section of the study adopts some of the measures proposed by the World Bank (2013), and have some that have been used in studies by Baidoo et al.,(2018) FSD Kenya 2009 and (Sherraden, 2013) in order to maintain consistency in the financial capabilities measure. The study examined the elements of financial literacy; knowledge & skills, desirable financial behavior and the level of use of Lipa Na Mpesa services. There was qualitative data collected from the survey and where appropriate it was integrated on this section.

4.4.1. Financial knowledge

This section aimed at answering the research question of elements of the financial capabilities of literacy in terms of knowledge. It looked into the elements of knowledge in terms of education, planning, risk identification, contract, and cash flow management knowledge.

The figure 4.8 below is a graph summarizing of the findings of financial knowledge.

Figure 4.8: Financial Knowledge
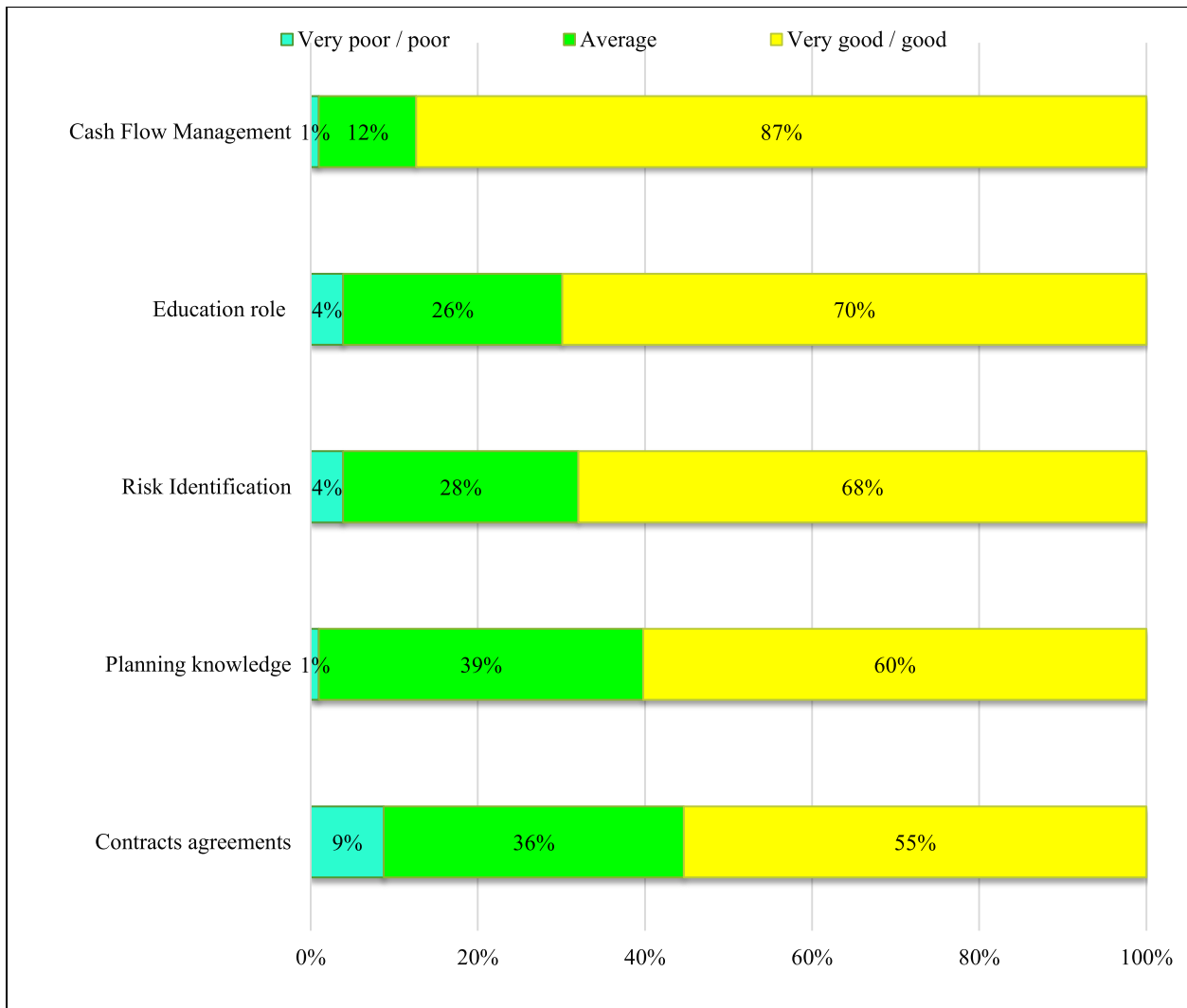
Source: (Field survey data, 2018)

Role of education in helping run the enterprise

The results the data collected and analyzed indicated that of the respondents at 39.9% said that education had been very good in helping them run the enterprise. Only 1% of the respondents indicated the role of education as being very poor. This can be interpreted that the education in turn helped enterprises to be successful. From literature education is very helpful as the means of building that capacity of knowledge has been put forth by McCormick (2009). Additionally If education fosters comprehensive literacy, this would help owner or managers to integrate relevant information to do effective planning and to make well-informed choices, which would ultimately boost the organization's success (Thapa et al., 2008).

Planning Knowledge

Out of the respondents interviewed, 48.5% of respondents indicated that they are good at planning. The 38.8 percent indicated that they were the average when it came to planning. Majority of them said that they had planning knowledge only after occurrences happened daily weekly and monthly Also that their planning was prompted so much by the happenings than having prior knowledge. The respondents that indicated that the planning was very poor showed lack of knowledge on how to do schedules and planners as a reason behind poor planning knowledge. The 11.7 percent that said they were very good indicated that they occasionally engage professionals to assist them to gain knowledge on planning. Literature indicates that if education fosters comprehensive literacy, this would help owner or managers to integrate relevant information to do effective planning and to make well-informed choices, which would ultimately boost the organization's success (Thapa et al., 2008).

Risk identification knowledge

The capacity to know the risks that the enterprise is exposed to was asked in the survey and 53.4 percent of the respondents they are good on the identification of the risks their enterprise is exposed to. 28.2 percent said they are average siting example of the unpredictability nature of the business environment. The training which gives knowledge helps owners and managers be able

to recognize and utilize opportunities out of threat and challenges (Kinyua et al., 2015). The knowledge that leads to success can also be in terms of understanding and mitigating risks.

Contracts Knowledge

This question sought to find out if the enterprise managers know the importance of having well-written agreements in the activities, they engage their enterprise in. From the survey data, the highest number of respondents indicated that they were good at having written down signed agreements. There was also a high number of respondents at 35.9% who said they are average in terms of having knowledge on contracts. Most indicated that there was no signing of complex contracts but simple trade documents like invoices and delivery notes. An example that kept recurring of why they did not have signed agreements was because there was the whole aspect of trust. In the case of employment contracts, majority didn't have. This is because a very high number of the surveyed enterprise were family businesses and had employed family labor. From his study, Kawamura (2016), showed that financially capable persons have the habit of assuming a fundamentally careful attitude toward contracts. Indicated was that this leads to success in terms of ensuring one does not sign the contracts whose obligations they are unable to meet (Kawamura, 2016).

Cash flow management knowledge

Of the respondents surveyed, 87% indicated they were either good or very good at cash flow management knowledge. Some of the examples given of the knowledge on cash flow management from the qualitative data collected were: Knowledge of writing down the money that comes into the business in a book or entering it into a computer. The knowledge of recording of expenses and ensuring they are well accounted for.

To summarize the section on financial knowledge, the data collected indicated that its role in financial literacy was that majority of the sampled respondents indicated that they were either good or very good in the above-stated categories

4.4.2. Financial skills

The other important aspect of financial literacy apart from financial knowledge is financial skills. This section is on the various aspects of financial skills questioned in the survey. Literature confirms that skills are important for growth (Čalopa, 2017; Cooney, 2012; Kimando, 2012). Skills looked at in the survey were informed by literature reviewed. These were measured in terms of the experience that the respondents had in the aspects of doing a business plan, budget, standards adherence, credit management, and coping with emergencies. The figure 4.9 below is a graph summarizing the trends reported in the findings of financial skills surveyed.

Figure 4.9: Financial Skills
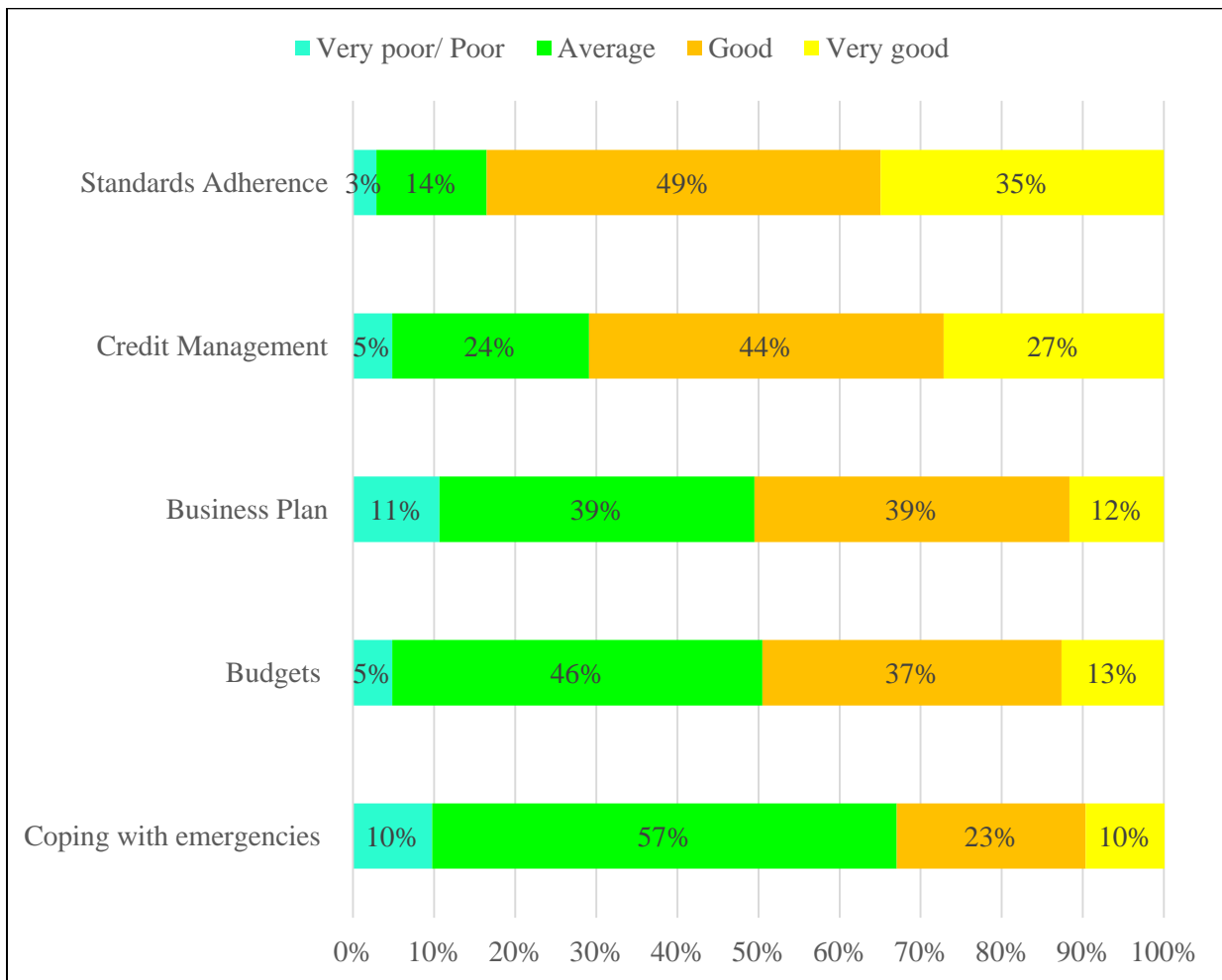
Source: (Field survey data, 2018)

The following sections give the descriptive report of the data findings and thereafter summarized by the graph.

Business Plan experience

The highest score of 39% for the majority of the respondents said they were good and average in their experiences in the business plan. Only 12% said that they were very good and the majority of them had either undertaken a business course or engineering course from the in-depth survey findings. The 11% who indicated that they were poor or very poor said on further probing that to some of them they don't see it necessary to have a business plan so they have never been interested in learning the skill. On the other hand, some said that they work depending on how the business environment is.

"Sometimes one may plan and the things don't turn out as they had expected so I don't see the need for a business plan." (Respondent 28, August 2018).

Budgets

The highest frequency of the respondents at 46% indicated that their budgeting experience was average. Examples of the reason for this outcome were given as most of the times the managers were not directly involved by employees in doing budgeting for the business. Some indicated they don't have physically written budgets and that the financial forecasts at times don't work due to the unpredictable business environment. Those that were good and very good at it were mostly trained in accounting courses while some indicated that they see budgeting as an important skill since it helped them control their enterprise costs.

Adherence to standards

The trend indicated that most respondent's experience in adhering to the set standards is good at 49% of the total sample. From the examples given from the qualitative interview most of the respondents indicated that often they adhere to standards because the standards are enforced. Below are some of the responses given by the sampled respondents;

"If we don't adhere to county government requirements they come to arrest and harras us (Respondent 71, August 2018)

"The Kenya Bureau of standards comes to check if we have stocked counterfeit electricals and whether the products have KEBS stickers". (Respondent 50, August 2018)

"We adhere to quality the customers want because we want to keep a good relationship with them for the sake of future business and referrals" (Respondent 63, August 2018)

Credit management

44% of the respondents had the highest rating in the skill of how they manage their borrowings and the response was that they are good at it. They said that the only impediment might be at times cash flow or unexpected business environment. Those that said they were very good indicated that they pay in time to avoid being in "Bad books" with either their suppliers who give them trade creditor banks who extend to them credit. There was an observation from the examples given from the qualitative interview that of the 5% who said they were the poor majority of them was not because they were borrowing and not paying but on the centrally, they were not borrowing at all. Most of them said they have enough capitalization and were very poor in borrowing. That 24 % of the respondents that said they were average gave examples in the in-depth interview of at times dogging the suppliers or using "lies" in order to have the credit period extended.

Coping with emergencies

Majority of the respondents said they were average in coping with emergencies and the frequency was 57% while 10% said they were very poor. The examples given by those who gave this response were that the turbulent business environment has caused them not to be able to cope. Majority of the enterprises who directly import their products said that the delay of clearing of good held at the port had caused them very heavy loses. The issue of increases prices of goods due to taxation measures by the government was a prominent example featuring from most respondents. Those that said they were good were 23% and very good were at 10%. The

examples cited for this outcome included having some savings that took care of the time of need, having a good network within the business cluster that enabled lobby together for the government to relax their requirements like port clearance and taxes. Networks were also cited in the enhancement of trust and by this consolidation of cargo for import was done where the respondents indicated containers could be shipped as one.

"We at times don't have much control over unexpected outcomes and the business is usually negatively affected but negative outcomes" (Respondent 15, August 2018).

"Savings are done for the days of emergencies to take care of business shocks and unfavorable business environment outcomes. We have also taken up several insurance policies to cater for unexpected outcomes; Life policy, car insurance comprehensive cover and children education policy" (Respondent 42, August 2018)

In summary, experience in the five aspects indicated that majority of the people were good and very good in adhering to standards, majorly due to enforcement while hugely average and poor at coping with emergencies majorly due to the economic shocks.

4.4.3. Financial behavior

This section presents the findings of the results of financial behavior; in other words, what people actually do in terms of managing their finances. The survey looked at five aspects namely: Investments, savings management, tracking income, timeliness of paying bills and comparing prices

Figure 4.10 below is a summary of the results of the analysis done for financial behavior

Figure 4.10: Financial Behavior
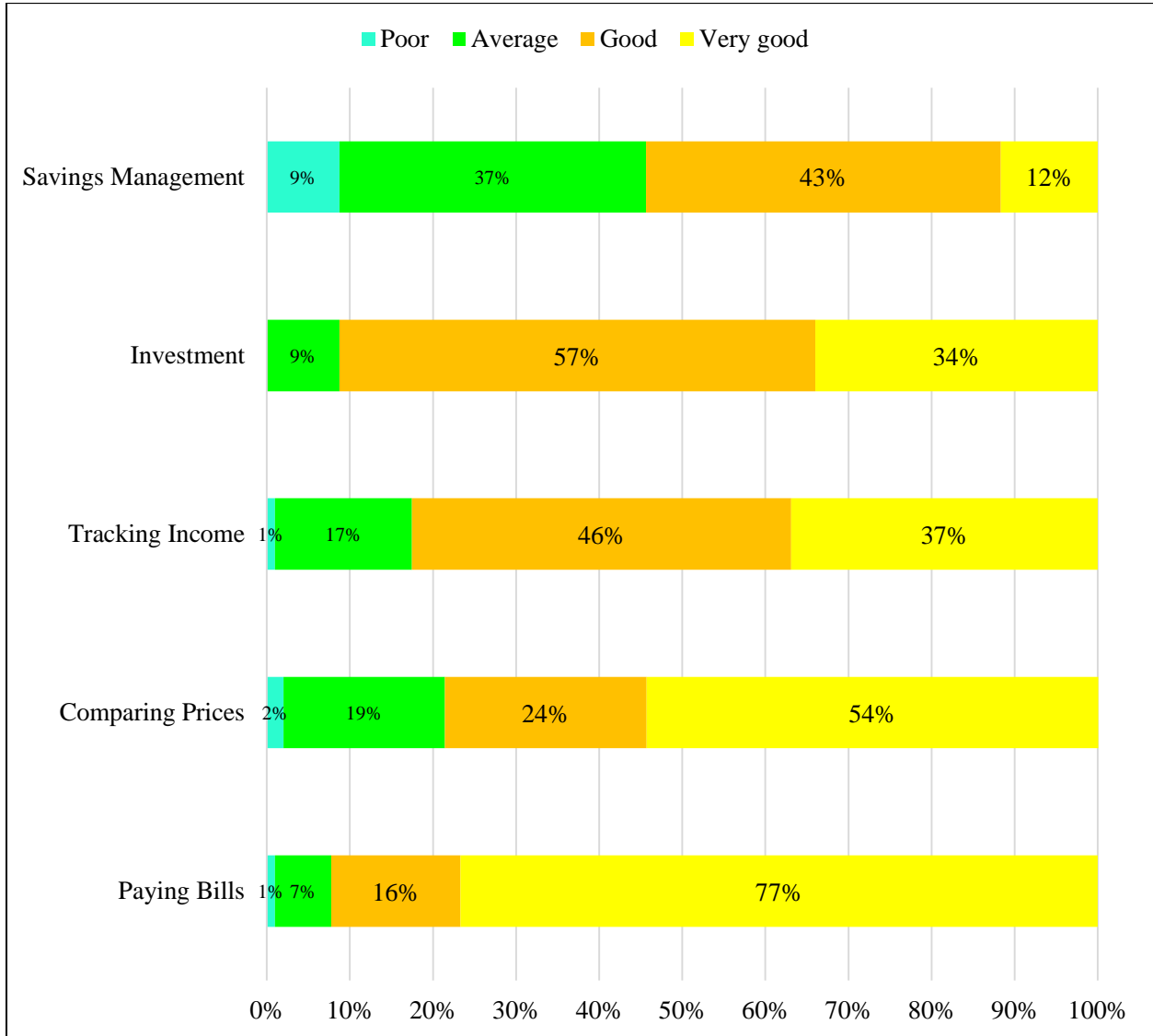
Source: (Field survey data, 2018)

Below is a detailed description of the output and trends obtained from the survey data that has been summarized in figure 4.11. It also contains the qualitative data of the examples given by the respondents.

Investments

The trend indicated is that 57% and 34% said they were good and very good respectively when it came to the reinvestment of the proceeds they received from the enterprise. Examples given of investments were stocks and business assets. Of the 9% that said that they were average in the investment, they gave the reason as being that at times the businesses didn't give much proceeds to invest. They said that they used the proceeds to meet their family needs while borrowing from suppliers to restock their enterprises by the use of trade credit.

"I have managed to invest in land and other personal properties from the proceeds from the enterprise" (Respondent 32, August 2018)

Savings

43% of the respondents said they were good at savings and this was the highest frequency. Of them that said they were good and very good at saving the examples that they gave for them saving was to cope with emergencies another example that they gave was that they save to accumulate for investment. Short-term saving as opposed to long-term saving prominently featured and the respondents said that there I usually daily or short periodical savings into the bank of proceeds due to safekeeping as well as building up of customer profile with the bank as active accounts.

"I save for emergencies on long-term or to accumulate the money to be enough to buy something needed at a future date so mostly short-term" (Respondent 27, August 2018)

The 37% was a huge average response considering the benefits that one can get from saving. However, on doing a further probing those that said they were average and poor in doing both short-term and long-term savings similar to the findings of most empirical evidence about savings for MSEs, the respondents said that they prefer to invest in assets and stocks instead of saving.

"I don't gain much from having my money stay in the bank. I prefer to stock the shop or invest in an asset like land" (Respondent 40, August 2018)

Tracking income

This question was asking about the behavior in the respondent in keeping cost low and the maximization of profits. The highest frequency of 46% of the respondents said that they were good while 37% said they were very good. From the qualitative data collected, the respondents gave examples of how they do this. Being direct importers or dealers from manufacturers to avoid middlemen, some do direct importation from factories in China for the electrical and Japan for the auto spares. Original equipment manufacturers (OEM) agreements from manufacturing countries and this enabled them to have local brand names.

Timeliness

Paying bills on time was considered to be of prime importance to most respondents at 77% indicating they were very good at it. Examples of bills paid that were given included utility bills, county council dues such as parking, salaries, insurance etc. Those that said they average and poor indicated the examples of not having cash in time and this caused slight delays in the payments.

"Salaries are paid daily for those engaged in the business activities rents and other utility bills are paid monthly but in time" (Respondent 93, August 2018).

Comparing prices

This sought to find out if the respondents did window shopping before settling on buying from a particular place. 54% of the respondents indicated they were very good. Majority of those that were good and very good sited the examples of getting various quotations from different suppliers, shopping online for both quality and best price.

"Before buying from somewhere we have to look at various quotations of the items we want to buy and buy from the least priced of the quality we want." (Respondent 84, August 2018)

Those that indicated they were average and poor at 7% and 1% respectively said that for some of the products stocked they are usually sold by the manufacturer at fixed price and the demand

from the customers force them to stock even though the prices of those specific brands are high for example, certain brands of lights, chloride batteries, genuine parts for cars etc.

"Some customers are very specific on what they want and no matter the price they are willing to buy it so we have no option than stock the product. Chloride batteries are sold regardless of the price and we don't have much say in the price given by the supplier unless we optimize on quantity discounts" (Respondent 90, September 2018)

To summarize it is evident from the trend that financial behavior is a very crucial element in financial capabilities. Of the five analyzed, investments and timeliness in payment of bills were at par and took the highest score with the majority of the respondents saying they were good and very good at it.

4.4.4. Use of a financial product; Lipa Na Mpesa

From the literature reviewed in chapter two, financial literacy and behavior are not adequate if a person has no access to a financial product suitable for their financial need. This is emphasized by the literature that financial capability matrix is not complete where there is lack of access and use (Trombetta et al., 2017). The unit of analysis in this study was the enterprise that had adopted and was using digital financial services of Lipa Na M-Pesa. The study generally tries to interrogate whether the financial capabilities of literacy and behavior harnesses the use of digital payments for enterprise success.

The figure 4.11 below shows the summary of the results obtained from the data analyzed on the level of use of Lipa Na Mpesa.

Figure 4.11: Level of Use of Lipa Na Mpesa
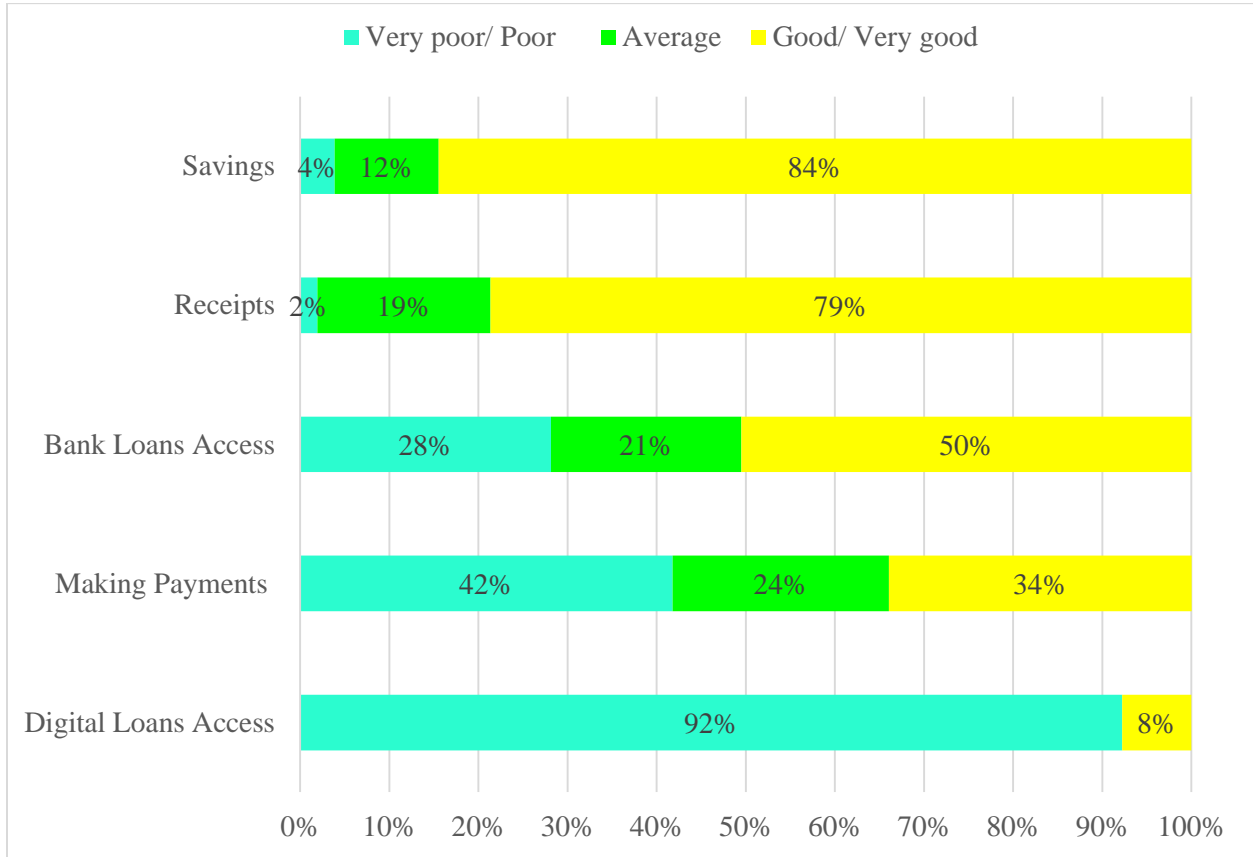
Source: (Field survey data, 2018)

The section below gives a detailed descriptive analysis of the results of the level of use of the Lipa Na Mpesa digital financial product.

Use to receive payments

The highest frequency of respondents at 79% said that Lipa Na Mpesa was good and very good in terms of its level of use by their customers to make payments. They gave the reason for this as the majority of the customers not preferring to carry cash around while doing purchases. There were also examples from the auto spares shops that the car owners could send the garage mechanics to source for spares and while at the shop the owners request to talk to the seller who they negotiate then the money is sent to them directly from the owner of the vehicle using Lipa Na Mpesa. They said that to them it enhances safety and this concurs to the findings that asserted

that use of digital money enhances mitigation of risk and enhances safety (Demombynes & Thegeya, 2012).

Another key theme that recurred from several respondents for the high level of use is customers demand. These results concur with the literature on the adoption of financial products that customers demand is a key determinant (Mung et al., 2017). Majority of those who had the service put said it was because customers come with amounts of money in their phone and they used to lose business if they were not having the Lipa Na Mpesa service. When given the option to go and withdraw from an Mpesa agent, most customers were adamant. Also, the option of them sending money to the numbers of the shop owners when given they said it was more expensive. Use of the Lipa Na Mpesa till number options do not cost the customers.

There was also the theme of reputation and most respondents said that having Lipa Na Mpesa makes them have a high profile. They therefor said they had taken up the service as a way of boosting their business reputation in as much as it was costing them. The costs come from the fee charged by the service providers to the businesses using the service.

The respondents that said they were average, poor and very poor were 16%. The qualitative data collected showed that the service came at a cost to the enterprise when customers use the Lipa Na Mpesa. Those that didn't have the service connected directly to the bank accounts said that they were charged double to withdraw from the till number to their mobile money and then to withdraw from the mobile money to get cash from M-Pesa agents. Some said the felt like there were hidden cost in the service that they had not gotten full disclose about. At times some said they had to lie to the customers that the Lipa Na Mpesa is out of service so that the customer can pay using cash.

Use to make payments

Here the study sought to establish whether when money has been received into the business through Lipa Na Mpesa, that same money is used to make other forms of payment. The response of very poor got the highest rating of 42% while 24% said they were average. From the

qualitative data collected, those that said it was good or very good gave the example of using to pay their trade creditors and also to pay casual labors or restock their enterprises.

Use to make savings

There was an overwhelming response of 84% of the respondents who said that the money they received through Lipa Na Mpesa has enabled them to be able to make savings. They indicated that there is a way that the money received is linked and goes directly to the bank. The 16% who said they were average and poor in having the money received through Lipa Na Mpesa said that they had not enabled that feature of having the money go directly to the bank.

Bank loans

There was a strong indication that the access to loans offered by the banks for the respondents was good and very goods at 50% of the enterprises sampled. This is contrary to the narrative in the literature that most of the MSEs find very hard to access the loans offered by the bank (Lamb, 2016, Rahman, Rahman, & Belas, 2017). It, however, concurs with the findings of (Kapunda, 2012) and (McKee, Kaffenberger, & Zimmerman, 2015) which indicated that digital finance when done right has an impact on helping the financially excluded get access to credit. The percentage that said they were average and very poor gave the reason for this is in the in-depth interview that they either ploughed back money into the enterprises from their business proceeds hence they did not need loans or preferred the use of trade credit instead of borrowing from the bank.

Digital loans

There was an overwhelming 92% of the respondents who indicated that they don't use digital loans to run their businesses. Majority of them indicated examples of reasons for not using to be the money gotten from the digital loans was very little compared to their financial needs for the enterprise. Also, the fact that the interest rates charged for the loans offered were high also came up. Some did not like the idea of being blacklisted in CRB really hated the constant reminders to pay while some did not need any loans at all as they said plowing back from their profits and

revenues has helped meet their business financial needs. There was the fact that from the 8% that said that they were good and very good the ease of access to digital loans. Manyika *et* Al., (2016) resonates that with the survey findings by affirming that beyond informal lenders as the use of digital leaves data trails that are a source of information to formal credit providers.

4.4.5. Success of the enterprise

The success of the enterprise is the dependent variable. In this research, it is seen as multi-dimensional. This section shows the elements of enterprise success as rated by the respondents who are the owners or managers of the enterprises. The survey data looked at five main elements of success; sales volumes, profits, employment, livelihoods, and self-assessment. The respondents were asked to rate the level of their enterprise success The findings are summarized below in figure 4.12

Figure 4.12 Enterprise Success

Source: (Field survey data, 2018)

63
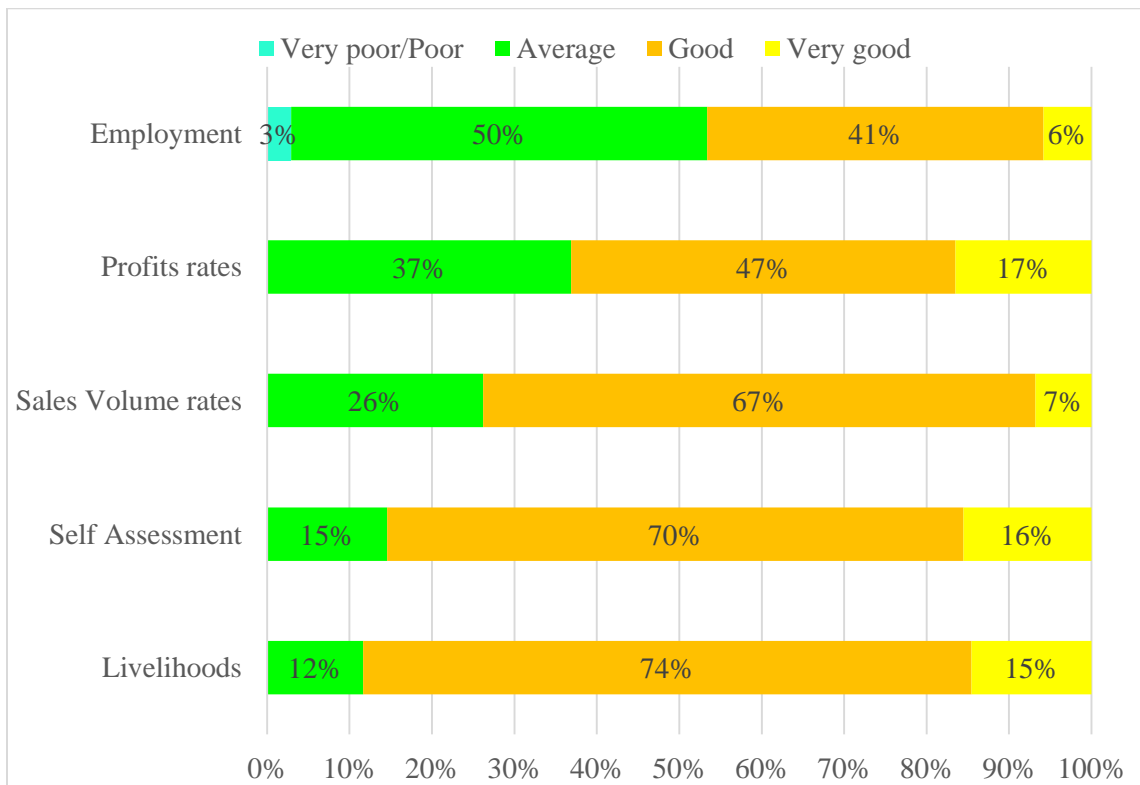
The sections below give the details of the results of the ratings given by the respondents on the success of the enterprise.

Sales volumes

Majority of the respondents indicated that their sales volumes were good and very good with a 74% rating. From the qualitative data collected the majority of the respondents, they attributed this to the fact that there was a constant flow of customers due to their strategic location and the type of clientele base

"Our sales volumes are very good because we have managed to get a good mix of customers; NGOs, Government, corporates and walk-in buyers. We bid in tenders and have managed to win several of" (Respondent 7, August 2018)

Those who said the sales were average were 27 % and majority blamed it more on the business and economic climate in the country. As part of the challenges, examples from the qualitative data were that they that were direct importers blamed the recent past lack of ease of doing business to delays at the port and also the anti-counterfeit measures undertaken by the government which is delaying clearance of imports. They also cited competition from the cheap imports from china manufacturers who had started to directly sell into the Kenyan market with the same price importers buy from China.

Profits

The highest number of respondents; 47% indicated their profits are good while 17% said very that their profits were very good. I the examples are given on further probing, some attributed this to being given direct dealership from the manufacturers hence eliminating the expense of the middle-men. Some of them attributed the fact that they can have Original Manufacturers agreements with the manufacturers in China, and Japan to them being able to maximize on their profits.

"We are able to import our electrical fittings direct from China and there we get them at very good prices that make us make very huge profits when we come to sell them here" (Respondent 15, August 2018)

"We don't buy locally because we see it expensive for no reason, everything we get we buy from Dubai and the quality we want is what we get." (Respondent 23, August 2018).

Employment

The study indicated the majority of the respondents considered the level of employment to be average at 50%. Most of the surveyed enterprises use family labor and they said they feel more comfortable handling the business activities rather than entrusting other employees. They also saw it as a measure of cutting cost. Of the 41% that said they were very good, and the 6% that said they were good, they gave examples of employing people on a temporary or casual basis. In Kirinyaga road there was a very heavy presence of motorcycle riders and most of the respondents admitted to engaging most of the times their services to do deliveries. Additionally, in this cluster, there was the notable uniqueness of a lot of brokers. I asked the respondents in my in-depth interview and they said they brokers are employed at a commission of each sale they help to close. The garage mechanics also help in the marketing in the garages the enterprises on agreements with them to give a commission on sales.

"There has been a steady growth of employment as we are now more than 35 some working in the field and others in the workshop at Ruai" (Respondent 7, August 2018).

"I prefer to hire services on a need basis and for transport, there are a lot of bodaboda riders here so I engage them when a customer needs a delivery to be made" (Respondent 25, August 2018).

Livelihoods

There was a close association of success in terms of livelihoods as 74% of the respondents said that their livelihoods are good and 15% very good. This confirms the assertion that MSEs are crucial to the economy because they help generate livelihood strategies which help reduce

poverty and vulnerability (Jones, 2008). Some of the examples given by the respondents of how it has been beneficial to livelihood include, food education shelter clothing, able to access health, able to help their relatives and take care of their sick and old parents.

"Our employees here are paid well and most of them have managed to get a decent life for themselves and their families" (Respondent 8, August 2018).

The 12% that said their livelihoods were on average were mostly managers and they claimed they were poorly remunerated despite the business making lots of profit and hoped "with an increase in salary my livelihood might be better"

"The aspirations for our livelihoods are higher and we are still stiffing to achieve them so we can only say its average" (Respondent 11, August 2018).

Self-assessment

Majority of the respondents; 70% gave the overall of self-assessment as good while 15% said it was very good. They gave examples for this high rating as the enterprises have helped them have a comfortable life. Some said that they would opt for running their businesses any day as compared to being employed.

"We have managed to open two more branches and hope to open more in the future" (Respondent 68, August 2018).

The 15% that rated the performance as average gave examples of at times struggling to reach their expectations and the goals they had while starting due to business climate being not very accommodating.

"The business is not quite where I wanted it to be there is a goal, I have of seeing it grow more than what it is now" (Respondent 27, August 2018).

In summary, the various elements of success were assessed and livelihoods seemed to have the highest frequency of respondents that said their success was good or very good while

employment seemed to be the lowest with majority indicated this measure was average for their enterprises.

4.6. Independence Chi-square tests and Pearson correlation Tests

Statistical tests of Chi-square and Pearson correlation were carried out in this study. The chi-square statistic is used to evaluate the tests of independence of the variables used in the study by doing bi-variate analysis through cross-tabulation (Kothari, 2004). On the other hand, the Pearson correlation tests are used to indicate the extent to which the variables are linearly related.

4.6.1. Financial Knowledge, skill and behavior harnessing the use of digital payments; Lipa Na Mpesa

The main research question in this study is on the role of financial capabilities in harnessing the use of digital payment- Lipa Na Mpesa and if this results to enterprise success. The cross-tabulation was done for the financial capabilities of knowledge, skills, and behavior with the level of use of the financial product; Lipa Na Mpesa. This was in a bit to find out if there is the independence of the means of these measures in relation to digital payments and whether there is a correlation. This, therefore, indicated if the knowledge, skill, and behavior harness the use of Lipa Na Mpesa

The results are summarized in table 4.1 below.

Table 4.1: Cross tabulation financial knowledge, skills and behavior with the level of use of Lipa Na Mpesa

Capability	Knowledge		Skills		Behavior	
Variables	Chi- Square p	Pearson R	Chi- Square P	Pearson R	Chi-Square P	Pearson R
Receipts	0.950	0.970	0 .005	0.966	0.210	0.043
Use for payments	0.155	0.040	0.431	0.301	0.460	0.982
Use for Savings	0.410	0 .001	0.030	0 .054	0.880	0.083
Bank loan access	0.221	0.0160	0.219	0 .000	0.030	0.006
Digital loan access	0.070	0.0026	0.412	0 .367	0.005	0.022

Source: (Field survey data, 2018)

A cross-tabulation of knowledge and variables measuring the level of use of Lipa Na Mpesa showed the relationship between the two may not be significant since the chi-square test indicated all the P values being greater than 0.05. This is to mean there is the independence of the means of these measures. The Pearson R correlation, however, shows that there is a significant correlation for all the variables apart from the level of use for receipts which shows there is no significant relationship with the R-value of 0.955>0.05.

Skills and the level of use of Lipa Na Mpesa cross tabulation showed that there is a significance in the Chi-square test with receipts and savings level of use while the other variables show there no dependence. The Person R for the skills and level of use of Lipa Na Mpesa showed that the correlation that existed was in the use to make savings at R-value of 0.054 and access to bank loan at 0.0001 Significance level.

As for behavior and the level of use of Lipa Na Mpesa cross tabulation, the results for the Chi-square tests showed that there was significance in the independence with the bank loan and digital loan access as the P values for both were all less than 0.05. There was a very high correlation z' of behavior with the variables measuring the level of use of Lipa Na Mpesa all being less than 0.05 apart from use for making payments, which showed no significant correlation at the R of 0.982>0.05.

The statistical cross tabulation carried out for use for access to digital loans indicated mixed results. While the chi-square test for of the digital loans access with knowledge and skills showed no significance in independence, behavior showed significance. The R-value showed a correlation of behavior with use to access digital loans for knowledge and behavior but skills showed no correlation[1].

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[1] R =0.022s of level of **Success** with: **Type** of business; Chi-Square Tests; P= 0. 421 Symmetric Measures; Pearson's R=0.773c. **Income** per year; Chi-Square Tests; P= 0.524 Symmetric Measures; Pearson's R=0.364c. **Number of employees**; Chi-Square Tests; P= 0.065 Symmetric Measures; Pearson's R=0.004c. **Assets Value and Success**; Chi-Square Tests; P= 0.224 Symmetric Measures; Pearson's R=.012c.

To summarize; There seems to be a great role in the financial capabilities in harnessing the overall level of use of the financial product; Lipa Na Mpesa showing independence between the variables with use of the product. On the other hand, it showed that skills and behavior have a significance at 90% confidence level while only knowledge was not significant.

4.6.2. Financial capabilities and success of the enterprise

This section sought to find out the independence and correlation relationships between the independent variables; financial capabilities, and the dependent variable; success. The figure 4.2 below gives this summary

Table 4.2: Cross tabulation financial capabilities with enterprise success

	Success	
Financial Capability	Chi-Square P	Pearson's R
Financial Knowledge	0.639	0.040
Financial Skills	0.622	0.003
Financial Behavior	0.070	0.000
Financial Product (Lipa Na Mpesa)	0.033	0.054

Source: (Field survey data, 2018)

Cross-tabulation results above are used where statistical testing of independence of the variables was done by use of Chi-square. The results as shown showed that there was no significant dependence on the variables of financial knowledge, financial skills, and financial behavior but there was as significant in the financial product at a P value of 0.033. This agrees with the

literature that the success can be explained by adoption and use of a financial product by (Trombetta et al., 2017).

The correlation testing was done by use of Pearson correlation analysis of the four measures of financial capabilities with success showed significance for all of them with a confidence level of 0.05 for all of the measures. These results agree with the literature that there is a positive correlation for financial capabilities measures with success (Sheen, 2010.; Sherraden, 2013; Sherrard Sherraden, 2010)

Additionally, the cross tabulation and analysis looked at whether there was any statistically significant effect of the variables; type, number of employees and assets of the enterprise. The type of business and income per year Chi-square tests showed independence from the success of the business and the correlation showed a weak significance of the relationship. The business types surveyed were clustered together and were carrying out almost common business activities of the sale of spare parts in Kirinyaga road and Electricals in Nyamakima. The theory of industrial cluster states that that enterprise collocation enhances industrial synergies that lead to the growth of enterprises and eventually development of industries (Madsen & Valdemar, 2012).

The number of employee's statistical test Chi-square indicates significant dependence at 94.5% confidence level while the correlation shows a very strong correlation between the number of employees and the success of the enterprise. There is no dependence of the variable s of success with total assets value while the correlation statistical tests indicate a strong correlation between the two. These results concur with literature that the value of business is determined by the assets dependent on its capitalization and this is both in terms of both physical and human capital (Madsen, Smith, & Dilling-Hansen, 2010) There is a major boost in an enterprise success due to the diversity of innovation from the workforce which facilitates growth.

4.7. Regression analysis results

The third specific research question in this study was seeking to find out the relationship between financial capabilities and enterprise success. To achieve this, a multiple linear regression analysis was used. The results are shown in table 4.3 below.

Table 4.3: Results of regression analysis on financial capabilities and enterprise success.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.438[a]	.192	.155	.35766

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.673	4	.668	5.224	.001[b]
	Residual	11.257	88	.128		
	Total	13.930	92			

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.619	.513		3.156	.002
	Financial Knowledge	.059	.106	.072	.559	.578
	Financial Skills	.047	.117	.056	.401	.690
	Financial Behavior	.354	.107	.352	3.312	.001
	Financial Product - Lipa Na Mpesa	.102	.079	.125	1.284	.202

a. Dependent Variable: Enterprise Success

b. Predictors: (Constant), Financial Product - Lipa Na Mpesa, Financial Knowledge, Financial Behavior, Financial Skills.

Source: (Field survey data, 2018)

This regression was done in order to establish whether four independent variables; financial knowledge, financial skills, financial behavior and use of a financial product Lipa Na Mpesa, have any effect on the enterprise success and if the effect is significant to the success of the enterprise in Starehe constituency. The results also help in establishing which of the four

measures of financial capabilities had the greatest significance to enterprise success. Additionally, the results are of importance in designing a regression model which is helpful in the prediction of key outcomes ("Measuring financial capability: an exploratory study," 2005).

The indication from the above results was that financial behavior was the only financial capabilities indicator that had a significance to enterprise success with a confidence level of 95 percent, the P value was 0.001 which is <0.005. The B coefficient was positive for all the variables indicating that they all have a positive relationship with on the enterprise success. This agrees with the literature that financial capabilities have a positive relationship with success (Sheen, 2012).

The results gaave the below regression model.

Enterprise Success $=1.619+0.059X_1+0.047X_2+0.354X_3+0.102X_4$

Where; the dependent variable is Enterprise Success, Constant is 1.619

X_1= Financial Knowledge

X_2= Financial Skills

X_3=Financial Behavior

X_4= Financial Product - Lipa Na Mpesa

4.7.1. Discussion of the regression analysis

The purpose of this study was to identify the role of financial capabilities in harnessing the use of digital payments Lipa Na Mpesa for the success of Micro and small enterprises in Starehe Constituency Nairobi County. Majorly the implications of this findings concur with those in a study done in Thailand which indicted that entrepreneurs that have capabilities are able to get a better understanding in addressing the factors that significantly affect their business success. This further helps in supporting business growth and continuity thereby helping to support economic development within a country (Chittithaworn, Islam, Keawchana, & Yusuf, 2011).

The results established that financial behavior affected the success of the enterprise to a very great extent. The this concurs with the literature that financial behavior has a great effect on the

financial wellbeing (TNS-BMRB, 2015). This outcome coincides with Rebound & Mazzarol, (2008) that the MSEs decision-making process normally involves more complex strategic behavior.

It is important to note that the R square is 19.2 meaning the financial capabilities analyzed only explain the success of the enterprises at 19.2 percent and this is a weak relationship. This, therefore, implies they there must be other factors that explain enterprise success. The equation model is significant at a confidence level of 99% from the ANOVA output and can, therefore, be used to explain the relationship between financial capabilities and enterprise success. This finding is consistent with the results of (Baidoo et al., 2018; Bowen, 2009) about the attainment of success in the adoption and use of financial products in combination with literacy and appropriate behavior.

4.8. Hypothesis testing

The study had hypothesized that financial capabilities do not lead to enterprise success. The regression test at a 95% confidence level, the Sum of Squares, Degree of Freedom and Mean Square gave a P value of 0.001<0.05. This means the difference between the means of financial capabilities and enterprise success is significant. Therefore, the study rejects the Null Hypothesis: H_0- Financial capabilities do not lead to enterprise success and fails to reject the alternative hypothesis: H_1-Financial capabilities lead to enterprise success.

CHAPTER FIVE : SUMMARY, CONCLUSION AND RECOMMENDATIONS.

5.1. Introduction

The previous chapter presented the findings and discussions of the research and showed how the study results are anchored into the existing literature and theories. This chapter gives the summary of the study and conclusion. Moreover, there are recommendations for further research, a highlight of customer protection issues as well as recommendations for policymakers.

5.2. Summary

Generally, this study sought to look at the role of financial capabilities in harnessing the use of digital payments for the success of MSEs. This study was on the contextual background of MSEs being key engines for growth, creating employment, contribution to GDP, aiding industrial development and being key drivers of innovation (World Bank, 2016). The 2016 data indicates that this sector accounted for 45% percent of the establishments and 85 % of employment (KNBS, 2016). Despite their great importance, the sector has experienced many challenges and one of them being the exclusion, both in terms of access and use of formal financial products.

This research is based on the framework of financial capability theory. This theory proposes on one hand that a person must have the ability to act based on his literacy; which entails knowledge and skills, as well as have the rightful behavior. On the other hand in addition to literacy and behavior, a person must have the opportunity to act based on the access and use of quality financial products suitable for them (Sherraden, 2013). Its anchored in the broader capabilities theory which indicated that the attainment of well-being is best understood by the real opportunities that people have to do what they value hence enhance their freedoms (Charlesworth et al., 2010). Financial capability is related to growth and well-being while lack of well-being leads to poor quality of life and eventually lack of realizing goals (Sheen, 2012).

Micro and Small enterprises require the set of financial capabilities; of financial literacy, financial behavior and financial products in order to achieve growth. The MSEs have been in the

past been excluded both in terms of access and use of a financial product and there has been developing efforts for the MSEs to get financial inclusion. While financial inclusion is about increasing the set of financial products options available, financial capability entrenches the fact that the effective use of these financial products results to well-being (Storchi & Johnson, 2016). There has been overwhelming attention given to the products of financing in literature and many studies have looked at access and use of credit. Payment products for MSEs, however, are not much explored. There had been a great problem of MSEs over-relying on use of cash for making and receiving payments which were unsafe, difficult in tracking, had impulse buying challenges etc. (Suri et al., 2010).

It is also worth noting that the financial product chosen for this study is Lipa Na Mpesa. This was driven by the fact that in its inception it was majorly designed for use in the MSEs to solve the problem of over-reliance on cash and it's a great innovative disruptive technology in Kenya (Lazzolino & Wasike, 2015). Literature shows that there is a great adoption of formal financial products including digital financial products in urban areas (King, 2015). Hence the choice of the study area to be Starehe constituency in Nairobi county which is in an urban setup. There has been a great level of adoption and use of this financial product by the MSEs in the study site selected of the Nyamakima electrical shops and Kirinyaga road auto spare shops clusters where this research took place.

Specifically, the study sought to answer the question: What were the elements of the financial capabilities of the owners/managers of the enterprises? What are the elements of enterprise success and finally what is the relationship between financial capabilities and enterprise success? To adequately answer these questions, this study adopted descriptive research design and used both qualitative and quantitative data. A total of 103 MSEs were sampled which was at least 30% of the population which was 344.

The study found out that overall, financial capability measure of financial behavior had the greatest significance to enterprise success. The behavior of timeliness in paying bills was exemplified from the qualitative data by paying for utilities, salaries, insurance, county council rates etc. The main reason for this was in time was the most felt obligated as they timely

payment ensured the smooth running of their businesses without interruptions. The other examples of desirable financial behavior from the qualitative data collected included investments in stocks, purchase of assets such as land and movable assets such as vehicles. Most of the entrepreneurs were very keen to compare prices before purchasing while some indicated it not to be a priority because some items had high brand value and customers still bought despite their high price. The financial behavior of minimizing cost and maximizing income was seen as high in most enterprises and the respondents asserted that is one of the major ways, they are able to keep their enterprises profitable.

The measures of the capability of financial knowledge, financial skills, and financial behavior had a significant correlation with the level of use of the digital financial service of Lipa Na Mpesa. From the qualitative data collected, the level of use of the digital financial service of Lipa Na Mpesa cascaded from just receiving payments to making payments, savings, access to bank loans and digital loans. However, the use to build a profile in order to access digital loans seemed slightly low with the majority indicating that they didn't mostly use the digital loans for running the enterprise but for personal loans. Access to loans offered by the banks seemed low and from the qualitative data given, most of the enterprises were preferring trade credit and ploughing back profits into their businesses and those who could access did so only when need be. The money received through Lipa Na Mpesa was also helpful in assisting the entrepreneurs to be able to save as majority said that the money went directly to the bank. Additionally, this helped the enterprises build up a profile of their bank accounts as active and this was advantageous for them when it came to accessing bank credit.

Additionally, the findings were that there was a significant relationship between financial capabilities and enterprise success at a confidence level of 95%. This, therefore, meant the study failed to reject the alternative hypothesis and rejected the null hypothesis. It was noted that the definition of enterprise success meant different things to different respondents. Some of the examples of success given by the respondents were opening of new branches for the business, being able to meet family financial needed and growth in terms of customer base. Some indicated they were successful since they started as retailers and the growth has been to wholesalers, direct importers, manufacturers agents, suppliers to corporates and governments.

The regression model was developed and the Analysis of Variance showed that the model was significant. However, the model indicated a weak relationship between financial capabilities and enterprise success; with the model having financial capabilities explain enterprise Success at just 19.2 percent. This meant that there were other factors that affected enterprise success apart from financial capabilities.

This level of detail for MSEs financial capabilities has not been done before. This study has contributed to the body of knowledge by showing that financial capabilities harness the use of innovative financial products. Most of the studies on financial capabilities have focused on financial literacy and behavior with no product and there was a keen interest in this study, for digital finance products of payment. The studies explored digital financial products have not focused on the financial digital payment products for MSEs but on financial products of credit and this study sought to fill that gap. The few that had done digital financial products had focused on the supply side and this study attempted to fill the gap in literature from the demand side perspective on how consumers respond in terms of the level of use of the digital financial product.

5.3. Conclusions

In this study the elements of financial capability that the owners/ manages of MSEs have are financial knowledge, financial skills, and desirable financial behavior. In addition to these, there is the adoption and use of the Lipa Na Mpesa financial payment product. This study pointed to the role of financial knowledge skills and behavior in harnessing the use of this digital financial product. The findings conclude that the level of use of digital payment is positively significantly correlated with the financial knowledge skills and behavior. The level of use of the digital finance was notably high in receiving payments and in making savings. However there seemed not to be high use for digital loans and access to bank loans and from this, the study concludes that use of the product in one way like receipts does not automatically make entrepreneurs take up the other financial products that are interlinked, for example, Mshwari loans. However, all these elements of financial capabilities have to work in together for a person to be termed as having financial capability.

The study also concludes that enterprise success is perceived differently by different people and that for the success of an enterprise to happen, there are many factors that affect it. The focus of this study showed that of the four measures of financial capability, financial behavior had the greatest influence on the enterprise success. Further, the regression model suggested that the financial capability only explained the enterprise success at 19.2 percent and this is a weak relationship. Therefore, this study can tentatively conclude that there are other factors that affect enterprise success apart from financial capability.

5.4. Recommendations

This study, based on the theoretical underpinning, empirical findings, and survey results, has the following key recommendations on future research. It is appreciated in this study that there was so much constraint of time and it was not possible to do case studies of the unique cases and thought-provoking stories that emerged from the field survey. The study recommends further studies to be done to find out why so many enterprises that had graduates working as entrepreneurs as opposed to being in formal employment. It is noteworthy that the graduates were the ones that displayed the pattern of high levels of financial capability.

More studies should be done on the use of digital financial products for MSEs because this is the current frontier of technological development. Suggested are comparative studies of users and none users to find out the pathways and missing links in adoption and use. There should be research on the sustainability of innovative digital products because from qualitative data of this study it has emerged that most entrepreneurs have high adoption rate but the level of use even when the product has been adopted might still not be at optimum.

The pathway of attaining enterprise success still remains grey. There still hasn't been enough clarity of what this exactly entails since each business has its own unique combination of critical success factors. There should, however, be a consensus that some factors are of crucial importance for micro and small businesses and these factors should be made crystal clear in the literature. As part of the success factor, the level of financial capability critical for MSEs entrepreneurs is yet to be established and a recommendation is for further research to get this matrix of the right financial capability measures.

There emerged issues of consumer protection as some of the respondents felt there were hidden costs that the digital payments services make them incur with or without their knowledge. Some felt that the costs are too high and they go to an extent of even discouraging their customers from paying using the service or at times even "lie it's out of order" so that the payments can be made in cash. The results of financial inclusion should result in the MSEs who were previously financially excluded in terms of payments, to use more formal financial services rather than the already existing informal options. There should be a proper clarification on all the costs implication to all the parties for both the buyers and the sellers so that a person can make an informed decision when using the product.

Some of the shops were identified at the mapping stage as having the Lipa Na Mpesa till number and blotted it out and they said they had really been frustrated and that was why they were no longer using it. This sentiment can continue and cause a retrogression in the gains already made in the digital financial inclusion for MSEs in terms of payments. The respondents said the service provider mostly delay in responding to their queries if they have challenges and that they do not often see customer service representatives coming to their enterprises to find out what their challenges were. The recommendation here is on customer service from the providers to eventually ensure their products are meeting the needs of their customers and are affordable.

For the policy-makers and the stakeholders of the MSEs sector, this study has revealed that there exists a positive relationship of financial capability and enterprise success. It is recommended that the aspects of financial capabilities be enhanced through awareness creation and capacity building. This will enhance the financial capability which is a road to financial inclusion and is theoretically linked to outcomes of increased performance, productivity, and employment. This will lead to the increased success of the MSEs which play a very critical role in the Kenyan Economy. Eventually, the impacts will be economic growth, development and ultimately poverty reduction.

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APPENDICES

4.4.6. Appendix 1: Survey Questionnaire

Good day. My name is Grace Muraya, a Masters of Development (MDEV) student at the Institute for Development Studies (IDS) of the University of Nairobi. I am undertaking my research project on the *role of financial capabilities in harnessing digital mobile payments; Lipa Na Mpesa for Mses Success*. Your enterprise has been selected for the survey. I am kindly requesting for 30 minutes of your time to answer some questions on this subject. All the information you volunteer to give me will be treated with utmost confidentiality and is going to be utilized purely for academic purpose. The findings of the study will be used in an MDEV project and published in an academic journal. Your valued time and cooperation are highly appreciated in advance.

A. BIOGRAPHICAL DATA OF THE RESPONDENT

1a)	Name of the respondent	
b)	Job Designation	
c)	Years in the enterprise	
d)	Gender (Observe)	☐ 1. Male ☐ 2. Female
e)	Date of the interview	
f)	Contact (Optional)	
g)	The highest level of education	☐ No education ☐ Primary ☐ Secondary ☐ Diploma ☐ University Degree ☐ Other; name………………………………………

B. INFORMATION ABOUT THE ENTERPRISE

2.a)	Name of the enterprise	
b)	Year of establishment	
c)	Current location	

d)	Type of business: (Multiple answers allowed)	☐ Retail ☐ Wholesale ☐ Sole-Proprietorship ☐ Partnership ☐ Limited company Specify types of goods/services sold……………… ………………………………………………………

e) Kindly indicate where applicable

Number of Employees	Total income per year	Total assets value
☐ 1-9	☐ Below 500,000	☐ Below 5,000,000
☐ 10-49	☐ 500,000-5,000,000	☐ 5,000,000-25,000,000
☐ 50-99	☐ Above 5,000,000	☐ Above 25,000,000
☐ 100 and Above		

C. FINANCIAL CAPABILITIES

C (i) Financial Literacy

Financial knowledge

I am going to ask you questions about what you know in some aspects few aspects.

3a)	**Education**	How would you rate the extent to which your education been useful in helping you run your Enterprise? Very poor — Poor — Average — Good — Very Good
b)	**Planning**	How would you rate your planning knowledge? (In other words; to what extent do you know about preparing for business activities you undertake?) Very poor — Poor — Average — Good — Very Good

c)	**Risk Identification**	What is your capacity to identify the risks that your enterprise faces? (In other words what is your knowledge of the dangers that your enterprise is exposed to? Very poor — Poor — Average — Good — Very Good
d)	**Contracts**	How would you rate yourself in terms of having written down signed agreements in the activities you engage your enterprise in? Very poor — Poor — Average — Good — Very Good
e)	**Cash flow Management**	How do you categorize yourself in terms of how you manage the cash that comes into the enterprise and the cash that goes out? Very poor — Poor — Average — Good — Very Good
f)	Please give **an example** of your financial **knowledge** …………………………............ …………………………………………………………………………………………... …………………………………………………………………………………………...	

Financial Skills

I am going to ask you questions about the experience you have in how you run the enterprise

4a)	**Business plan**	How would you rate your experience in writing down how the business shall be run? Very poor — Poor — Average — Good — Very Good
b)	**Budgets**	How would you judge your experience in writing the financial forecasts for the enterprise? Very poor — Poor — Average — Good — Very Good
c)	**Standards adherence**	How would you rate your skill in adherence to standards that have been established for running enterprises? In other words; Business requirements by government Very poor — Poor — Average — Good — Very Good

d)	**Credit management**	How would you judge yourself in terms of the way you manage your borrowing? Very poor — Poor — Average — Good — Very Good
e)	**Coping with emergencies**	How do you categorize yourself in terms of coping with unexpected outcomes? Very poor — Poor — Average — Good — Very Good
f)	Please give **an example** of your financial **skills** ……………………………………...................... …….. ……..

C (ii) Financial Behavior

I am going to ask you questions about what you do in terms of management of finances. People manage their money in different ways so there are no right or wrong answers

5a)	**Investment**	How would you categorize your conduct towards re-investment of the proceeds you get from your enterprise? Very poor — Poor — Average — Good — Very Good
b)	**Savings management**	How would you rate actions of doing both short-term and long-term savings? Very poor — Poor — Average — Good — Very Good
c)	**Tracking income**	What is your level of minimizing costs and maximizing profits? Very poor — Poor — Average — Good — Very Good
d)	**Timeliness**	How would you judge yourself in terms of the way pay your bills in time? Very poor — Poor — Average — Good — Very Good

e)	**Comparing prices**	How would you rate yourself in terms of window shopping before you settle on a purchasing from a specific place? Very poor — Poor — Average — Good — Very Good
f)	Please give **an example** of your financial **behavior**………………………........................ ……………………………………………………………………………………... ……………………………………………………………………………………...

C (iii) Financial Product: Level of use of digital payments; Lipa Na Mpesa

I am going to ask you questions about your use of Lipa Na Mpesa.

6a)	**Receipts**	How would you categorize the level of payments made using Lipa Na Mpesa? Very poor — Poor — Average — Good — Very Good
b)	**Payments**	How would you rate your extent of use of the money received by Lipa Na Mpesa to make payments? In other words, what is the level of use of that money to directly make other forms of payments? Very poor — Poor — Average — Good — Very Good
c)	**Savings**	What is your degree of saving the money you receive through Lipan a Mpesa either to the bank or mobile savings account? Very poor — Poor — Average — Good — Very Good
d)	**Bank Loans**	How would you categorize your access to the loans offered by the bank? Very poor — Poor — Average — Good — Very Good
e)	**Digital loans**	How would you categorize your access to the loans offered through mobile money? Very poor — Poor — Average — Good — Very Good

f)	Please give **an example** on your use of Lipa Na Mpesa …………………….......................	
	……………………………………………………………………………………………..	
	……………………………………………………………………………………………..	

D. SUCCESS OF MSES

I am now going to ask you a few questions on the performance of your enterprise

7a)	**Sales volumes**	How would you rate your sales volumes? Very poor — Poor — Average — Good — Very Good
b)	**Profits**	How would you judge your enterprise profitability? Very poor — Poor — Average — Good — Very Good
c)	**Employment**	What is your degree of increase in employment in your enterprise? Very poor — Poor — Average — Good — Very Good
d)	**Livelihoods**	How much has been the improvement of your livelihood? In other words, securing your necessities of life Very poor — Poor — Average — Good — Very Good
e)	**Self-assessment**	How would you categorize your enterprise success? Very poor — Poor — Average — Good — Very Good
f)		Please give **an example** of your **enterprise success** ……………………....................... …………………………………………………………………………………………….. ……………………………………………………………………………………………..

We have come to the end of this interview. Thank you very much for your valued time and cooperation!