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DONE BY

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DEDICATION

This research project is dedicated to my family and the Almighty God.
ABSTRACT

The study was concerned with information and communication technology (ICT) and the performance of microfinance institutions, a survey of Harare Central Business District (CBD). The purpose of the research was to identify different barriers encountered by MFIs in adopting and implementing ICT, the effectiveness and the impact which information and technology has on microfinance institutions so that recommendations can be made to entrepreneurs on the effective approaches and strategies of adopting and utilizing ICTs in improving their economic decisions to safeguard subsequent business survival. A descriptive research survey was adopted in order to make use of both qualitative and quantitative methods of data collection. Research instruments which were used were observation, questionnaires and interviews. Questionnaires were distributed and interviews conducted to a sample of 26 respondents from the chosen four microfinances located in the Harare CBD. The study found out that monetary costs, limited resources, uncertainty of returns, disruption concerns and management support are the major barriers to the adoption and implementation of ICT in microfinance institutions. It was also discovered through respondents’ responses that there are more positive impacts to the adoption of ICT as compared to negative ones basically in the sense that ICT adoption (if properly handled), increases efficiency and effectiveness in an organisation. ICT adoption upholds firm-client interaction through various communication platforms, enhances firm’s quick response to client queries and needs, improves services quality and delivery. The study recommended that MFIs make efforts to adopt ICT by all means as the advantages of adopting it have more benefits as compared to the disadvantages. Recommendations were also made in line with how microfinances can go about the barriers to adoption of ICT.
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CHAPTER ONE

INTRODUCTION

1.0 Introduction
Microfinance is the provision of financial services to Non-Governmental Organisations, cooperatives, low income earners or solidarity lending groups including consumers and the self-employed who traditionally lack access to banking and related facilities, (Assefa et al., 2013). During the last three decades, microfinance has captured the interest of both academics and policy makers. This is, among other things, due to the success and challenges being faced within the industry. Microfinance is an approach which has been recognized to empower poor people around the world to exterminate poverty or to at least improve people’s living standards.

To date, they have and are still playing a very big role in poverty eradication in Zimbabwe since the adoption of a multicurrency regime in 2009. In this chapter, the researcher will outline the background of the study, the statement of the problem, research objectives, research questions, significance of the study, assumptions, limitations, delimitations, definition of terms and also the summary of chapter.

1.1 Background of the study
Microfinance institutions are of paramount importance as they are critical to the development and growth of national economies. Rosenberg (2010), states that the reliability of MFIs makes it such that they become the first option for poor households to consider for their loan requirements. This distinct issue on ICT in Africa looks into whether ICTs can empower improved lives for people in Africa and, if so, how and in what ways. It is therefore of paramount importance to explore issues on ICT in Africa examining the role of ICT infrastructure and institutional quality in microfinance institutions to enable an increase in intra-African trade and Zimbabwe, in particular, mobile telephony and to enable information sharing. Another eye-catching issue on ICT in Africa is that the focus shifts to explore how ICT can be adopted and utilized to build better lives for the people in the African continent by microfinance institution. Increasingly, from a broader African broader view, innovations and
information communication and technology (ICT) are providing access to financial services for the benefit of people through mobile banking in developing markets. According to Grande, Estebanez and Colomina (2011) studies show that microfinances are the driving engine of economic growth, job creation and competitiveness both in the domestic and global markets. Since MFIs play a central role in the innovation and sustainable productivity of the nation and the world as a whole, in order to achieve their full potential in these areas, there is need for them to catch up with economic trends such as information and technology (IT) use and e-commerce.

Despite high potential of MFIs in contributing to socio-economic development, the sector continues to face a number of constraints that hinder them realising their full potential and growth. As purported to by Mpofu (2010) market access constraints continue to persist in Zimbabwe despite countless policy interventions. Olaf (2003), advocates that one way to promote microfinance institutions in Zimbabwe is by enhancing their use of ICT. In this 21st century, with endless innovations in technology and e-commerce, it has turned to be a prerequisite for the MFIs to exploit the potential of information and technology and adopt e-commerce for the betterment of institutions, the sector as a whole and the whole nation and obviously the effects being noticed at a global level at large. Ndiege, Herselman and Flowerday (2012), information and communication technology are being widely used by MFIs in African counties and on the global platform in order to achieve the benefits, increase market, profits, improved customer relations, increasing customers for the organisation, better firm or organisation’s corporate image, reduction of operational costs, eradicate poverty within the society just to mention a few.

Ruvinga and Zhou (2014), purported that currently in Zimbabwe in the majority of areas there is at least a common understanding that using information technologies has been vital to both local and broader markets as it saves selling and engagement costs in business. However, on the other hand a question which pops up is to what extent does this investment in specific technology for the economic-financial area is related to performance and productivity? Studies in developed have been done by a number or authors Dudle (2013), Hashim (2007) regarding the potential information technology contribution in general.

**1.2 Statement of the problem**

In Zimbabwe microfinances are facing slow and stunted growth, limited market access, loss of competitive advantage, increasing transaction costs and very high operational costs. It seems
as if MFIs are not getting the value of ICT in achieving superior business advantage. In Harare some microfinances tend to be slow in adopting exploiting IT as a means of enhancing their sustainability. The purpose of this study therefore was to investigate the impact of ICT on the performance of microfinance institutions in Harare CBD. Recommendations will made to entrepreneurs on the effective strategies of adopting and utilising ICT in their economic decisions to ensure subsequent business survival, profitability and sustainability. It is against this background that this study seeks to determine the impacts of ICT on microfinances’ performance.

1.3 Objectives of the study
   i. Determine the effectiveness of ICT on microfinance performance.
   ii. Establish the major barriers to ICT adoption in microfinances.
   iii. Determine the impact of ICT on the performance of microfinances.
   iv. Make recommendations and suggestions to help in improving MFIs performance by strengthening ICT roles.

1.4 Research Questions
   i. How effective is ICT on microfinance performance?
   ii. What are the major barriers to ICT adoption in microfinance institutions?
   iii. What is the impact of ICT on the performance of microfinances?
   iv. What recommendations and suggestions help in improving MFIs performance by strengthening ICT roles?

1.5 Assumptions of the study

The assumption of this study will be as follows;

i. The problem that prompted the study will still be in place during the study.
ii. The information that will be collected from primary and secondary data sources will be authentic and accurate.
iii. The respondents will be able to give accurate and honest answers to research instruments.
iv. The sample will be a true representative of the whole population.
v. The researcher will be granted consent to access all the relevant primary and secondary data by the relevant authorities.
1.6 Significance of the study

The contribution of this study to literature will be double-fold. Understanding how MFIs learn to use and adopt IT will fill a knowledge gap in the IT adoption model by providing insights on the link between IT illiteracy and IT adoption and help providers of training programs to develop IT related training that will enable microfinances to quickly learn, adopt IT and use it to the firms’ advantage both in the short and long run.

Denscombe (2002), purports that the relevance of a research in terms of contributing to existing knowledge, solving practical needs and being of relevance to current issues. This study aims at looking into the challenges faced by microfinance institutions in Harare. Adjustments needed in order to curb the stated challenges by microfinances will also be pointed out.

➢ To the organisation

Outcomes derived from this study are anticipated to result in improvements in MFIs operations and management. This research furthermore intends to give thorough recommendations regarding microfinances adoption and use of ICT to improve firms’ self-sustainability of their operations built on lucrativeness, effectiveness and portfolio quality. It will also help the organisation on how best it can handle and manage its credit facilities through the use of IT and e-commerce.

➢ To Bindura University of Science Education

The University can use the research as an academic resource for literature review on topics relating to the impacts of ICT on the performance of microfinance institutions in Harare by future student researchers.

➢ To the researcher

This study is of paramount importance as it is undertaken in partial fulfilment to the requirements of the Bachelor of commerce (honours) degree in Financial Intelligence offered at Bindura University. After carrying out this research, the researcher will acquire experience on carrying out a comprehensive research henceforth serving as a virtuous and concrete foundation for future work. The researcher will further benefit from the amplified knowledge which will be used for other further academic studies as literature review.
➢ To general public and nation

To the standard makers like Zimbabwe Association of Micro Finance Institutes (ZAMFI) and commercial banks, they could find a way to modernise their standards taking into account IT innovations being developed so that they can be exercised on the broader platform and benefit the entire industry for the betterment of the whole nation.

1.7 Delimitations of the study

The study will restrict the researcher to focus on the impacts of Information and Communication Technology on the performance of microfinance institutions in Harare. Much focus will only be restricted to a few microfinances in Harare which are Nelhurst Trading (Pvt) Ltd, KCI Consultants and FMC Finance. Harare will be the only target sample as the representation of the whole population. The period of study will be from July 2017 to August 2018. This time period should be able to permit the researcher to collect sufficient and relevant information in line with the research topic.

1.8 Limitations

The study may face various limitations these include;

i. Limited access to information: Access to paramount information like facts, figures and evidence which is regarded to be private and confidential might be partially disclosed or not disclosed at all to the researcher. In this respect the researcher had to depend on reports availed by the organisation and secondary data such as newspapers and journals. This therefore means that the researcher might not be availed with all the required information due to sensitivity and discretion which vary from organisation to organisation.

ii. Fear of being exposed: Access to relevant information was a stumbling block since some department managers felt exposed as a result of this study so there was resistance in releasing information which was deemed sensitive.

iii. Incorrect information by correspondents: Some respondents might give incorrect information; the researcher will therefore have to compare the information from different sources. For instance, information from the management to be compared with the one acquired from shareholders, ordinary workers and see if there is any
familiarity, if there are similarities or any close relationship one was justified for concluding that there is some sort of correctness.

1.9 Definition of Terms

Conferring to Dominowski R.L (1980), “Every researcher is mandated to clearly define research terms to avoid readers from deducing different meanings from the terms used in the research since this results in misinterpretation of the context.” In this study, most used terms will be defined below;

**CBD:** Central Business District

**Central Bank/ RBZ:** The Reserve Bank of Zimbabwe.

**Control environment:** INTOSAI (2004), This refers to the attitude towards internal control and control consciousness reputable and upheld by the management and employees of any given organisation.

**Economy:** The financial status of a country.

**Financial Institutions:** Banks, money lenders and government administered schemes for provisions of funds to SMEs

**ICT:** Information Communication and Technology

**Internal check:** This refers to the prearranged measures to be followed which are designed to reduce errors, theft, or fraud. Millichamp (1993).

**Internal control systems:** As attributed to by Millichamp (1993) this is the blending of the plans, procedures, activities and their applications by the personnel of any given organisation working hand in hand to provide impartial reassurance that the organisation will achieve its goals and objectives.

**IT:** Information and Technology

**Management:** It is a progression by which all the resources within organization that is to say (human, physical, financial, and informational) are applied to achieve intents and objectives of the organization. The actions involved are planning, leading, organizing and control. Cole (2004)
**Microfinance:** Alemayehu (2010), defines microfinance as “a provision of financial services to low income earners or solidarity lending groups including consumers and the self-employed, who traditionally lack access to banking and related facilities”

**Researcher:** means the owner of this research study.

**SMEs:** Small and Medium Enterprises

**University:** Bindura University of Science Education.

**ZAMFI:** Zimbabwe Association of Micro Finance Institutions.

**1.10 Summary**

This chapter provided the problem and its setting. In doing so, the chapter focused and discussed on the background of the study, statement of problem, the research objectives as well as the research questions to be used. Lastly, the chapter highlighted the significance and assumptions of the research together with the delimitations and the limitations to the study. This was followed by the definition of key terms in the chapter and finally capped by the chapter summary.

Chapter 2 discuses related literature review, chapter 3 deals with the methodology whilst chapter 4 presents, analyses, interprets and discusses data. Lastly, chapter 5 the overall summary of the research, conclusions and research recommendations.
CHAPTER 2

LITERATURE REVIEW

2.0 Introduction
This chapter seeks to explore into the secondary data or literature that was put forward by different previous researchers and their substantive findings related to the subject matter in line with the impacts of ICT on the performance of MFIs. Borg and Gall, (1983), advocate that, literature review is a procedure that involves locating, reading and assessing reports of research, reports of casual observations and opinions that are related to the individuals’ research project. In this study, the researcher will be guided by the research questions and objectives to review and debrief literature. Literature review further enables the researcher to pinpoint the knowledge gap from previous researches that the study attempts to address and setting the study in the context of previous research. More so, it provides critical evaluation of supporting theories or theoretical analysis. Theoretical links of relevant studies are also given in this chapter then it winds up with research gap identified that would assist in the analysis of the study findings.

2.1 Conceptual framework
A theory is a fact-based framework for describing a phenomenon and it is based upon a hypothesis and backed evidence. It also presents a concept or idea that is testable. According to Saunders (2007), theoretical framework becomes handy in research when one has to plan probable courses of action or to present a preferred approach to an idea or thought. He further states that conceptual framework is a type of an in-between theory that attempts to inter-link all aspects of inquiry for instance problem definition, purpose, literature review, methodology, data collection and analysis.

2.1.1 Concept of ICT
ICT basically it is technology that supports activities involving information. Such activities include gathering, processing, storing and presenting data. Increasingly these activities also involve collaboration and communication. Hence IT has become ICT (information and communication technology).
2.1.1.1 Effectiveness of ICT

- Using ICT to support creativity is commonly found in small, democratic, high value economies focused on smartening up. Conversely economies that are large and low value (focused on minimising costs including labour costs) tend to be focused on using ICT to support productivity hence ICT has made creativity and productivity so effecting and successful resulting in more profit returns for the firm.

- Components of integrated arrangements of devices, tools, services and practices that enable information to be collected, processed, stored and shared with others benefit the MFIs in their operations and service delivery resulting in effective business operations and enhances the organization’s ability to meet targets.

- A collection of tools and devices used for particular tasks makes work easier and saves time. For instance, publishing, course delivery, transaction processing is made quicker and easier e.g. through online advertising and mobile money transfers.

2.1.1.2 Barriers to adoption of ICT

For a “business to survive and thrive in a competitive market, it is crucial to constantly innovate and improve. Bringing in new business technology is a vital part of this process. Without regularly investing in technology that underpins both progress and performance, businesses run the risk of lagging helplessly behind the competition.

However, bringing in new technology into the business is strewn with challenges. When you are in the process of identifying or adopting new solutions, you are likely to encounter several of the barriers listed below;

**Sceptics in the ranks**

There will always be advocates of the status quo and making the best of what is already in place. The cultural undercurrent of “This is how we do things” can be a very tough challenge to overcome. But in most cases, this resistance to the new order is based in a limited understanding of how a potential change can benefit the business.

**Solution to barrier:**

By quantifying improvements to efficiency or revenue, you will be able to link the technology back to the key objectives of the business. It’s important to get the user base comfortable with
the technology, introducing it to them early and helping them understand how it makes their roles more efficient.

**Integration issues**

Any new technology brought into the business needs to be evaluated from the perspective of existing processes and legacy technology that may be impacted. Dealing with integration as an afterthought can become very expensive.

**Solution to barrier:** Review your current technology map and consider how this is likely to develop in the future. Are you looking to phase out any existing platforms? Will you make changes to functions in the business, impacting how applications are used? Make sure all of these views are captured when assessing the compatibility of a new solution.

**Budget allocation**

Releasing funds for investing in technology is one of the biggest challenges for IT leaders. Budget holders are faced with the task of identifying the most beneficial allocation of money at any given time, constantly evaluating which investments will provide the best returns in the short as well as the long term.

**Solution to barrier:** The best way to approach negotiations is to centre the conversation on the long-term corporate strategy and how the particular solution will support it. Ensure that any proposed spend is securely anchored in the overall vision for the business.

**Validation of investment**

Another major hurdle is convincing senior management that the technology is needed. Many IT professionals feel uncomfortable when it comes to justifying decisions to executives and line of business.

**Solution:** Although this may always be a difficult process, it can be made easier by preparing with plenty of examples of proof of value and a clear outline of projected benefits to the business. Once the technology is in place, it’s key to get a few quick wins documented and shared. This will help to boost confidence in the solution across the business.
Disruption concerns

Planning and scheduling an implementation of business technology is always likely to be a challenge. Line of business, management as well as clients may express concerns around how the project might affect them.

Solution to barrier: Everyone needs to be aware that there may never be such a thing as “the perfect time”, and there could always be a risk of potential disruption to the business. It’s just a case of making that disruption as small and as brief as possible. It could be necessary to trade off one disruption against another, for example considering whether to risk losing custom, upsetting existing clients or incurring additional work for staff.

Training

Providing training is another area which tends to be an afterthought for many organisations when deploying new technology.

Solution to barrier: The complexity of a solution should be assessed very early on in the process, to determine how users should be introduced to it. The costs and time necessary for training should be rolled into the budget and deployment plan, taking into consideration the need for customising training to various learning types, to get the best possible value from it.

Limited resources

The business needs to be fully aware of the requirements for not only implementing new technology but for managing it going forward.

Solution to barrier: There needs to be enough staff, with the right qualifications and with enough time available to dedicate to managing, supporting and updating the technology. This is critical to the long-term success of any IT project. Even though purchasing a platform or a set of licenses can be a major cost for a business, it’s never just one single investment point. To get optimal value from any solution, the business needs to continually invest time and effort to make it successful.
2.1.1.3 Impact of ICT on MFIs performance
The rise of information technology has paved the way for various innovations. With the digitization of information, more and more businesses are increasingly leveraging the benefits of digital tools to improve their prospects. Information technology has been crucial in turning this process into a complete success. These are divided into positive and negative impacts.

Positive impacts

✓ Working Remotely
Implementation of information technology provides the ability to remotely access your company’s network. As a result, it equips employees with the ability to get the work done even if they are not physically present at the workplace. Such agility has a number of benefits. Therefore, it has gained massive popularity.

✓ Mobile Technology
Mobile technology has picked up momentum owing to its convenience, efficiency and speed. With the rise in the popularity of information technology, implementation of mobile technology has gained ground quickly. Mobile technology takes business communication to a whole new level. A mobile team can improve the workplace productivity considerably. There are numerous ways to integrate mobile technology in the workplace.

✓ Protecting Information
Every organization has a mammoth database comprising various information related to business transactions, client details and so on. Such information is extremely valuable to a business and can cause a host of legal issues if it is lost. This is where information technology becomes relevant. It provides the right resources to store the information in a way that ensures maximum protection. Virtual storage systems can keep information safe by allowing a limited number of users to access these. Increased protection also ensures that these systems are not hacked and the information is not wiped out owing to some problems. Therefore, information technology helps in upholding business integrity.

✓ Providing Customer Satisfaction
Customer experience and satisfaction are crucial aspects of all businesses. The key to customer satisfaction is a strong customer support team and its availability to cater to the requirements of the customers. Information technology provides the best tools for communicating with customers and solving their problems in real time for example if clients complain about high interest rates or slow disbursement services, one can make
use of facilities like Email, social media and other messaging platforms for this purpose. A happy customer-base is important for the growth of a business. Various cloud-based communication channels have made customer experience more improved.

**Negative impacts**

Technology has also proven to have negative impacts on the performance of MFIs.

- **Employee Morale**
  Installing monitoring software in the workplace sends the message to employees that the company does not trust them, according to research done under the aegis of professor Howard Besser while teaching at New York University. In a Pew Research Study about the effect of the internet on their work, nearly half of the employees who responded said their employers block their access to some websites. This was an increase over when the survey was conducted in previous years. Yet, the employees felt internet use had increased their productivity but also their time spent working. Giving employees responsibility, trust and respect boosts their morale and productivity. Showing them that they are not trusted and must be recorded decreases morale and worker productivity. This is true regardless of the actual reasons for installing monitoring software, according to the same research.

- **Time-Wasting Spam**
  Spam refers to unwanted and unsolicited email messages. Spam is widespread and has negative impacts on business, according to the article "Impact of Information Technology on Global Business" published by Purdue University. Wading through spam email is a waste of time, and spam filters can only do so much. Users of spam filters must then check for necessary email messages diverted incorrectly as spam.

- **Business Relationships**
  Internet technology -- such as chat rooms, Skype and other software -- has made it possible to hold meetings without all parties being physically present in the same place. A drawback is that meeting with somebody over the Internet is much less personal than meeting face-to-face. It's ironic that while 24/7 connectivity has improved customer service, it has been detrimental to the office environment. Internet technology in business decreases the personal aspect of business relationships. Business people used to network in restaurants and on golf courses. Today, the lack of physical proximity
decreases brainstorming and other communications that use a personal touch thereby straining some business relationships in the process.

2.2 Theoretical framework

2.2.1 Diffusion of innovation theory
Diffusion is the process by which an innovation is adopted by members of a certain community. The most frequently used work dealing with diffusion is diffusion of innovation Rodgers (1995). This theory is not a single theory but rather a Meta theory with several perspectives that relate to the concept of diffusion. As purported by Lucchetti and Sterlacchini (2004), under the diffusion theory, there are four factors which influence the adoption of innovation by members of an organisation. Firstly, the innovation itself, secondly, the communication channel used to spread or disseminate information about innovation, thirdly, time factor and lastly the nature of the group to which it is introduced. Diffusion of innovation can be dealt with according to the four major theories, Ndjege, Herselman and Flowerday (2012). These are the innovation decision process theory, the individual innovativeness theory, the rate of adoption theory and the theory of perceived attributes.

This study focuses on the individual innovativeness theory and the theory of perceived attributes because they help in understanding the relationship between the innovator characteristics and the adopter's categories Hashim (2007). Diffusion theory provides a framework that helps in understanding why IT is adopted by some individuals and organisations but not shunned by others. According to Brychan (2003). The theory can explain, predict and account for factors increase or impede the diffusion of innovations.

2.2.2 Individual innovativeness theory
This theory is based on who adopts the innovation and when they do so. Rodgers (1995) and Ruvinga and Zhou (2014) advocate that there are five categories of adopter. These groups shape a bell-shaped curve when illustrated using percentages when an innovation was adopted as shown in Fig 2.1 below.
Fig 2.1 Adopter categorization of diffusion model
As purported by Rodgers (1995), the first category is called innovators. These are the risk takers and pioneers who lead the way of an innovation project. They are able to adopt despite a high degree of uncertainty about the innovation at the time of adoption and are willing to accept an occasional setback when a new idea proves to be unsuccessful. He further advocates that the second stage is known as the early adopters. These are the individuals and or organizations who quickly get on board and help spread the word about the innovation to others. According to Grande, et al (2011), the third category is known as the early majority. These are persuaded to adopt the new innovation circulation by the early innovators together with the early adopters. They may deliberate for some time before completely adopting the new idea. Rodgers (1995), further purports that the fourth category is the late majority. This group’s approach to new innovations is very cautious, they wait to make sure that the adoption satisfies and is in their best interests. This therefore result in the late majority adopting an innovation late or after most others have done so. The fifth category according to Grande, et al (2011), is called the laggards. This simply refers to a group of people who are highly skeptical and resist adopting a new idea until absolutely necessary.

2.2.3 The theory of perceived attributes
This theory is based on the notion that individuals adopt an innovation if they perceive or observe that the idea has a number of attributes. Firstly, the new innovation must have some relative advantage over the innovation already in place or the status quo. Secondly, the innovation must be compatible with the existing values, past experiences and practices of the potential adopter. The third thing is that the new idea or innovation should not be too complex
or perceived to be by the possible adopters. Fourthly, the innovation must be tested for a limited time without or before being adopted. Lastly, according to Grande, et al (2011) the invention must offer observable results. Rodgers, (1995) purports that the adopter’s experience with one innovation at hand influences that person’s perception towards the next innovation in a technology cluster to diffuse through the individual’s system. For this reason, therefore, if an adopter had a negative first experience with one ICT application, one may perceive all ICT applications to be bad or complex depending on the previous experience.

2.3 The current situation of the adoption of ICT among MFIs
According to Grande et al (2011), the most common uses of ICT are for traditional business operations such as storage of records, communications (vial mail, chat, forum, text messages, video conferences and calls) and device sharing. Ruvinga and Zhou (2014), lamented that most institutions are inadequately or not fully utilizing ICT. They concur with Lucchetti and Sterlacchini (2004), who say most MFIs use computers as a storage device for typing documents. Mobile phones are also highly used by MFIs to communicate with clients. Although Hashim (2007) revealed that most microfinances view ICT as an aiding tool to their business activity they were not aware of how to incorporate some of the ICT applications in their business. They view ICT as a must have to provide a professional but not as a must use, since they minimally use it.

Previous studies have shown that the adoption of IT by microfinance institutions is still lower than expected, (Ndiege, Herselman, and Flowerday, 2012), they further purport that organisations without computerized systems record their transactions manually for the purposes of record keeping, this therefore prolongs the order processing process.

2.4 Empirical Evidence
This topic will focus on faults from prior researches by different scholars. The section will further look into the objectives, results, methodologies, conclusions and recommendations by previous scholars. The adoption and implementation of new technology is a fundamental part for development process of all nations and in any department of any institution.

Ndiege, Herselman and Flowerday (2012) reviewed literature on ICT usage within MFIs in developing economies and made a number of conclusions, these include that with the realization of the benefits associated with the adoption of information and communication technologies (ICTs), many MFIs in the developing economies are beginning to embrace ICT usage. This process has, however, been marred with numerous challenges, characterizing the
process as slow-paced adoption and use of poor-quality ICTs that are outdated, ineffective and therefore inefficient. This partly attributed to the fact that most developing economies are not well suited to provide conducive environments for their microfinances to flourish, even in their efforts to adopt ICT. Authors further purport that MFIs can make use of their flexibility and relatively small size to their advantage, because these are perfect conditions for the diffusion and ICT application.


The previous researcher examined the impact of technology investment on various measures of performance and their contributions to production. These studies have not effectively accounted for the impact of technology investment that increases pro-action efficiency and improve product quality on firm productivity. A closed – analytical model was used and challenged this underlying assumption and demonstrates that investments in technologies that reduce the variable costs of designing, developing and manufacturing a product encourage the firm to improve product quality and to charge a higher price. The direction of the firm productivity following the investment relies on the relationship between the fixed costs of the firm and the size of the market. The studies have attempted to quantify the benefits realized from IT investments since it has shown a positive relationship between IT investments and economic performance measures. The reason for these mixed empirical findings is that the studies have not efficiently differentiated among the goals of increasing production efficiency and improving quality product. Technology investments that improve product quality includes investments in patient tracking systems by hospitals to enable emergency doctors to provide better care in short timely manner to those indeed.


According to this article, the study summarizes that information technology may not automatically improve business profitability. It is an important tool but not adequate on its own, there is need for it to be accompanied by other organizational factors like business strategies. A business can maximize its firm value through aligning its IT investments with strong and lucrative business strategies since IT improves the opportunity economies and coordination with the entity. The contribution of IT to financial performance of an organization can be
measured through ratio analysis of ROA and ROE by focusing on business strategies for example disintegration and diversification. These ratios are not associated with the IT factors of vertical disintegration and diversification. The researcher in the end therefore concluded that increased IT spending expands net profit of a business not the performance ratios.

Jamal (2009): The impact of Health Information Technology on the quality of medical and health care. Australia

The article zeroes in on the impact of health information technology on the quality of health care and mainly focusing on clinicians and the corresponding impact this had on patients’ clinical outcomes. The study dwell much on the use of HIT and systems in both medical care thus clinical and surgical side. A number of results were noticed especially a change of provider’s behaviour, specific patient outcomes demonstrated the effectiveness of a particular treatment being given by the service provider. As the public demands for quality health care services to be provided, the whole attention was being directed towards the implementation of HIT to lower health care expenditure and to advance the efficiency, quality and safety of medical care, Schoen C et al (2006). This resulted in less manual work and reduced the workload of health care professionals thereby growing administrative efficiencies and expanding access to affordable care within a short period of time.

Kamau (2014) carried out a study on the consequence of ICT espousal on the financial performance of micro-finance institutions in Kenya. The study did a descriptive survey to zero in on the features that influence ICT adoption on financial performance of micro finance institutions in Kenya. The study conducted tests on the effects of ICT adoption on the financial performance of MFIs from the period of 2008 to 2012. Primary data was collected through questionnaires and an analytical model was established to determine the strength of the relationship between these two variables. Analysis of the data showed that there was a positive correlation between ICT adoption and financial performance of MFI’s meaning to say ICT adoption in microfinances paves way for positive financial performance.

Dube, Runyowa, and Chitura (2009): Adoption and Use of Internet Banking in Zimbabwe. In a survey carried out by Dube et al. (2009), overall the results showed that while the majority of the banks in Zimbabwe have adopted internet banking, usage levels have remained relatively low, as not many customers are using this innovation in Zimbabwe. Regarding the challenges faced by banks in the adoption of internet banking, compatibility
with existing legacy systems, cost of implementation and security concerns ranked high. The implications of the study are that banks in Zimbabwe should vigorously promote the usage of internet banking among customers while policy makers such as the Government and the Reserve Bank of Zimbabwe should increase investments targeted at infrastructure development so as to encourage banks and individuals alike to adopt the innovation. The study also indicated that those banks that have been using internet banking for many years indicated a high capacity utilization of the service while banks that had just adopted the service are characterized by low capacity utilization.

2.5 Articles on the barriers to ICT adoption by an organization.

Mahesha Kapurubandara and Robyn Lawson (2004): Barriers to Adopting ICT and e-commerce with SMEs in Developing Countries: An Exploratory study in Sri Lanka

In a study carried out in Sri Lanka on SME capability to adopt e-commerce conducted by the Sri Lankan Business Development Centre in 2002, it was identified that the key factors inhibiting the adoption of e-commerce by SMEs were lack of knowledge and awareness about the benefits of electronic commerce. Unpreparedness on the part of the SMEs to adopt e-commerce as a serious business concept, lack of exposure to IT products and services, language barriers and lack of staff with IT capability, web-based selling was not seen as practical as their limited use of Internet banking and web portals together with inadequate telecommunications infrastructure.

Lukasz Arendt, (2008): Barriers to ICT adoption in SMEs: how to bridge the digital divide

The results of the research findings of a research which was carried out by Arendt (2008) argues that the main barrier to better utilization of ICT and eBusiness is the issue of digital divide. Thus, he purports that the main reason why SMEs face a digital divide, is not so much the lack of access to information technology (“material access” barrier) as the lack of proper knowledge, education and skilled owner-managers and employees within the enterprise (“skills access” barrier). As long as European SMEs do not realize this fact, so long will the scale of the digital divide in Europe continue to grow.
Matteo Bugamelli and Patrizio Pagano (2007): Barriers to investment in ICT

With specific reference to this article, by means of firm-level information taken from an expansive example of Italian assembling firms, an ICT marginal product higher than its client cost is assessed. It is then contended that missing correlative speculations may have gone about as boundaries to interest in ICT. Results reinforce the deduction that the outlying item profusion over the client cost is because of those organizations that did not supplement their ICT speculation with an expansion in the human capital of their work compel and with a redesign of the work environment.


According to this research, technological revolution has improved businesses this century in the following five primary ways:

✓ **ICT has given business the tools to solve complex problems.**
  Enhanced hardware (including increased memory, faster processors, sharper visual displays, etc) interlinked with smarter applications (mind mapping softwares, collaborative software like Kanban boards, organizers like Google calendar, etc) have made it easier to research, analyze data, and plan scalability within a flash.

✓ **Allows businesses to make better decisions.**
  ICT allows for good informed decision making in business which are based on solid market research. This is done through engaging teams like video conferences, reviewing public sentiment on social media and industry forums, and online surveys to get customer feedback.

✓ **Information technology has improved marketing.**
  Internet marketing using online advertising methods like web adverts, PPC and Facebook Ads are far more accurate and effective marketing strategies than traditional marketing of finding target audiences, discovering their needs, and building a marketing campaign to persuade them to buy. It’s difficult to see how many people read a newspaper yet on the other side it is easy to figure out how many people clicked on an online banner.

✓ **Improved customer support.**
  Customers can receive support from multiple channels telephone, emails, social media platforms, webinars, and so on. Additionally, customer relationship management systems help businesses understand customer behavior. This also enhances quick response to customer needs in the event that one needs assistance.
✓ **Information technology has improved resource management.**

Cloud computing allows a company’s employees to use any device anywhere in the world to access their enterprise level software from any corner of the globe.

### 2.6 Gap Analysis

This part seeks to look into post researches conducted by other researchers who primarily steered research on the Information Communication and Technology and its impact on the performance of microfinance institutions. Innovation of contemporary technology was applied without considering the organizational factors and as a result business has failed to provide expected benefits to the community. Alemayehu (2010), carried out a study on different Microfinance institutions in Ethiopia. The survey among other things was aimed at looking into the the impact of information communication and technology innovation. This research will use both qualitative and quantitative data collection methods which include observations, interviews and questionnaires to gather data from a sample of randomly selected MFIs. The survey in the Harare CBD targets microfinances which are Nelhurst Trading (Pvt) Ltd, KCI Consultants, HomeLink and Get Bucks microfinance. During the period of 2012-2018 a lot of ICT innovations have taken place in the technological world. The study at hand therefore looks into the impact of Information Communication and Technology (ICT) on the performance of microfinance institutions.

Macharia and Nyakwende (2009), did a study on the factors affecting the implementation and diffusion of internet in higher educational institutions in Kenya, whose outcomes show resistance by end-user systems by users such as apprentices and is a widespread problem. This phenomenon has created the need to better foresee, explain and upsurge user acceptance of technology in higher education. The study results further show that since the use of the Internet in higher education is still in its primary stages specifically in developing countries like Kenya, many issues regarding its acceptance, distribution, infusion and use have not been fully looked into. The research also established that rivalry pressure, government backing, ICT merchants’ support and the perceived socio-economic factors also influence the acceptance and diffusion of the Internet by institutions of different levels. This is therefore not any different even in MFIs as the end users are significant in the acceptance and usage of any innovation as their response plays a pivotal role as well. However, despite advances in ICT and the acceptance of such technologies by large organizations, the same level of adoption is not evident among MFIs in Zimbabwe. The
purpose of this study was therefore to come up with a set of potential determinants that affect the adoption of ICT by MFIs on one hand and a set of potential supporting activities to overcome the barriers. The study revealed that both, internal and external barriers inhibit the adoption of ICT by MFIs. Internal barriers can be resolved within the organization by the organization itself, while external barriers need to be addressed either by government intervention or by associations of MFIs. The study further identifies the relevant support required by MFIs in a developing country, like Zimbabwe.

Hashim (2007), investigated on Information Communication Technology (ICT) embracing among MFIs in Malaysia. He examined the level of ICT skills, use, and adoption among microfinances in Malaysia. The researcher surveyed ten MFIs, using a survey instrument established from the hypotheses used in the diffusion of innovation theory. The discoveries confirm that the level of ICT skills possessed by MFIs in Malaysia is poor, low ICT usage, and their adoption of ICT is very slow and late. Primarily, this is so because they find that ICT adoption is very difficult and problematic. The researcher therefore then discussed the consequences of his study and presented suggestions for future research direction. Likewise, Manuere et al (2012), investigated challenges to the adoption of ICT by MFIs in Zimbabwe in Chinhoyi district. They acknowledge that, the development of the internet has permitted microfinances (MFIs) to compete effectively and competently in both inland and intercontinental markets.

With reference to Business Vibes (2015): The importance of Information Technology in Business Today, it is important to note the need to adopt and implement ICT in organizations since there are clear notable benefits to both the firm, its corporate image and the clients. In our local MFIs however some of these benefits are not being enjoyed since ICT is not fully utilized to full capacity. It is therefore of paramount importance to go on with this research in order to note and unearth other positive attributes associated with adoption of ICT besides the ones mentioned earlier.

In line with a research survey carried out by Dube et al. (2009), on the “Adoption and use of internet banking in Zimbabwe,” the research findings overally showed that although the majority of the banks in Zimbabwe have adopted internet banking, still ICT utilization levels have remained relatively low because a handful of customers are using the ICT services. The study also indicated that those banks that have been using internet banking for many years
indicated a high capacity utilization of the service while banks that had just adopted the service are characterized by low capacity utilization. The purpose of this research is therefore to look into other benefits and effectiveness of adopting and implementing new Information Communication and Technology in microfinances, the drawbacks faced by MFIs in the implementation together with the impacts as well whether positive or negative to the organization.

2.7 Chapter summary
This chapter has zeroed in on literature review, theoretical framework, empirical evidence, gap analysis and various ideas relevant to the study. The chapter also looked into researches previously done in relation to the impact of technology on financial performance of microfinance institutions. The next chapter explains the methodology used to carry out the study.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction
This chapter seeks to outline of procedures and methods that shall be adopted by the researcher to gather, analyze and present data on how the research was overally carried out. As part of research methodology, the research design to be used will be discussed and justification of the choice of the research design to be used. Description of the target population from which data shall be collected will be done and highlight the characteristics of the population. This chapter will further zero in on various methods that the researcher used to present gathered data in a way to make findings clear and the analysis of the presented data and its interpretation.

3.1 Research Design
Research design provides a blue print for reacting to the objectives of the research hence gives a framework for the research plan of action. It will provide answers for questions such as; What are the techniques used to attain data? What instruments are to be used to gather data? How will research constrains be dealt with? In the research, the researcher used descriptive survey design that allowed him to scrutinize the impact of ICT on the financial performance of MFIs.

3.1.1 Descriptive Research Design
Descriptive research design provides answers to questions such as who, what, when, where and how of the topic under study. It further provides accurate account of characteristics of a particular individual, event or group in real life situations and it is dependent on both primary and secondary data. Descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection for the purposes of better understanding by the reader and users of the researched information, Glass & Hopkins, (1984).

3.2 Justification of Descriptive Research Design
✓ The method was chosen because the data is not static, financial innovation and technological progression is having a bearing on MFI performance and the service delivery as well. Descriptive research therefore allows for the gathering of both
qualitative and quantitative data. It also stimulated the researcher to advance and uphold skills to assess and create ideas.

- **Descriptive** survey method was appropriate because it involves the use of a variety of research tools. The researcher used interviews and questionnaires as data collection methods. Interviews were done to reveal the nature of problems being faced by businesses in Harare CBD in utilizing ICTs. Interviews with some owner/managers and employees elicited some of the factors causing them not to fully utilize ICTs.

- The researcher implemented a descriptive research design because it gives an opportunity for questions like why, where and how to be answered. This means that detailed information was gathered for the research.

- Descriptive research design was adopted by the researcher because the data collected was descriptive in nature.

- Descriptive research design often uses visual aids such as graphs and charts to aid the reader in understanding the data distribution.

**Disadvantage**

- Descriptive research design demands one to present a very high level of knowledge and analytical skills so as to make a detailed analysis on the data collected hence it prolongs the time period to complete the research.

In order to overcome the above-mentioned problem, the researcher showed high level of understanding and developed better skills required through reading so as to make detailed analysis.

**3.3 The Population**

A population comprises all the variables of interest to the researcher and to which the findings of the research will be generalized, sometimes it is referred to as the target population or universe. In this study, clarification of the target population was necessary in order to provide a base from which sample units and sample size were construed. In this study the target population comprised of the managers and employees of 4 different microfinance institutions in the Central Business District (CBD) in Harare.

**3.4 Sampling Procedures**

Sampling method is a plan which one sets forth in order to be certain that the sample adopted in the research study represents the true population from which the sample was drawn. The researcher consequently uses a sample because it needs less time to gather the data and it saves
resources. It is not always practical to get data on every observation in the population and as a result a sample is gathered on the random variable. In this research, non-probability sampling was implemented. Non-probability sampling enabled information to be collected on each of the chosen MFIs. Each section was then tested as an independent subpopulation, out of which distinct fundamentals were selected. The respondents were randomly selected.

3.5 Sample size
The target population for this research included four microfinances situated in the Harare Central Business District. A total of four questionnaires were distributed at each of the four MFIs to make a total of sixteen questionnaires distributed by the researcher. The target population was considered the best representation of the whole microfinance industry in Harare and reflect a true and fair view of how microfinances’ approach to the adoption of ICT and how it affects their business operations.

3.6 Research Instruments
For the purpose of this study, questionnaires and the interviews are the research instruments which were used by the researcher.

3.6.1 Questionnaire
Questionnaires vary from interview schedules or interview guides because respondents fill in the questionnaire without the researcher’s assistance. They were designed using dichotomous (yes/no) type of answers and open-ended questions. The use of the questionnaire as a key tool for data collection was based on the advantages that the instrument has over other instruments that could be used.

Advantages of using questionnaires:

- Closed ended questionnaires took least time for the research to be conducted and respondent to respond to the questions.
- They were less expensive.
- It offered privacy to respondents because they responded without any fear of persecution.

In the past they have proved to be some demerits due to the use of questionnaires as listed below.
Disadvantages of questionnaires

- Questionnaires in some instances were unclear or vague to respondents thus led to distorted or incorrect responses by respondents. The researcher therefore ensured that all questions were precise and clear to avoid and minimize misinterpretations.
- The information attained could be insufficient because the responses are in either yes or no form and unjustified why one said yes or no and unelaborated why they said yes or no.
- Questionnaires were not good and therefore not advisable for exploratory research or other research that involves bulky numbers of open-ended questions.
- Some questions generated inaccurate and or irrelevant information. This was then therefore remedied by employing the interviews to check on responses from questionnaires.

3.6.2 Interviews
It was through using the interviews that helped the researcher to gather valid and reliable data that was relevant to the research questions and objectives. The researcher executed private interviews to gather information from the managers, directors and employees at microfinances around the central business district in Harare. Private interviews provided elasticity and increased the levels of accuracy since there was close interaction with the respondents so one can ask for more clarity when there is need to.

Advantage of using interviews

- Interviews provided full and exhaustive information as compared to available information through other methods of collecting data like surveys.
- A more relaxed and stress-free atmosphere was created when collecting information so that respondents felt more comfortable having a conversation with the interviewer.
- The interviewer during an interview used probing to attain information especially on complex and relatively emotional questions.
- The researcher had a great deal of flexibility and used his inventiveness to draw respondents to reveal more of their attitudes and motives in line with the issue at hand.
Interviews enabled the researcher to observe non-verbal aspects such as body language and facial expressions. It thus permitted the researcher to accurately interpret responses that were communicated.

**Disadvantages of using interviews**

- Due to in-depth interviews, some respondents felt a little bit uneasy and intimidated, this then led to the collection of data to be prejudiced and therefore biased. To overcome this, the researcher therefore assumed a friendly posture and expression that helped the respondents feel at ease.
- Respondents failed to disclose some vital information which they felt was sensitive. Oral assurance for confidentiality was therefore given to the respondents by the researcher.
- Interviews were time-consuming to transcribe and analyze the results.
- Some interviewees had limited time to seat for the whole process therefore the interviewer (researcher) had the disadvantage of waiting for the given date and time for appointments.

3.7 Data Collection Procedures

To gather primary data, questionnaires and interviews were employed. The researcher made enough printouts of questionnaires for each respondent to receive and respond to it. During the distribution of questionnaires, the researcher simultaneously clarified the importance of the research project results and how respondents were expected to complete the questionnaires. The researcher then waited for reasonable time to collect the completed questionnaires. Then finally made arrangements with a number of directors and managers from the selected MFIs and interviewed them face to face. The researcher used interviews because it ascertained values, attitude, beliefs and experiences from management. Interviews helped the interviewer to observe non-verbal behaviour, thereby assessing the respondent’ motives.

3.8 Data Presentation and Analysis

This section presented and interpreted the discoveries of the research targeting to establish whether the data to be collected answered all questions the researcher had at the beginning of the research. Data was arranged and placed into appropriate categories which were relevant to the research objectives. Data presentation entails the presentation of the data obtained from the research. Data presentation was in the form of answering research questions through literature and tables. Data analysis on the other hand involves inspecting, cleansing, transforming, and
modeling data with the goal of discovering useful information, informing conclusions, and supporting decision-making. Data analysis involves applying statistical techniques to a database in order to make interpretations about variables.

Analysis refers to breaking a whole into its separate components for individual examination, analysis furthermore, encompasses obtaining raw data and converting it into information useful for decision-making by users. Data is therefore collected and analyzed to answer questions, test hypotheses or disprove theories. Data analysis entail the evaluation of the data presented ascertain the effectiveness of the research question and its impact. The researcher used graphs, charts and tables to present data collection for the purpose of the study. In cases where the data could not lend itself into statistical analysis, the researcher used content analysis for open format questions. This was considered appropriate particularly where respondents either gave suggestions or expressed their opinions.

3.9 Validity of instruments
Validity is more concerned with guaranteeing that question measures or defines what it aims to find. Due caution was exercised in word selection and phrases which the target population is more familiar with so as to avoid and minimize ambiguity. Questions were asked in unambiguous ways meaning all of the terms were clearly defined in order to have the same meaning to all respondents and appropriate terminology which suits respondents’ industry and departments. The study further ensured that major themes from research objectives are presented under the research instrument. All instruments proved to be very useful to the researcher as some aspects that could not be covered by a particular instrument were covered by another instrument. Before questionnaires were sent out, the researcher did a pilot test.

3.10 Reliability of instruments
Reliability is more interested in the replicability of the research under similar comparable settings elsewhere. This was vital in determining consistency in terms of the measurements used in the study. This then therefore ensured reliance on the research findings as faithfully representing the economic and business phenomena under study as the research instruments yielded accurate and consistent results. As a way of ensuring reliability of the research study, the researcher formulated research instruments which collected satisfactory and adequate data to cover and fit into the formulated research objectives. The pilot study which was carried by the researcher prior to the research study additionally helped to evaluate the effectiveness of
the instruments used in measuring objects or phenomena it intended to measure before using them in the main study.

3.11 Summary
The chapter provided the background on how the research was conducted. The instruments employed in the study were analyzed and the concepts of validity and reliability of research instruments were discussed in detail. It explained the data collection procedures in terms of sampling the respondents, distribution and collection of questionnaires, the strengths and weaknesses of research instruments as practical approaches to data gathering. Lastly the chapter explained the data analysis and presentation procedure, which is expected to add new dimensions to the body of knowledge on the topic of interest in the next chapter.
CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction
The previous chapter discussed the procedures and techniques that were applied by the researcher to collect and analyse data. This chapter deals with the presentation, interpretation and analysis of the research findings found from the data collected from selected microfinance institutions in Harare Central Business District (CBD) area on Information and Communication Technology (ICT) and the performance of microfinance institutions. Data was gathered from the fieldwork carried out during the study and was solicited through interviews and questionnaires. Analysis tables, charts and graphs were used so as to reveal the relevant message in the data and thus facilitate interpretation.

4.2 Data Presentation

4.2.1 Questionnaire Response rate

Table 1: Questionnaire Response rate N=16

<table>
<thead>
<tr>
<th>Name of MFI</th>
<th>Targeted Sample</th>
<th>Achieved</th>
<th>Response Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nelhurst Trading (Pvt) Ltd</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>KCI Consultants</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>GetBucks Microfinance</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>Homelink (Pvt) Ltd</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td>16</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Survey data (2018)

All 16 distributed questionnaires were completed and returned signifying a high response rate. The 100% response rate was attributed to the researcher who was crafty during the data collection process. Follow-ups were effectively executed leading to all the target respondents filling up all the questionnaires before they were collected by the researcher. More so, the
maximum 100% response rate was attributed to the fact that the sample size was small but big enough to cover and deliver the required information. The high response rate further helped the researcher to evaluate the validity and reliability of the research findings.

4.2.2 Response rate for interviews

Table 2: Response rate for interviews N=12

<table>
<thead>
<tr>
<th>Name of MFI</th>
<th>Targeted Sample</th>
<th>Achieved</th>
<th>Response Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nelhurst Trading (Pvt) Ltd</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>KCI Consultants</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>GetBucks Microfinance</td>
<td>3</td>
<td>2</td>
<td>66,6%</td>
</tr>
<tr>
<td>Homelink (Pvt) Ltd</td>
<td>3</td>
<td>2</td>
<td>66,6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>10</td>
<td>83,3%</td>
</tr>
</tbody>
</table>

Source: Survey Primary data (2018)

From the above data shown in Table 2, the initial plan was to interview a total of twelve respondents, three from each microfinance institution, but only ten interviews were conducted. Technically this therefore meant 83,33% success rate of the scheduled interviews was recorded and a corresponding failure of 16,66%. During the process of conducting interviews, two interviewees did not turn up for interview for different reasons. One was attending the institution’s emergence meeting and had a tight schedule since then, the other did not report for work for some reasons. Information assembled through interviews was used in relation to data found by administering questionnaires to aid in data recommendation and conclusions.

4.3 Industry and Demographic characteristics

Subjects under study had at least (25%) of personnel with at least a professional course, (40%) at least a first degree and (35%) of post graduate degree holders. This therefore implies that there was a high literacy rate of respondents, high enough to making their responses to questions authentic and valid. 80% of the respondents had a minimum of five years working experience in the microfinance industry significantly implying that they were well versed with the MFIs operations. This shows that the subjects in this survey possessed the required information for the study either through qualifications or working experience and familiarity to the industry.
4.4 Establishing the effectiveness of adopting ICT in the performance of microfinance institutions.

4.4.1 Knowledge on the concept of ICT in MFIs
From a total of 26 respondents who responded either through questionnaires, interviews, or both, 22 of them were affirmative that they have knowledge of the concept of ICT in microfinance institutions and the other four were not sure. Statistically this means 84.6% agreed that they had knowledge of information communication and technology in microfinance institutions. This resounding majority was enough evidence to convince the researcher that his sample is characterised by respondents who can give reliable information. Their responses therefore can be relied upon as far as this research is concerned since the majority of the respondents have knowledge of the subject under study. Data is illustrated in the pie chart below;
Fig 2: Knowledge of ICT in MFIs

Source (Primary data survey 2018)

4.4.2 Effectiveness of ICT on the financial performance of MFIs

With specific reference to the conducted interviews and distributed questionnaires, ICT adoption is effective to the performance of Microfinance institutions. Only 12% of the total respondents disagreed with the idea that ICT is visibly effective on the performance of MFIs, 73% concurred and the remainder 15% of the respondents were not sure. Follow ups through interviews and supplementary explanations in the spaces provided on the questionnaire allowed respondents to justify and explain further the reason(s) behind their response. Data is clearly shown in fig 3 below;

Fig 3 Effectiveness of ICT on the financial performance of MFIs

Source (Primary data survey 2018)
4.4.3 ICT impact on the performance of MFIs
From the 26 respondents engaged by the researcher, they had different views as to whether ICT has an impact on the performance on microfinance institutions. 22 of the respondents affirmed that somehow Information Communication and Technology (ICT) has an influence on the performance of microfinance institutions. This meant that 84.6% of the total sample concurred with the idea that ICT has a bearing on the operations of MFIs. The remaining 4 respondents were for the view that ICT does not have a bearing/ influence on the performance of MFIs correspondingly giving a total sample of 15.4% as shown in fig 4 below.

Fig 4 ICT impact on the performance of MFIs

Source (Primary data survey 2018)

4.4.4 Positive and negative impacts of ICT on organizational performance
Based on the total responses recorded from the research survey, out of the whole target population, 76.9% were for the view that Information Communication and Technology has positive impacts on organizational performance. 23.1% were for the perspective that ICT adoption has negative impacts on the performance of microfinance institutions. Research data findings are shown in the chart (Fig 5) overleaf;

Fig 5 Positive and negative impacts of ICT on organizational performance
Fig 5 Positive and negative impacts of ICT on organizational performance

Source (Primary data survey 2018)

4.4.5 Barriers to ICT adoption in MFIs

Table 3 Barriers to ICT adoption in MFIs

<table>
<thead>
<tr>
<th>Barriers to adoption and use of ICTs</th>
<th>Frequency (Respondents)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary costs</td>
<td>16</td>
<td>61.5</td>
</tr>
<tr>
<td>Limited resources</td>
<td>3</td>
<td>11.5</td>
</tr>
<tr>
<td>Uncertainty of returns</td>
<td>4</td>
<td>15.4</td>
</tr>
<tr>
<td>Disruption concerns</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>Management support</td>
<td>2</td>
<td>7.8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>26</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

On the barriers, according to the respondents, the most prominent barrier are the financial costs associated with adopting and implementing new ICT into the organization. This was represented by 16/26 respondents giving a total sample of 61.5%. Limited resources in an organization to implement new ICT is another challenge represented by 3/26 respondents (11.5%). Uncertainty of returns and disruption concerns are other challenges represented by 4/26 (15.4%) and 1/26 (3.8%) respondents respectively and management support which has 7.8% represented by 2/26 respondents. It therefore was deduced from the above sample that the greater chunk of barriers to ICT adoption by MFIs were internal issues as compared to external forces. The data is shown in a chart overleaf.
Fig 6: Barriers to ICT adoption in MFIs

Barriers to ICT adoption in MFIs

Source (Primary data survey 2018)

4.5 Chapter summary
The study focused on the presentation and analysis of data using methods outlined on the previous chapter. The presentation was based on the findings obtained from the questionnaires and interviews. The next chapter will give summary of findings, conclusions and recommendations to the study.
CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSION

5.0 Introduction
This chapter seeks to summarize, give recommendations and conclusions based on the research objectives, research problem and the assumptions of the research under study. The chapter further provides the conclusions through the data gathered and findings made during the research.

5.1 Summary of the findings
This study sets out to look into the impact of Information Communication and Technology on the effectiveness and performance of microfinance institutions looking at a survey in the Harare Central Business District area (CBD), this is done so that recommendations can be made to MFIs on the effective strategies to be adopted and how to fully or maximize ICT utilization as a way of improving their service delivery, cost leadership, client base, gaining competitive advantage over competitors and to ensure subsequent survival of the businesses. The following were the objectives of the study;

✓ Determine the effectiveness of ICT on microfinance performance.
✓ Establish the important or major barriers to ICT adoption in microfinances.
✓ Determine the impact of ICT on the performance of microfinances.
✓ Make recommendations and suggestions to help in improving MFIs performance by strengthening ICT roles.

With specific reference to findings of conducted interviews and distributed questionnaires, ICT adoption is effective to the performance of Microfinance institutions as represented by the greater response in chapter four although a particular lesser number of the total respondents disagreed with the idea that ICT is visibly effective on the performance of MFIs.

In relation to the impacts of ICT in the financial performance of MFIs, based on the total responses recorded from the research survey, out of the whole target population, 76.9% were for the view that Information Communication and Technology has positive impacts on
organizational performance and 23.1% of the respondents were for the perspective that ICT adoption has adverse impacts on the performance of microfinance institutions.

From the research survey, it was deduced from the sample that the greater chunk of barriers to ICT adoption by MFIs were internal issues as compared to external forces.

5.2 Conclusions
The study findings show that the adoption of ICT by MFIs has improved operational efficiency and service delivery by making it more productive and effective. The study discovered that adoption and implementation of ICT by microfinances has enabled MFIs to grow their client base and market share through customer attraction, engagement and customer retention. This has been so chiefly because of their ability to offer lower transactional costs as equated to the traditional prior practices where transactional costs were high. In view of the extent of ICT usage, microfinances have basically enjoyed and flourished as a result of adoption of information communication and technology which has improved the likes of time taken to deliver required services, response to client queries, improved marketing strategies etc. MFIs have drastically been affected by Information Communication and Technology; therefore, this study concludes that although there are a number of factors which hinder adoption of ICT, it is effective and efficient for microfinance institutions to adopt and implement ICT based on the results particularly zeroing in on the microfinances namely Nelhurst Trading (Pvt) Ltd, KCI Consultants, GetBucks Microfinance and Homelink (Pvt) Ltd which were under survey.

Additionally, the study showed that in spite of the fact that some ICTs being present in these MFIs at different levels, their usage and utilization was not satisfactory. It can be inferred from this study that microfinances focused much on common ICTs such as phones, radios and TV as equated to other vastly interactive ICTs like computers and internet. Results of the study exposed that MFIs had difficulties in adopting and using ICTs because of their lack of ICT literacy. It was discovered that ICT illiteracy undesirably affected the adoption and use of ICTs by microfinances despite them having a positive attitude towards ICTs.

5.3 Recommendations to microfinances
The study has assessed the impact of technology on the financial performance of microfinance institutions and the main focus was a survey of microfinances in Harare CBD namely Nelhurst Trading (Pvt) Ltd, KCI Consultants, GetBucks Microfinance and Homelink (Pvt) Ltd. The findings of this study have implications for practice and future research.
✓ Awareness must be made amongst MFIs on the benefits of using ICTs in their businesses as the study revealed that they mostly used it for personal communication and not business. This can be done by coming up with activities that show the importance of ICTs in business and having the right content for particular groups.

✓ Policy makers in government and the informal sector must engage the owners of SMEs in coming up with strategies to embrace ICTs.

✓ ICTs specialists should in view of the research results design systems that will make it easy for people to adopt and use ICTs specifically for low income earners like SMEs. This can be done by coming up with more user-friendly computer interfaces and integration of local languages. This will make it easy for people with low ICT literacy to effectively use ICTs.

✓ SME owners should be encouraged to give importance to the adoption and use of ICTs by investing in ICTs infrastructure to facilitate the provision of ICTs services to their customers.

✓ SME owners should intensify the training of their employees as the study revealed that most of the employees were unable to use ICTs due to lack of training.

✓ There must be a deliberate programme to bring about awareness on how ICTs can be beneficial to different societies especially those engaged in the business sector and their potential customers.

5.4 Recommendations for future studies
This study endorses that further research be conducted on factors which are affecting the acceptance and implementation of ICT in microfinance institutions. The research must further zero in on the impact which ICT has on the financial performance of MFIs. Furthermore, the conclusion was reached at based on a small number of sample size so the researcher recommends that future studies should increase the sample size to more than four.
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APPENDIX I

RESEARCH QUESTIONNAIRE

INSTRUCTIONS TO RESPONDENTS
1. Read each question carefully and answer each question truthfully and honestly.
2. Do not inscribe any of your personal information in the questionnaire.
3. Please tick where applicable in the space provided.

SECTION A: BACKGROUND INFORMATION
1. Level of education
   a) Certificate [ ]
   b) Diploma [ ]
   c) Degree [ ]
   d) Masters [ ]
   e) PhD [ ]
2. For how long have you been working at this microfinance?
   a) Less than one year [ ]
   b) One to five years [ ]
   c) Six to ten years [ ]
   d) More than ten years [ ]
3. Which department are you attached to?
   a) Finance [ ]
   b) Information Communication and Technology (ICT) [ ]
   c) Marketing [ ]
   d) Operations [ ]
4. Which position do you hold?
   a) Senior management [ ]
   b) Middle management [ ]
   c) Other
      If other specify……………
5. Do you have any of the following ICTs in your business? (Tick where applicable)
   A. Computer [ ]
   B. Internet [ ]
   C. Phone [ ]
   D. TV [ ]
   E. Radio [ ]

SECTION B
6. Do you think ICTs are fully utilized and adequately used in your company?
   A. Yes [ ]
   B. No [ ]
   Justify in brief .................................................................

7. What do you think is the most prominent reason for not fully using the ICT services in your company?
                                                                                                                                  .................................................................
8. Has there been any advances in modern technology in any department of the firm?
   A. Yes
   B. No
   If yes what are the improvements, if no then why?
   ........................................................................................................................................

9. Modern technology has an impact on the performance of microfinance institution?
   Strongly agree [ ] Agree [ ] Disagree [ ] Strongly disagree [ ]

10. Can the benefits of ICT outweigh the costs in the organization?
    In your own opinion and according to your experience in the microfinance industry?
    ........................................................................................................................................

11. What do you think are the effectiveness/benefits of ICT on the performance of the
    organization?
    ........................................................................................................................................

12. In your opinion, what are the impacts of ICT on the firm’s performance? Are they
    more inclined to the negative or positive side?
    Why?...................................................................................................................................

13. What are the major barriers to the adoption and full ICT utilization faced by the
    organization?
    ........................................................................................................................................

..........................................................................................................................
APPENDIX II

INTERVIEW GUIDE

1. How long have you been employed at this microfinance institution?

2. What is the current position you hold in the organisation?

3. Do you understand the concept of ICT?

4. What can be done to encourage ICT adoption and usage by microfinance institutions nationwide?

5. As a microfinance, what challenges or barriers do you encounter in adopting and using ICT in your organisation?

6. In your opinion what can you say is the link between ICT and the performance of microfinance?

7. What do you think are the effectiveness/ benefits of ICT on the performance of the organization?

8. In your opinion, what are the impacts of ICT on the firm’s performance? Are they more inclined to the negative or positive side?

9. What are the major barriers to the adoption and full ICT utilization faced by the organization?

THANK YOU FOR YOUR CONTRIBUTION
APPENDIX III
APPROVAL LETTER

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To Whom It May Concern

REF: RESEARCH ASSISTANCE

My name is Madhume Antony (B1544279), a student at Bindura University of Science Education, undertaking Financial Intelligence in the Faculty of Commerce. I am carrying out a research project on “Information and communication technology (ICT) and the performance of microfinance institutions. A survey of Harare central business district area (CBD).” I therefore sincerely ask you to provide me with information that will support me in my research. Information collected during this research is for academic use only and it will be treated with great confidentiality. All information will be valued and recognized, no view or opinion will be regarded as wrong. You will not be probed to write your name anywhere on this questionnaire as it is considered anonymous.

Your assistance and time taken to fill in this questionnaire and conduction of interviews is greatly appreciated. For any queries and more information kindly contact the undersigned at email address at amadhume@gmail.com or cell 0774 929 111 / 0716 172 752

Yours Sincerely

Madhume Antony K.