CREDIT MANAGEMENT PRACTICES AND LENDING DECISION BY DIGITAL FINANCIAL FIRMS IN KENYA

ANNE KARIMI NTHIGA

D53/CTY/PT/37711/2017

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS

IN PARTIAL FULFILMENT FOR AWARD OF DEGREE IN MASTER OF BUSINESS ADMINISTRATION (FINANCE OPTION) OF KENYATTA UNIVERSITY

MARCH,2021

DECLARATION

This research project is my original work and has not been presented for award of a degree in any other university.

Signature……………………………………Date……………………………..

Anne Karimi Nthiga

REG: D53/CTY/PT/37711/201

This research project has been submitted for examination with my approval as the University supervisor.

Signature………………………………………..Date…………………………

Dr. Eddie Simiyu

Department of Accounting & Finance

DEDICATION

I dedicated this project to my parents, Mr. and Mrs. Nthiga Mwandiko, whose love, commitment and sacrifice towards giving each one of us an education remain paramount.

ACKNOWLEDGEMENT

I am extremely thankful to the Almighty God for granting me the strength this far. I am privileged and honored to work with Dr. Simiyu, my supervisor, who continues to be an excellent and committed mentor.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

OPERATIONAL DEFINITION OF TERMS

Credit management practices	the process of lending whereby proper guidelines are established to ensure smooth lending processes while ensuring that proper credit scoring measures and loan review practices are taken into account
Credit scoring	**Is** a statistical assessment by lenders and financial establishments to assess an individual' s creditworthiness. It facilitates decisions making regarding whether to lend or deny credit.
Consumer protection	This means safeguarding consumer rights and facilitating fair trade competition and honesty in information dissemination in a market economy
Digital lending	The process of offering loans through digital channels. Every loan has to go through proper lending decisions channels before disbursement.
Digital financial firms	These are firms involved in offering financial services that can be transacted through the digital channels such as payments, loans, and savings.
Financial knowledge	Refers to the acquisition of skillset and instrumental knowledge in making effective and well-informed decisions on matters pertaining financial resources.
Lending decisions	Refers to the process involving determination of the possibility of lending.
Loan review practices	These are practices meant to enable examination of the overall quality of a loan portfolio. It examines individual loans together with the risks of repayment.
Self-regulation	Is an activity by which members of a business, industry or eco nomic sector track and enforce their own compliance with the r ules of law, ethics or protection rather than having an Independent, external body, such as a third-

party organization or a governmental regulator.

LIST OF ABBREVIATIONS AND ACRONYMS

CAR	Corporate Annual Report
CBK	Central Bank of Kenya
CRB	Credit Reference Bureaus
FASB	Financial Accounting Standard Board
FS	Financial Statements
FSPs	Fiscal Service Providers
GDP	Gross Domestic Product
IMF	International Monetary Fund
KCB	Kenya commercial bank
LPM	Loan Portfolio Movement
MFB	Micro-Finance Banks
MRP	Money Remittance Providers
NPL	Non-Performing Loans
SME	Small and Micro Enterprises

ABSTRACT

Digitalization and digital technology are causing fundamental changes in many parts of society and encouraging unprecedented creativity across a wide range of sectors. With the rising digitization of companies and their ecosystems, digital innovation creates difficulties and necessitates the adaptation of incumbent organizations. Kenya has seen technical advancements in the financial industry, particularly in the area of digital credit lending. Most Kenyans relied on informal lenders (shylocks) as well as family and friends for loans prior to the introduction of digital lending. Banking services were only available to the wealthy or those who had collateral and could afford to pay the fees imposed to gain access to bank branches. The digital lending services are conveyed by a range of providers and target all individuals who have the ability to utilize them, which includes the unbanked, the disadvantaged in the society like the poor, the disabled and other excluded populations. It is to be noted that the traditional banking business was only accessible to the financially stable and those who had collateral and could access the bank branches and afford to repay the loans together with the interest and fees chargeable. This study aimed to understand credit management practices on lending decisions by digital financial firms in Kenya. The dependent variable under consideration was lending decision, the independent variables were credit scoring, loan review practices, consumer protection and financial literacy. A descriptive research design was employed to obtain a more comprehensive response. 12 digital financial firms were considered for the target population and a sample of 36 respondents were used for sample scope. The data for the study was collected via questionnaires. SPSS was used for editing and coding the gathered data in order to analyze it. Methods of descriptive and inferential analysis were used. Frequencies, means, percentages, and standard deviation were used in the descriptive analysis. Correlation tests, regression tests, and ANOVA tests were used for inferential analysis. The results of the analysis were provided in the form of charts, tables, and graphs. The data set was subjected to a linear regression analysis. The Pearson Product Moment was used to evaluate the data, and the variables' correlation coefficient (R) and coefficient of determination (R2) were calculated. According to the linear regression model, every independent variable had a positive coefficient, as evidenced by a positive relationship between the dependent variable (lending choices) and the independent factors (credit scoring, loan review practices, consumer protection and financial literacy). The R Squared value was 0.887, indicating that the independent variables for the study, credit scoring, loan review processes, consumer protection, and financial literacy, explained 88.7% of the changes in lending choices. Credit scoring had a substantial impact on loan decisions made by digital financial businesses, according to the research. Lending decisions were also influenced by loan screening processes. Furthermore, the study found that consumer protection and financial literacy have a substantial impact on digital financial businesses' lending decisions.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Digitalization and digital technology are causing fundamental changes in many parts of society and encouraging unprecedented creativity across a wide range of sectors (Benlian et al. 2014). With the rising digitization of companies and their ecosystems, digital innovation creates difficulties and necessitates the adaptation of incumbent organizations (Tilson et al. 2010; Yoo et al. 2012). Organizations are being forced to constantly examine and innovate their business models as a result of digitalization (Bharadwaj et al. 2013). The financial services industry is undergoing major changes as a result of digital innovation (Barberis and Chishti 2016). Fintech startups are recognized as a driving force behind these changes because they respond to rising customer expectations by delivering innovative technology-based solutions with user-centered ways (Ansari and Krop 2012; Christensen 2013). The market for digital credit in Kenya is estimated at 6 million unique potential borrowers. The digital lending services are conveyed by a range of providers and target all individuals who have the ability to utilize them, which includes the unbanked, the disadvantaged in the society like the poor, the disabled and other excluded populations. It is to be noted that the traditional banking business was only accessible to the financially stable and those who had collateral and could access the bank branches and afford to repay the loans together with the interest and fees chargeable.

Kenya has seen technical advancements in the financial industry, particularly in the area of digital credit lending. Prior to the emergence of digital credit, the majority of Kenyans, for loans, they turned to informal lenders (shylocks), as well as relatives and friends (Shicks, 2010). Banking services were only available to the rich or those with collateral who could afford to pay the fees required to visit bank branches. As a result, financial institutions had little motivation to serve the poor because the goods were not only pricey but also unavailable to them. The emergence of digital credit, on the other hand, has changed everything. Digital credit is a type of digital financial product that requires little in-person interaction and relies on digital infrastructure. To accept loan applications, evaluate borrowers' creditworthiness, authorize the loan, transfer cash, and receive payment, the product relies on digital infrastructure.

(Triki and Faye, 2013). Digital credit products are those that depend on digital set-up for the entire or even part of the procedure. (Venkata and Yamiini, 2010). The digital infrastructure employed by these goods, along with their convenience, has resulted in their great market demand. The developing utilization of digital loans is influenced by fast access to assets by the debtors, zero security prerequisites, no paperwork by money creditors, remote accessibility, and utilization of other credit scoring methods like mobile money exchange data to determine capability for credit (Hwang, 2016). Advanced digital lending on the planet is on the rise (World Bank, 2014).

Digital loan services are both huge in formal financial consideration and a regulatory minefield. Hence, spotlight ought to be on the improvement of a sound regulatory structure which won't disincentive development and yet give answers to challenges experienced by customers as the service continue to expand (Hwang, 2016). Digital credit services crosscut administrative conditions on matters of purchaser security, usage of mobile money value-based data, lending behavior to debtors, over-indebtness, and direction on assortment of operational and performance data (World Bank, 2014).

The diversity of digital credit options available, as well as product innovation, indicate attempts to provide credit to the unbanked in order to enhance financial inclusion. Financial inclusion requires a well-functioning infrastructure that allows people to borrow money while maintaining their rights. Digital credit is a game-changing technology that operates outside of traditional regulatory boundaries. Indeed, some feel that the lack of rigorous regulations is one of the reasons for mobile money's success in Kenya. Credit assistance to these vulnerable individuals, on the other hand, must be carefully monitored in order to avoid unintended consequences such as over-indebtedness, which is a cause of poverty. Furthermore, clients may be able to obtain formal financial services with the help of digital credit. However, if lending is not regulated, there is a risk of predatory lending, in which customers are unable to pay, resulting in poor credit ratings, limiting their access to formal financial services. Thus, if such lending is not overseen, then companies will be making profit at the expense of consumer rights which is parallel to the efforts of financial inclusion.

According to Kaffenberger *et al.*, (2018) more than third of mobile phone proprietors in Kenya and a fifth in Tanzania have taken out digital loan. The cost of digital loans includes interest rates, office fee and commissions. Mobile loans, for example, Branch and Tala charge 14% and 15% month to month interests which whenever institutionalized every year is 165% and 180%, respectively which is higher than the commercial banks (GSMA, 2015). Some Fintech applications require loan evaluation fee from borrowers. Some mobile loan stages normally rollover the loans if not paid and also include interest rate on the rolled over fee.

While advanced advances organizations have changed the credit showcase scene and dove in budgetary related solidification inside the country, different troubles face the business. In mechanized crediting, there's no likelihood to encourage for money loan specialists to comprehend what number of different advances borrowers have. The affiliations battle with the developing heap of terrible commitments.

1.1.1 Credit management practices

This seeks to assemble money inflows, delay money outpourings, invest money to acquire a return, get money at the best accessible rates, and keep up an ideal money level (Aminu, 2012), For improved credit and income management practices, an association can hold the ideal amount of money to give the firm a shot receive payment in due course . The main objective of loan management is to guarantee that an association tends to its required in order to avoid a financial crisis. Three qualities – moment, automated, and remote – underscore the intensity of digital credit and its ability to scale quickly (Horner, 2013).

According to a study done by Abdou and Pointon, (2011) noted that credit scoring models are calculated to contain only the variables that have a statistical significance and linked with loan settlement, but judgmental judgments are insignificantly linked and hence no availability in reduction of variable. The methods of credit scoring try to counteract the bias that comes from solely examining approved applications' repayment histories. They guess the successful rejection of applications would have been if accepted. Credit scoring methods incorporate both excellent and poor payers. Taylor (2013) revealed that loan appraisal and the resultant decisions on lending are automated and are based on data that is not the normal credit information used by banks. The approach adopted by the digital lenders is that all data is considered relevant for lending purposes and there is the reliance on alternative algorithms in determining whether or not to lend to borrowers. The data that is commonly used includes mobile phone utilization, mobile payments usage, airtime usage, data obtained from the borrower' s digital networking websites accounts. Typically, digital lenders do not require any collateral to offer loans. Rather they utilise the user data to evaluate their viability and their risk status. The loans are disbursed automatically as the resultant resolution to issue the loan is automated. This is the key distinguishing factor from the traditional bank loans which takes some time to be approved as the loan appraisal undergoes a human facilitated process. The loans are disbursed using mobile money services which currently include Mpesa, Airtel Money, and others. This creates and additional layer of terms of service (from service vendors) that digital lenders must deal with. Mobile money transfer service providers set their terms of service and establish their own fees, which are not regulated and usually vary from one provider to another (Veljanovski, 2010).

Consumer protection is one of the important aspect of regulation of financial service markets. Due to the result of the global financial crisis, consumer protection has become a key and essential aspect of regulation.88 It is essential that consumers are protected from abusive practices and enabled to make well informed decisions regarding the use of financial products and services.89 A strong consumer protection regime is key to ensure increased access to credit and it ensures that the consumers trust the products being offered. Even in the effort to deepen financial inclusion, there is need to ensure complementary financial consumer protection.90. The challenge the regulators are likely to face is the balancing of the interest of consumers by providing consumer protection measures that imposing measures of fair and proper treatment against expanding of financial markets to ensure financial inclusion.91 Regulation may be costly as it is a barrier to emerging financial markets especially financial technology markets. It is necessary that consumers should be protected however regulators should ensure that the price of regulation is not too costly and that the regulations are not too stringent to prevent innovation and product development.

Financial literacy initiatives are a significant policy instrument that is now being utilized to bring the most economically deprived groups in the PRC into the financial mainstream. (Klapper and Singer, 2014). In a recent study, Lyons and Kass-Hanna (2018) investigated into how financial literacy affects the financial presence of economically disadvantaged people in MENA (women, youth, the less educated, poor, and refugees). Financial inclusion was measured using savings and borrowing habits. Individuals in MENA countries with greater financial literacy were more likely to engage in healthy saving habits and borrow officially. They were less inclined to borrow on the side. Economically disadvantaged people, on the other hand, were less sensitive to the effects of financial literacy than less vulnerable people. One rationale was that these people faced significant financial hurdles in the MENA area, particularly when it came to formal borrowing options. It was suggested that in order for interventions like financial literacy to be effective, these populations needed more focused and comprehensive programs to address the numerous barriers to financial inclusion. Lyons and Kass-Hanna (2018) also found that nations with superior financial and technical infrastructure, greater levels of human development, more political stability, and stronger legal rights have higher rates of financial inclusion.

Moreover, the industry is improving by producing apparatuses that assess credit[1] risk in[1] a assortment[1] context. They’ re moreover using credit subsidiaries to shift risk[1] efficiently[1] while protecting[1] consumer affiliation (Gakure, 2012). Taking everything into account, this examination will concentrate on digital credit management practices on credit scoring, loan review system, regulation and financial literacy, customer protection and limit system.

1.1.2 Lending decisions

Digital data ought to be used by lenders to make quick mechanical and more precise decisions. Digital lenders use orthodox data sources and advanced calculations investigation too rapidly acquire clients and make credit decisions. It’ s imperative for decision makers like business investigators, credit examiners and investment experts to research a companies' financial data as a pivotal apparatus for creating decision on whether the organization's financial performance meets their decision threshold (Stanga and Benjamin, 2014). One such significant instrument utilized in calculation and investigation of monetary proportions to measure the financial strength of an organization. In recent years, a strong emphasis on the need of data transparency has prompted discussions about how creditors utilize monetary statement data. In his study of the importance of income statements, Yap (2015) found that annual reports play a critical part in a creditor's choice to issue loans or not. Advancements in digital loaning are empowering fiscal service providers (FSPs) to supply superior items to the less fortunate customers in quicker, additional expense and fascinating manners. Governments are progressively boosting the development of digital loaning models as an approach to advertise and encourages more prominent income consideration to underserved communities and associations. Digital lending offers a great deal of advantages for FSPs to disregard. In spite of the way that joining digital loaning practices into a FSP's operations are regularly a troublesome procedure, any FSP can discover approaches to attempt to do so effectively. Besides, FSPs ought to discover approaches to attempt to do digital loaning in order to help themselves advance, scale, and contend during a speedily evolving landscape. Then again, FSPs overlook they do so at their own risk when it comes to digital financing. Clients' prospects are quickly altering and are being molded by their understanding in advanced mobile phones applications, fintechs, and web-based life.

Essentially, digital loaning offers a technique for FSPs to satisfy those evolving expectations. Be that as it might, there's a hole amid the vision of completely combined digital loaning and real factors that conventional lenders ought to successfully steer to whole that institutional change. This guide tends to address essential concerns, shares bits of knowledge of new patterns forming digital lending, and distils developing procedures into a system that FSPs can employ to execute digital financing currently.

Opportunities in the market are tremendous: a report in 2016 by KPMG established alternate finance 2 comprehensive had grown to become a multi billion sector, forming into 264% in just a solitary year, from 2014-2015.3 In various cases, littler fintech new organizations have contended with this loaning space. Notwithstanding, fintech players alone can't satisfy the requirement for advanced credit, as they are subject to trials with financing and authorizing that limit their thing duties (Stanga& Benjamin, 2014). Computerized loaning is in addition a huge resource in the overall advantage for make a monetarily thorough world and flexibly the three billion individuals kept separate from or insufficiently attended by the formal money related area with the contraptions they have to improve lives. By widening even more quality administrations, comprehensive computerized banks can encourage more prominent social and financial improvement, guaranteeing that people and independent ventures can create a greatly improved world (Chen and Hsu, 2015).

1.1.3 Self-regulation

Self-regulation is a widely used industry method for resolving a variety of industry challenges, ranging from creating professional standards to formulating, implementing, and enforcing a code of professional ethics and fostering customer trust. It is possible that self-regulation is preferable to governmental regulation especially in instances where regulation is on technical and highly specialized issues. As digital lending and its associated risks are technologically driven, the industry players can utilize their expertise in formulating Regulation that is adaptable and can be modified quickly in response to changing circumstances technological changes. It is recommended that the Digital Lenders Association of Kenya (DLAK) be recognized in law within the context of newly developed laws and regulations. With the creation of an underlying

52 legislation, the entity will obtain a stronger legal position along the same lines as the laws giving mandate to the LSK and ICPAK.

For self-regulation to be effective, DLAK should be mandated to exercise some direct oversight responsibility over the digital lenders. Furthermore, when executing its powers and assigned tasks, DLAK shall be subject to the regulator's scrutiny, in this example CBK or the Ministry of Finance's Microfinance Unit, and it should adhere to norms of fairness and secrecy.

The rise of digital credit as a new frontier in the credit market has led in the establishment of a self-regulatory body that will apply industry best practices in the right directions. One of the most convincing regulatory arguments in favor of sector self-regulation is that government intervention in fixing a company's systemic problems is almost always ex post rather than ex ante.

However, just as there are numerous self-regulatory organizations, the core of the association should be more than ex-ante. First and foremost, the creation of a more inclusive fintech sector has long been a priority of Kenya's financial sector. However, according to several media reports, the behavior of a number of digital lenders has been questioned, notably in relation to debt collection tactics. As a consequence, by matching the long-term aims of members collectively with the interests of industry customers, the organization should contribute to the improvement of market trust in the sector.

Second, one of the most serious issues confronting the digital lending sector is a lack of regulatory supervision. Members of the organization are free from the central bank's strict regulatory system because they are not deposit-taking institutions, as shown by the 12 founding members. To do so, the association must practice self-regulation, which includes conducting regular financial, systemic, and operational risk evaluations to examine the stability of digital financial institutions and the market as a whole. Researchers are pondering whether the widespread use of digital loans may lead to long-term improvements in happiness without putting borrowers under undue financial strain or exposing them to needless risks. Finally, every self-regulatory framework's potential is always assessed in terms of how well it promotes participation, transparency, and accountability, which are the three fundamental elements of a self-regulatory approach. As a result, the organization must resist the self-regulatory impulse to promote members' short-term self-interest at the expense of long-term market trust. in order to maintain long-term market confidence.

The Self-Regulatory Organization (SRO) should facilitate sectoral stakeholder forums aimed at exchanging knowledge and enhancing the regulator’ s technical knowledge and understanding of the innovations and business models which in turn facilitates communication by the regulator on its expectations and concerns. The key challenge with self-regulation is the potential for conflict of interest as a result of access by DLAK to valuable information about digital lenders. The appointed regulator should ensure that there is management of conflict of interest through regulations and a conflict of interest policy should be created to ensure frequent declarations by the SRO. To ensure compliance there should be provisions made for inspections and surveillance by the regulator to ensure compliance with the set standards. The regulator should set strict sanctions and have enforcement powers to ensure strict compliance by the SRO

Due to constraints in banking accessibility, a lack of credit history, and a lack of papers that can serve as proof of cashflow, financial customers at the lowest end of the market are increasingly choosing for informal finance. As a result, they are locked out of the financial-banking system, leading to the fast rise of digital finance. More over a third of Kenya's adult mobile phone owners have used digital credit, with 64 percent of them being active borrowers, following a period of fast development in digital credit that began in 2013. In 2009, just one out of every ten individuals with a cellphone had ever taken out a formal bank loan.

1.1.4 Digital financial firms

We distinguish digital credit from conservative loans by recognizing three key attributes: digital credit is immediate, automatic, and distant (Chen and Mazer, 2016). Instant Digital lenders utilize digital data, for example, airtime top-ups, versatile call records, and application-based information on cell phones, on likely debtors to settle on moment credit decisions. From enlistment to application, disbursement, and repayment, loan specialist choices and activities are motorized dependent on preset boundaries.

Digital loaning services take three unique forms. To start with, is that the bank-sponsored portable loaning initiated by Safaricom[1] and Commercial[1] bank of[1] Africa named[1] M-Shwari in 2012, KCB-Mpesa by Kenya business bank presented in 2015, Eazzy banking by Equity bunch Finserve presented in 2016, MCo-operation Cash by Co-employable Bank presented in 2016, and Timiza pushed in 2018 by Barclays Bank (Kaffenberger, 2014). Additionally, loaning can be founded on portable applications by money related advancement firms, which structure the majority of the versatile administrations stage. These applications are downloaded from Google

Play store and Apple-store and they consolidate things like Tala, and Branch, which are bolstered by investors from Silicon Valley (FSD Kenya and national bank of Kenya, 2017).

Non-bank money related establishments have moreover grasped the versatile credits model as suppliers of the item. These consolidate microfinance establishments and Savings and Credit Cooperative Societies (Saccos), which have expanded their item portfolios through computerized acknowledge, benefits either along with a system administrator or through Fintech. Model is the Caricash versatile advances via Caritas Microfinance bank and M-advance by Kenya Bankers Sacco (Kaffenberger, 2014). Credit evaluation in the portable advancing movements with different versatile advances suppliers. One can acquire without having a record with the supplier, not at all like bank's systems where one must be a record holder.

Fintech stages like Branch, Tala, and Stawika utilize online life accounts, versatile data utilization examination, character stock and in this way the borrower's encouraging group of people to make a borrower's credit profile. This investigation will represent considerable authority in lending by versatile applications by financial innovation firms. Digital Lenders Association of Kenya (DLAK) and are 12 establishing individuals enrolls these firms

1.2 Statement of the problem

Many challenges face the digital loan service firms. In digital lending, there's no way for lenders to understand how many other loans borrowers have. The firms struggle with the increasing burden of bad debts. Murray (2011) points out that the bad loans are a frequent challenge in most nations, restricting businesses' capacity to issue loans and develop. Prudent management of the loan-book portfolio increases profitability and boosts the confidence of the sector's stakeholders, including investors and depositors. Similarly, the inability to manage credit risk effectively is the primary danger to the survival of a lending organization. (Murray, 2018).

Digital credit is resulting in over borrowing in Kenya, with a mobile phone many people have the equivalent of a bank account, which has brought about new wave of financial inclusion but this financial inclusivity is also resulting in financial exclusion. According to a study by FSD Kenya (2019), digital credit lending has changed the market for credit in Kenya, with mobile phones, automated credit scores, agent networks, and credit data sharing enabling digital lenders to offer loans rapidly and on a scale. Over 2.7 million Kenyans have negative listing credit bureau reports for late repayment or default (Nthiga and Simiyu, 2021). Due to late payment and defaulting, the credit worthiness of many borrowers is damaged thus they face blacklists by credit bureaus, which locks them out from accessing future credit.

Studies administered previously have shown that credit management practices play a crucial In industrialized countries, banks play an important influence in lending choices. Samreen and Zaidi (2013) investigated the development and evolution of a credit scoring model for Pakistani commercial banks, focusing on credit rating, credit history, sales growth, and debt advantage as research factors. Mabvure (2012) scrutinized the foundations of non-performing loans in Zimbabwe using variables as low capitalization, poor credit monitoring and price of borrowing. Nyorekwa (2014) studies the fiscal performance of banks in Tanzania. The variable studied are credit restrictions, fixed cash ratio, also as a minimum deposit and maximum lending rates.

The recent studies in Kenya also appears to coincide with previous studies conducted elsewhere. Mwithi (2012) administered a study[1] of credit[1] risk management[1] and the[1] level of NPLs the[1] variables here were[1] credit risk[1] management and[1] nonperforming[1] loans. Aduda et al (2012) carried out an investigation to identify the connection between SME's access to credit and credit scoring in banks in Kenya.

None of the studies listed above have investigated the factors that lead to a loan decision. Management of credit procedures, such as credit scoring, loan review systems, consumer protection, and financial literacy, is one such essential factor in determining lending decisions.. This study seeks to fill these gaps identified.

1.3 Objectives of the Study

1.3.1 General objective

The general objective of this study was to understand credit management practices on lending decisions by digital financial firms in Kenya.

1.3.2 Specific objectives.

i. To explore the effect of credit scoring on lending decision by digital financial firms
ii. To evaluate the effect of loan review practices on lending decision by digital financial firms
iii. To determine the effect of consumer protection on lending decision by digital financial firms
iv. To measure the effect of financial literacy on lending decision by digital financial firms
v. To examine the moderating effect of self-regulation on lending decision by digital financial firms

1.4 Research Questions

i. What's the effect of credit scoring on lending decision by digital financial firms?
ii. What's the effect of loan review practices on lending decision by digital financial?
iii. What's the effect of consumer protection on lending decision by digital financial firms?
iv. What's the effect of financial literacy on lending decision by digital financial firms?

v. What's the moderating effect of self-regulation on lending decisions by digital financial firms?

1.5 Significance of the Study

This study would offer empirical data for strategy to CBK in figuring sound policies for successful operations of digital firms. The result of the study may moreover be useful to other non-banking organizations on the best lending operations practices to receive risk from lending.

The study would offer information to digital firms on how and whether credit analysis might be effective to attenuate the extent of non-performing loans of digital credit firms. It will likewise provide recommendations while in transit to assess and recover the loans given to customers.

The findings in this study additionally would be of great value to future researches since it provides a ground for further related research inside the area of credit risk and decision-production. This may likewise increase the overall collection of data and create a reason for extra exploration.

1.6 Scope of the Study

The[1] study targeted mobile application digital financial firms in Kenya. There are 12 digital financial firms headquartered in Nairobi, Kenya. The study was done for a three months' period. It targeted the chief executive officers (CEO), head of credit department, and credit officer in digital financial firms in Kenya.

1.7 Limitation of the Study

Different components hindered the achievement of the objectives hence the study was limited to variety of limitations. There might have been predisposition from the respondents who gave favorable results to the researcher or concealed some data thereby undermining the intended purpose of the study. The researcher overcame these limitations by guaranteeing respondents of confidentiality of the knowledge they provided. The researcher likewise got necessary permission from Nacosti and Kenyatta University to facilitate smooth process of research.

1.8 Organization of the Study

The research proposal covers the following chapters: The first chapter contains the background of the study, [1]problem statement, [1]aims and hypothesis. Influence of the study, delimitation and limitations[1] and of[1] the study. The second chapter concentrated on review of related literature involving the presentation, Theoretical review, Conceptual frameworks and Gaps in the Literature review. The third chapter concentrated on Research methodology comprising of the Research design, Target populace, sample size and examining process, Methods of data gathering, Legitimacy and reliability, Methods of data assessment and ethical deliberations.

The fourth chapter focuses on Research findings and Discussions. The last chapter includes an introduction, a summary of the findings, the study's conclusion, recommendations, and suggestions for further research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter discusses theoretical[1] and empirical[1] review of[1] literature. It also introduces the existing research gaps and eventually provides the conceptual framework.

2.2 Theoretical review

This[1] section discusses[1] the theories[1] developed by[1] scholars' and[1] their relevance[1] in guiding the concepts[1] of this[1] study. The[1] theoretical foundation[1] is essential[1] to the[1] study since[1] it helps understand[1] the concepts[1] under review[1] in the[1] study.

2.2.1 Financial Intermediation Theory

Gurley[1] and Shaw[1] (1960) coined the theory and It has been determined that financial intermediation is the mechanism through which people who have extra money may save them and those who have deficits have a source from which to borrow cash. Savings and borrowing, according to the idea, are the most essential operations of financial organizations, which they do on a daily basis. This implies that it is necessary to guarantee that individuals have access to financial services whenever and wherever they require them. Ndebbio (2004) points out that financial intermediation brings surplus units and deficit units together, allowing them to save and borrow at the same time, respectively. Therefore, according to this theory, depositors money is loaned to banks, which then loan money to borrowers. Honohan (2013) divides financial intermediaries into four categories based on four characteristics. Liabilities that are unrelated to portfolio performance make up the first group. The second category includes short-term deposits. Chequable deposits that can be converted on demand fall into the third category, whereas nontransferable assets and liabilities go into the fourth (MacDonald, 2015). We seek to maintain a constant flow of funds between deficit units as intermediaries and financial institutions. They act as intermediaries, generating specialized financial assets and selling them at rates that cover both production and opportunity costs. Profit equivalent to the cost of investing the same amount in a different venture (Gorton, 2015).

Depositors provide cash to financial institutions, which then lend to borrowers. The development of technology advances has guaranteed that even individuals living in remote regions may have access to financial services via platforms such as agency banking and mobile banking. Furthermore, low-income workers may get mobile loans when they need them, which is a fundamental feature of the intermediation hypothesis.

According to the idea, the purpose of financial institutions is to offer a platform for those with surplus cash to lend to those with deficits. As a result, this theory provides a solid foundation for comprehending financial advances.

The theory relates to credit scoring/credit history on lending decision in that it believes that the primary function of financial organizations is saving and borrowing. This means that there is a need to guarantee that individuals have access to financial services when they need them. Financial intermediation brings surplus and deficit units together, allowing them to save and borrow correspondingly.

2.2.2 Innovation Diffusion Theory

Rogers first proposed this theory in 1962 with the goal of identifying what minor variables contribute to the diffusion of breakthroughs across industries (Rogers, 2003). The hypothesis sought to describe the mechanism through which new technologies and ideas spread inside companies. According to Rogers, new technological adoption is a time-based process involving decision-making circumstances among members of a social setup. He defined the dissemination of innovation as five factors: awareness, interest, assessment, trial, and finally acceptance. According to Sevcik (2004), an innovation is a product or process that a particular social system perceives as novel in comparison to current ones. Because of this, Lundblad and Jeniffer (2003) idealize that before innovations can completely take shape in a market, their inputs and outputs must be quantifiable and satisfying to consumers. The technology should be reasonably simple to use in order to attract consumers.

The novel item features are the subject of Innovation Diffusion Theory (IDT). According to the idea, the acceptance of new technologies is determined by triability, complexity compatibility, observability, and relative benefit, which are necessary qualities that determine the successful diffusion of innovations (Mas and Morawczynski, 2009). This means that before they are adopted, technical tools should have such qualities. According to this study, technological advances should be simple to implement in order to adapt in the market. According to Liu and Li (2009), IDT is a good hypothesis that offers useful information on how innovations propagate and are adopted by consumers in an economy. The theory relates with the loan review system on lending decision as It depicts the process of adopting new technology advances in a social setting, which leads to a review of the lending system. Adoption of technology advancements implies a broadening of financial institutions' market base and lending decisions. Having said that, it is sufficient to say that the adoption of innovations has the potential to improve financial performance owing to larger markets. Such technologies like digital lending make banking transactions easier and more cost-effective than visiting traditional banking rooms.

2.2.3 Portfolio Theory

Credit obsessions can negatively influence financial performance. Therefore, a number of associations are efficiently looking for after quantitative approaches to deal with credit risk estimation. There is extra credit derivations to transfer risk productively while conserving client affiliations. Portfolio quality extents and benefit markers are adapted (Gakure, 2012).

This approach may entail assessing the standard of credit experiences, applying a credit hazard rating, and compiling the results of this evaluation in order to predict impending disasters. A good credit survey and an internal credit hazard rating procedure might be the cornerstone of the advantage by resource strategy. (Gakure et al., 2012). This strategy authorizes the board to spot variations in particular credits, or portfolio designs during in an ideal way dependent on the progressions perceived, credit distinguishing proof, credit audit, and credit hazard rating can make major adjustments to collection procedures or augmentation the management of credits in a convenient manner.

This hypothesis is related to customer insurance and regulation on lending decision just as financial literacy and limit system on lending decision. It includes employing a credit chance rating, and storing up the investigation[1] of this[1] examination[1] to distinguish[1] a collection's normal disaster. The advantage by resource method is a sound credit audit and inside credit chance rating. This system enables the administration to spot changes in solitary credits, or group designs in an opportune way.

2.3 Empirical review

2.3.1 Credit scoring and Lending Decision

Samreen and Zaidi (2013) investigated the development and design of a credit rating system for Pakistani commercial banks. The main goal of this research was to use credit-scoring algorithms to assess credit risk in Pakistani commercial banks. For example, out of 260 individual borrowers who had obtained individual credits from various commercial banks in Pakistan, 154 candidates had a clean credit history with no defaults, 51 candidates had a 30-day default, and 37 candidates had a 90-day default. This research discovered that the Credit Scoring Model for Individuals (CSMI) accurately assessed the financial soundness of individual debtors with a 100% accuracy rate and deemed high-risk advance applications to be safe before default in the vast majority of cases.

To deal with the aftereffects of the created credit scoring model, Samreen and Zaidi (2013) employed key relapse and discriminant. The precision rate of the Credit Scoring Model for people was 100%, while the precision rate for key relapse people was 95.2 percent. This led to the recommendation that advanced credit scoring systems be used in future research projects. It was then suggested an outsized data of individual borrowers for the conjecture and exactness of the outcomes generated by credit scoring algorithms.

In a separate analysis, Mabvure et al (2012) looked into why loans in Zimbabwe aren't functioning properly. CBZ Bank Limited was the subject of a contextual study that looked into how it was supervised. The information for the investigation was gathered through meetings and questionnaires. The research revealed that external factors are becoming increasingly important in affecting non-performing loans at CBZ Bank. Cataclysmic events, government methods, and the borrower's respectability were the guiding factors that resulted in non-performing loans.

Aduda et al., (2012) led a study in Kenya to look into the relationship between1 credit scoring1 by Kenyan banks1 and access1 to credit1 by small businesses. This was a useful research in which the investigators sought to find a link between the use of credit scoring and Kenyan banks' access to credit for SME advances. According to the National Bank of Kenya, a list research was conducted recalling all commercial banks in Kenya that were enrolled and allowed under the financial show as of December 31, 2009. The basic information gathered from the audit respondents was used in this evaluation. SPSS was used to break down the data.

The relationship between credit scoring and underwriting rates for small businesses was investigated using relapse analysis. The study assumes that there is a link between credit scoring by Kenyan banks and access to financing for small businesses in Kenya. The benefits of credit scoring include the ability to remember exactness for changing situations. Better evaluations are based on providing a better dynamic. Before making advances to SME applicants, banks should use credit appraisal processes, according to the report. This naturally improves banks' credit ratings.

Ng'etich et al., (2011) hypothesized that financing cost spread has an influence on bank performance resources because it determines the cost of credit imposed on borrowers. Loan fee laws have an influence on resource non-execution since they pick the financing cost spread in banks to assist alleviate moral risks associated with NPAs.

2.3.2 Loan review practices and Lending Decision

Murray (2011) observed that the board might assess its ability to get compensation from the bank's whole pool of benefits by employing advances, and that if done incorrectly, this can result in the decay of benefit returns and therefore money related execution of business banks in the United States. The need for business banks to assist their customer advance assessment method advised that cautious credit assessment of the advance up-and-comer before advance progressing with a state of surveying the examination. This investigation demonstrates that adherence to credit assessment courses of action in various business banks remains a challenge, which has an effect on the general money related execution of the concerned business banks.

Chernykh and Theodossiou (2011) performed research in Russia and found that the creditor should make good judgments when it comes to approving loans with the goal of increasing ROA, which would be achieved via interest income to be recognized. Gobi (2003) goes on to say that the lender should gather information about the potential borrower in order to make a solid and safe loan lending choice.

According to Dallami and Guigale (2009), financial performance is dependent on the ability of credit evaluation frameworks to properly manage client credit limits. Borrower risks such as over-reserving and insolvency are reduced through loan assessment. By considering the customer's monetary quality, financial evaluation history, and instalment designs, the credit appraisal provides banks with information on the rate of premiums to charge buyers so that they are not pushed too far into the corner. The credit assessment system's viability is determined by the procedures and processes used in the credit evaluation.

Bank credit evaluation techniques range from simple abstract methodologies to more sophisticated concepts such as reenactment and computer-generated models. The goal of these approaches is to ensure that consumers are examined before moving their credit, allowing them to pick the likelihood of a favorable return on the advance, which might have an impact on money-related performance at the banks in issue. The investigation discovered that a problem with certain business banks is how to carry out loaning methods, relying on bank executives from various banks who differentiate between budgetary execution documented by business banks.

An investigation into the elements that influence commercial banks' financial performance discovered that loan inspection is critical in influencing their financial success. According to Ochieng (2012), banks are institutions that develop as a result of market imperfections. As a result, it is recommended that banks can mitigate the consequences of reducing interest rate advantage by changing strategic strategies or revising loan misfortune arrangements through loan assessment. According to the findings, commercial banks are unable to identify the proper consumers for loan progression.

The purpose behind advance assessment, according to Owino (2012), is to analyze the possibility that the advance asset to be provided to customers has a greater premium edge that promotes credit defaults. expanded profit for resources thus budgetary execution of the business banks. It fuses evaluating the borrower's requirements and money related circumstances that perceives the borrower's character, limit, security, capital thus forward.

Intrigued banks will envision that the advance competitor should have contributed from their own benefits and to have experienced individual money related hazard to choose the business before impelling any credit. This assessment perceived that the impediment of credit assessment is data irregularity that spells destiny on the accomplishment of totally studying the advance competitor because of shrouded information and history of the debtor that may have assisted in appropriate assessment of the client prior advance progression to keep up a vital good way from loss of profits on credit resources offered to the market.

The borrower's character, comprehension and skill to deal with the business and to employ the advantages for the point that they're advanced are usually mulled over. There was an opening with how the advance assessment could be set up if the bank's loaning could be insufficient or over the top concerning the need to cause issues.

2.3.3 Consumer Protection and Lending Decision

Cain, Loewenstein, and Moore (2011) discovered confirmation that, advisers with contending interests give more prejudiced advice than in the absence of disclosures. This overblown advice, together with poor limiting by advisees as expressed in the past segment, realizes advisees earning lower adjustments when irreconcilable circumstances are disclosed than when they are not uncovered. Cain, Loewenstein, and Moore (2011) have recommended two fundamental reasons behind the inadequate limiting. To begin with, conflicted advice can fill in as a grapple to the decision toward a suggestion. Second it is impossible that people would figure out how to coordinate the uncovered irreconcilable circumstance data into their decision-creation procedure and modify their decisions appropriately.

Jones, Loibl and Tennyson (2012) assess the effect of enhancements delegated by the CARD Act on client reclamation decisions dependent on month to month survey data from 300– 500 households month to month. Jones, Loibl and Tennyson (2012) infer that the likelihood of a nuclear family dealing with its most current credit card bill in full improved definitely (with a variance somewhere in the range of 3.8% and 4.8%) after the new revelation. The likelihood of skipping payment is about 1% to 1.5% lower after the CARD has been unveiled. However, there is negligible confirmation of debt repayment behavior among the people who keep on conveying debts.

In another examination, Salisbury (2014) inspects the effect of payment admonitions on repayment direct. The examination finds that the divulgence of data on the expense of paying only the base payment has no effect on reimbursement conduct of the respondents. However, when the base payment is trailed by data on alternate course of reimbursement that would pay off in three years, clients are will undoubtedly pay the whole close to the three-year repayment sum. Salisbury (2014) likewise depicts a potential "backfire effect" since people who may have paid more than the three-year limit sum are less disposed to do so when the three-year entirety is present.

Chater, Huck, and Inderst (2010) led out an examination office investigation in which 484 individuals from three European Union nations (Czech Republic, Germany, UK) played a speculation game with course either from a tangled guide or from a non-clashed instructor. They find a tremendous distinction on the disclosing advocate motivating forces. In one endeavour, advisees choose a choice as for the aggregate they will spend through unsafe speculation. Advisees contribute about EUR 900 less when they have a tangled guide, paid dependent on their venture entire than when their advocate is paid a level expense. In another task, advisees need to assign their advantages into two speculations, one better than the other. Right when it is revealed that their advocates have a beyond reconciliation circumstance, advisees trust the proposals less, whether or not the recommendation is the perfect venture. Advisees put about EUR 1.600 less in the perfect venture when the tangled instructor proposes it than when a non-clashed advisor suggests it.

Lotto (2018) conducted an examination to take a gander at the effect on capital guideline on bank working efficiently in Tanzania. The examination utilized bank level information for the period somewhere in the range of 2008 and 2014. The discoveries show an optimistic and noteworthy connection among capital extent and bank operating effectiveness as a sign that commercial banks in Tanzania with increasingly severe capital guidelines are more operationally productive. This affiliation recommends that capital ampleness doesn't simply strengthen financial soundness by giving a greater capital but by working efficiency by preventing moral danger issue among investors and debt holders. This outcome inferred that the expanded guidelines on capital prerequisites sway the decision of the bank to return to their inner operations strategy to the extent strong corporate organization, risk evaluation techniques, credit assessment processes, engagement of more competent staffs, and upgraded internal control strategies.

2.3.4 Financial literacy and Lending Decision

Agarwal *et al*., (2010) conducted an investigation to see the effect of a required monetary proficiency on credit reimbursement for[1] urban female[1] microfinance consumers[1] in India[1] and perceived[1] that microfinance[1] packs that got advance education getting ready had higher reimbursement execution, affirming the positive result of budgetary proficiency. Individuals in purposeful budgetary getting ready program[1] are likely[1] going to[1] fall behind[1] on their[1] home loan installments showing that extended money related education accomplishes lower misconduct rates.

Private financial practices that incorporates sparing rehearses, use rehearses, obligation the executives, cash the board, retirement and unanticipated exhibits of the laborers who are monetarily instructed versus those that aren't were investigated by Nyamute *et al*., (2011). There is noteworthy distinction between the private money related administration practices of the fund and non-account proficient respondents.

Amisi (2012) investigated the association between budgetary education and the influence of the components that impact a venture choice. The monetary education level was found to hugy affect speculation dynamic by the DTMFIs. Since these choices are advancing, anticipating that individuals should discontinuously, screen and evaluate the exhibition of the chosen investment choice and speculation whether to change to an alternate investment choice.

Mutegi, Njeru, and Ongesa (2015) examined the impacts of the EGF's educational program on small business loan repayment. The goal of the study was to determine how much bookkeeping, credit management, and budgeting skills influence loan payback. The study was conducted on small businesses in Ngara, Nairobi County, with 40 out of 300 small businesses participating. A questionnaire was the most common data gathering tool. Studies have shown that the skills listed above have a significant impact on the ability of small businesses to repay loans.

Discoveries of the examination prescribe that small enterprises who have next to zero financial literacy preparing should get together with related projects to strengthen their abilities. There is need to begin more projects to reach more numerous small enterprises for legitimate credit the board, improvement of advances reimbursement, a suitable comprehension of fiscal summaries because of monetary examination capacities and appropriate dynamic and hazard the board.

In Rwanda Musabwasoni et al (2018) studied impact of fiscal education a case of Inoza mihigo Umurenge Sacco on loan repayment among small companies of Microfinance Institutions Yamane's formula was used to identify a sample of 178 from a population of 320, which comprised SMEs from Inoza mihigo Sacco in Nyaruguru District. The population was chosen and surveys were given using a purposeful and sampling approach. SPSS software was used to examine the data. The affiliation and effect of financial education on loan repayment among small companies of Umurenge Saccos were assessed using a variety of approaches. The findings revealed a strong link between literacy in bookkeeping, organizing, and debt management and loan payback. Furthermore, R-squared was 77.2 percent, implying that financial literacy variables accounted for a higher percentage of loan repayment types.

2.4 Research Gaps

The question of the direction of connection between credit management and lending decisions is a long way from being resolved. The researcher's fundamental objective right now to address this huge hole by offering an intensive overview of the role of credit management in lending decisions. Financial education among the clients affects loan repayment of the finances obtained. Financial education owners of MFIs are motivated to take loans and pay them. However, the examination was done in Kenya not in Rwanda. What's more, the examination concerned the customer's in general not little and medium entrepreneurs, as it is the case for this investigation. Research done by Vickery (2012) say that financial education is a significant determinant of loan repayment. However, some other studies, for example, Barua and Sane (2014) found no connection on financial literacy and loan repayment. Truth be told, there is mixed evidence as financial literacy and loan repayment is concerned. More, the research has been conducted in the context other than Rwanda. Few researches had been conducted on the area of credit management especially on lending decisions of digital firms in Kenya. This investigation targets filling this hole by leading an analysis on[1] the effect[1] of management[1] of credit on lending decision by digital financial firms in Kenya.

Table 2.1: Summary of literature review Research Gap

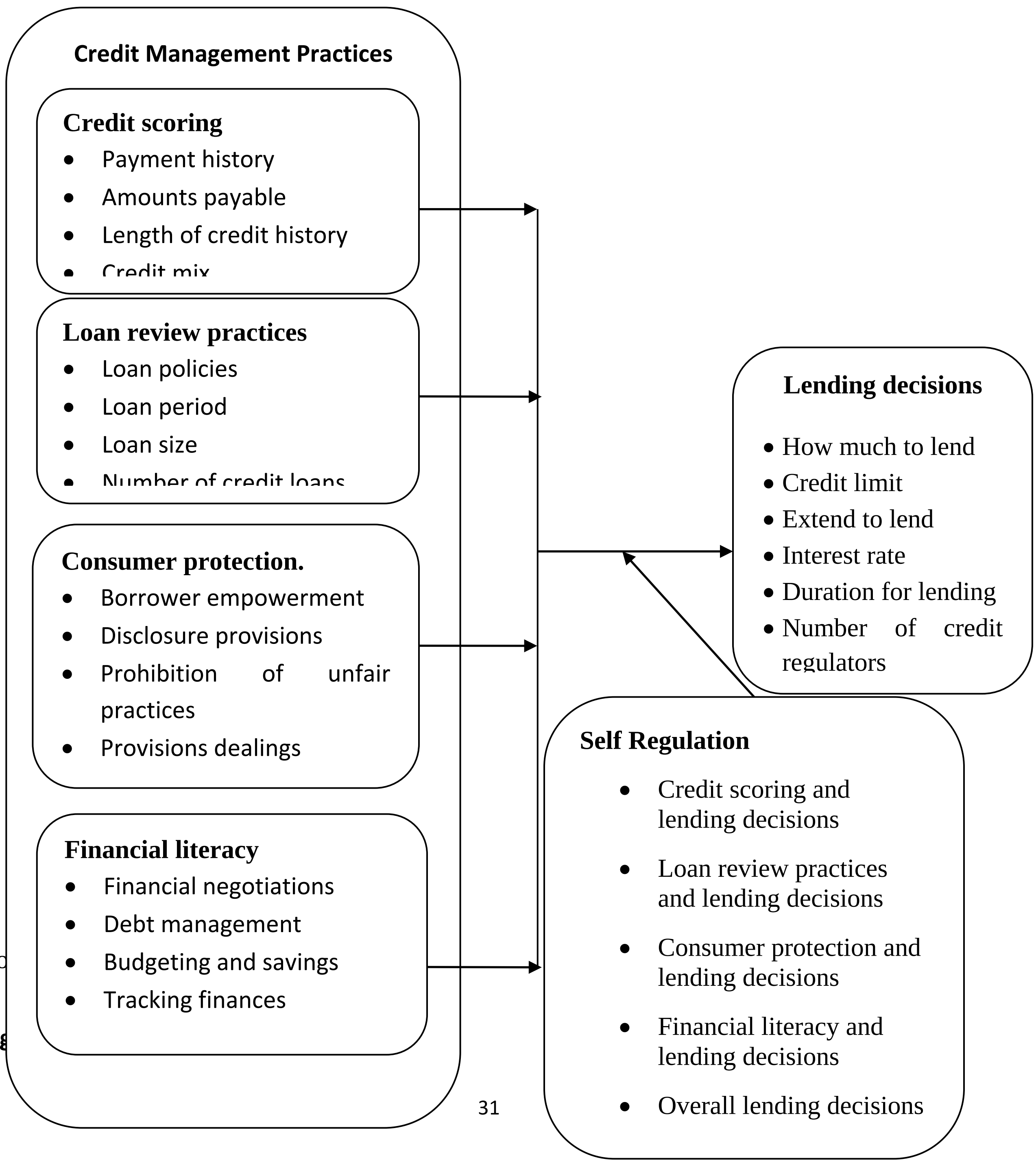
Author(year)	Title of the study	Findings	Knowledge gaps
Gatakaa (2010)	The affiliation between among management practices and fiscal education	Financial education influences lending decisions by increasing loan approval facilities	A gap exists in determination of the importance of access to personal financial information from banks since it is not covered by the study
Murray (2011)	Influence of client loan appraisal on	By means of credit examination; the board can	The study focuses only on commercial

	fiscal performance of apprehensive commercial banks	check its capacity to create income from the all out pool of benefits, that if not very much done bringing about a decay on resource returns in this way money related execution	banks
Aduda, Magutu&Wangu (2012)	The connection between access to credit by small initiatives in Kenya and credit scoring by Kenyan banks and	The advantages picked up from the utilization of credit scoring remember exactness for the dynamic procedure.	This study is limited to SMEs in Kenya. Further studies should look into the broader financial sector
Owino (2012)	Effect on lending policies on loan defaults to commercial banks	Hindrance to loan appraisal could negatively affect the success of loan applicant' s full assessment	Further examination should be carried out on other lending organizations other than commercial banks
Samreen and Zaidi (2013)	The[1] design[1] and development[1] of credit[1] scoring model for[1] the commercial banks in Pakistan[1]	Credit[1] Scoring Model[1] for Individuals[1] (CSMI) assessed[1] the creditworthiness[1] of individual [1]borrowers with 100% accuracy[1]	This study is limited to commercial banks in Pakistan
Salisbury (2014)	Title: the influence of minimum payment warnings on repayment conduct	Disclosing data on the costs of paying only the lowest payment (both interest costs and long payoff duration) has no influence on repayment conduct	The study does not reveal about individual lending organizations
Mutegi, Njeru and Ongesa (2015)	Impact of EGF' s training program on loan reimbursement by small enterprises in Rwanda	Credit management and budgeting skills impact on loan repayment	The study uses a case study of Rwanda, further investigation should be done to investigate effects of the training program on loan repayments by small enterprise in Kenya

Source: Author (2019)

2.5 Conceptual Framework

The independent variables will be credit scoring, loan review, consumer protection and financial literacy. The dependent variables will be the lending decisions.



Sc

Fig

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section focuses on the research design and methods employed. The chapter presents Research design, Empirical model, the target population, the sampling, Data collection and Data analysis, Research instruments and Research Ethics.

3.2 Research Design

The report used a descriptive research design. Descriptive experiments seek to explain something that is ordinarily market-specific or handy (Kothari, 2007). This takes into consideration the identification of the parameters of a phenomenon at a particular point in time, with the objective of acquiring precise means of catching the characteristics of a populace at a single point in time related to what, where, how, who and when of a research subject (Cooper and Schindler, 2005). The discoveries of the investigation would help to generalize the populace as a whole

3.3. Operationalization and Measurement of Variables.

Operationalization is the procedure of carefully defining variables into quantifiable components. The process defines concepts and permits them to measure data empirically and quantitatively. The operational definitions of variables for the current investigation is it appears in the table as shown below.

Table 3.1 Operational and Measurements of Variables

Type of Variable	Name of the Variable	Indicators	Measurement

Independent[1] Variable	Credit Scoring	Payment history Amounts payable Length of credit history Credit mix	Likert scale 1-5
Independent Variable	Loan Review System	Loan policies Loan period Loan size Common careers	Likert scale of 1-5
Independent Variable	Consumer Protection and Regulation	Borrower empowerment Disclosure provisions Prohibition of unfair practices Provisions dealings	Likert scale of 1-5
Independent Variable	Financial Literacy and Capacity System	Financial negotiations Debt management Budgeting & savings Tracking finances	Likert scale of 1-5
Dependent variable	Lending decisions	Credit limit available for lending The interest rate to be charged on the loan Duration through which the loan will last Number of credits	Likert scale of 1-5z

Moderating variable	Regulation	Self-regulation	Likert scale of 1-5

3.4 Target Population

Target populace is a set of people, cases/objects with some basic visible features of a specific nature particular from other populace. The examination targeted the chief executive officers (CEO), head of credit department, and credit officer in digital financial firms in Kenya. There are 12 digital financial firms registered under Digital Lenders Association of Kenya (DLAK) head quartered in Nairobi, Kenya. The lending firms are O-kolea, L-Pesa Tala, Kopacent, Zenka Finance, Stawika Capital, Alternative Circle, My Credit, FourKings, FourKings[1] Investment Sotiwa, [1]Mobile Financial[1] Solutions, Kuwazo[1] Capital and[1] Finance Plan[1] Limited.

3.5 Sampling

This examination embraced census-sampling[1] technique to[1] identify the[1] respondents. Census sampling[1] technique targets[1] a specific gathering[1] of people[1] of less[1] than 200 population[1] size, investigation[1] of association, [1]network, or some[1] other clearly[1] defined and[1] relatively[1] limited gathering (Patton, 1990). Therefore, all the 36 respondents comprised the sample scope of the study. The 36 respondents included just the CEOs, head of credit, and credit risk officer from digital lending companies in Kenya as it appears as in the table shown below

Table 3.2. Sample Size

Target population	CEO	Head of credit	Credit risk officer	Sample size
O-kolea	1	1	1	3
L-Pesa Tala	1	1	1	3
Kopacent	1	1	1	3
Zenka Finance	1	1	1	3
Stawika Capital	1	1	1	3
Alternative Circle	1	1	1	3
My Credit	1	1	1	3
FourKings	1	1	1	3
FourKings[1] Investment Sotiwa	1	1	1	3
[1]Mobile Financial[1] Solutions	1	1	1	3
Kuwazo[1] Capital	1	1	1	3
Finance Plan[1] Limited	1	1	1	3
Total	12	12	12	36

Source : Researcher (2020)

3.6 Validity of the Research instrument

Validity is the precision, adequacy or effectiveness of research apparatuses in estimating what it is proposed to measure (Creswell, 2013). Validity establishes whether or not the research accurately measures what it was designed to measure, as well as the accuracy of the results

(Joppe, 2000). If the study only contains the expected outcomes, it has a high level of validity. The typical technique for assessing the content validity of a measure, according to Mugenda & Mugenda (1999), is to use a professional expert in a certain area. A validity test can be used to determine what a questionnaire intends to collect (Newing, 2011). It encapsulates the discrepancies or congruence between reality and explanations. Respondents who are aware of credit management practices in digital lending firms were requested to respond to questionnaire questions for content validity. The questionnaires enhanced and refined for increased content validity. The supervisor was further requested to make input on the validity of the questionnaires with a view of improving the meaningfulness of the data.

3.7 Reliability Tests of Research Instruments

Similar research with a different group of participants produces a comparable set of results. Reliability is a statistic for assessing if the data provided is consistent with what was provided. 2011 (Sekaran & Bougie). Cronbach's alpha (Cronbach, 1951) was used to determine the internal consistency, or average correlation, of two independent variables in order to assess their reliability. A high alpha value of more than 0.7 was utilized to indicate that the variables had a high level of internal consistency.

3.8 Data Collection

The investigation sought to collect primary data that entails the information the researcher acquired from the field. Semi-structured questionnaires provided data needed to get significant data about the populace. The investigation administered online and manual questionnaires. The questionnaires contained closed ended and open-ended queries. Questionnaires were used since they provided an environment for the respondents and help the researcher to get data that would not have been given out had interviews been used.

3.9 Data Analysis

Data analysis is also defined as the process of using various statistical techniques to clean up data in order to provide useful information for decision-making (Cooper & Schindler, 2008). The collected data was edited and coded using SPSS. Methods of descriptive and inferential analysis were used. Frequencies, means, percentages, and standard deviation were used in the descriptive analysis. Inferential analysis, on the other hand, included correlation tests, regression tests, and ANOVA testing. The results of the analysis were provided in the form of charts, tables, and graphs. A linear regression analysis was done on the data set. Data on the determination of the correlation coefficient (R) and the determination coefficient (R2) of the variables were evaluated using the Pearson Product Moment. The analysis' results were organized, summarized, and shown using the results Tables.

3.9.1 Diagnostic tests

Certain assumptions regarding the variables utilized in the analysis are made by regression models. When these assumptions are not satisfied, the outcomes may be unsatisfactory reliable and may lead to biased parameter estimates. The accompanying tests were conducted

Normality

The assumption of normality is that the response variable's residuals are normally distributed around the mean. The Kolmogorov-Smirnov Test and the Shapiro-Wilk Test were used to determine this. The ratio of two estimates of the variance of a normal distribution based on a random sample of n observations is known as the Shapiro-Wilk Test. For this test, the null hypothesis is that the data are regularly distributed. The p-value is the Prob W value mentioned in the result. The null hypothesis that the data are normally distributed is rejected if the selected alpha level is 0.05 and the p-value is less than 0.05. The null hypothesis is not rejected if the p-value is larger than 0.05. The greatest difference between the actual and anticipated cumulative-normal distributions is used in the Kolmogorov smirnov test for normality. The Lilliefors' adjustment is employed because the anticipated normal distribution is calculated using the sample mean and standard deviation. The distribution is more likely to be normal if the greatest difference is modest.

Linearity

If the connections between the dependent and independent variables are linear, multiple regressions can properly predict the relationship (Tabachnick & Fidell, 2001). When the change or rate of change between two variables is consistent across the whole range of scores for the variables, it is said to be linear. Graphical and statistical approaches can be used to assess linearity. Scatter plots, which are sometimes superimposed with a trend line, are one example of graphical techniques. The linear correlation coefficient is one of the statistical approaches (Gupta, 2014).

The regression analysis findings will underestimate the real connection if the relationship between the independent variables (IV) and the dependent variable (DV) is not linear. This underestimating entails two risks: a higher probability of a Type II error for that IV and, in the case of multiple regression, a higher risk of Type I errors, or overestimation of other IVs that share variance with that IV (Field, 2009).

This study used a linear correlation coefficient to test for linearity in order to validate the linear relationship by looking at the positive direction, the strength of the coefficients, and the association's significance level.

Multicollinearity

The study used a multicollinearity test to confirm that the data gathered was free of bias and that the independent variables were not linked to one another. To test multicollinearity, the variance of inflation was employed. There is no multicollinearity when the VIF value is between 1 and 10, but there is multicollinearity when the VIF value is less than 1 or more than 10. When the test fails, the continuous variables should be standardized by selecting a standardization technique from the regression dialog box. You might, for example, use a variable centering technique.

Homoscedasticity

To test for homoscedasticity the Breusch– Pagan test was used to examine residuals, which involves doing an auxiliary regression of the squared residuals on the independent variables. In order to perform the Breusch– Pagan test, a p-Value > 0.05 indicates that the null hypothesis (the variance is unchanging in the residual) can be rejected and therefore heteroscedasticity exists.

3.9.2 Analytical Model

The empirical regression models that were adopted for this study to analyse the effects of credit management practices on lending decisions are as shown below.

According to Gupta (2017), the linear regression model is given as:

$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$ …………………model 1(reduced) direct relationship

Where;

Y = Dependent variable (lending decisions)

α = constant

X_1 = Credit scoring

X_2 = Loan review practices

X_3= Consumer protection

X_4= Financial literacy

ε = Error Term

The study utilized the above model to estimate the overall magnitude of the relationship between Credit management practices and lending decisions as well as estimate the effect of the individual independent variables on the lending decisions in digital financial firms.

According to schneider (2010) the multi-linear regression model utilized is as shown:

$Y= ß_0 + ß_1X + ß_2m + ß_3Xm + m\acute{\varepsilon}$………… Model2, (moderating relationship)

Whereby:

Y= Dependent variable

X = Independent variable, where X= (x1, x2 …xn)

m= Moderator variable

Xm=In terms of effect

ß0= Constant

ßi= Regression co-efficient of the independent variable where i=1, 2… n

e = Error term

The moderator influences the direction and intensity of the affiliation among the independent1 or predictor1 variable and1 the dependent1 criterion1 variable. The1 analysis utilized Regression Analysis (Stepwise Method) to1 examine the1 moderating influence1 of arrangement and credit management1 practices1 on the interaction among independent and dependent variables.

3.10 Research Ethics

Preceding data collection, researcher got a university letter, NACOSTI permit and the province letter to permit him to direct the investigation. The researcher likewise visited the respective firms and advise the general managers regarding his intention to direct the examination. The investment was voluntary in nature and the researcher guaranteed them that the data received was confidential and employed for academic purposes as it were.

CHAPTER FOUR:

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This[1] chapter presents[1] the data[1] that was[1] found in[1] credit[1] management[1] practices on[1] lending decisions[1] by digital[1] financial firms[1] in Kenya. The[1] research was[1] conducted[1] on a sample[1] of thirty-six respondents[1] to which[1] questionnaires were[1] administered. The[1] chapter introduces[1] with analysis[1] of general[1] information of[1] the respondents[1] and the[1] firms, and[1] then looks[1] into the analysis[1] of the study[1] objectives. Findings[1] from[1] open-ended[1] questions[1] were presented[1] in prose.[1]

4.2. Response Rate

This[1] section presents[1] information on[1] the questionnaires[1] that were[1] returned from[1] the field. Findings[1] on filled[1] in questionnaires[1] and unreturned[1] questionnaires are[1] presented in[1] Table below

Table 4.1 Response Rate

Response	Frequency	Percentage
Filled[1] in questionnaires[1]	30	83.3
Un[1] returned questionnaires[1]	6	16.7
Total Response Rate	**36**	**100**

Source: Researcher (2020)

Out[1] of the sampled[1] population, 30[1] questionnaires were[1] returned duly[1] filled in[1] making a response[1] rate of 83.3%. The[1] response rate[1] was representative[1] and was[1] adequately used[1] to answer[1] the research[1] questions. According[1] to Mugenda (2003) that[1] a response rate[1] above[1]

50% is[1] adequate for[1] analysis and[1] reporting; a[1] rate of 60% is[1] good and[1] a response rate[1] of 70% and[1] above is[1] excellent. [1]

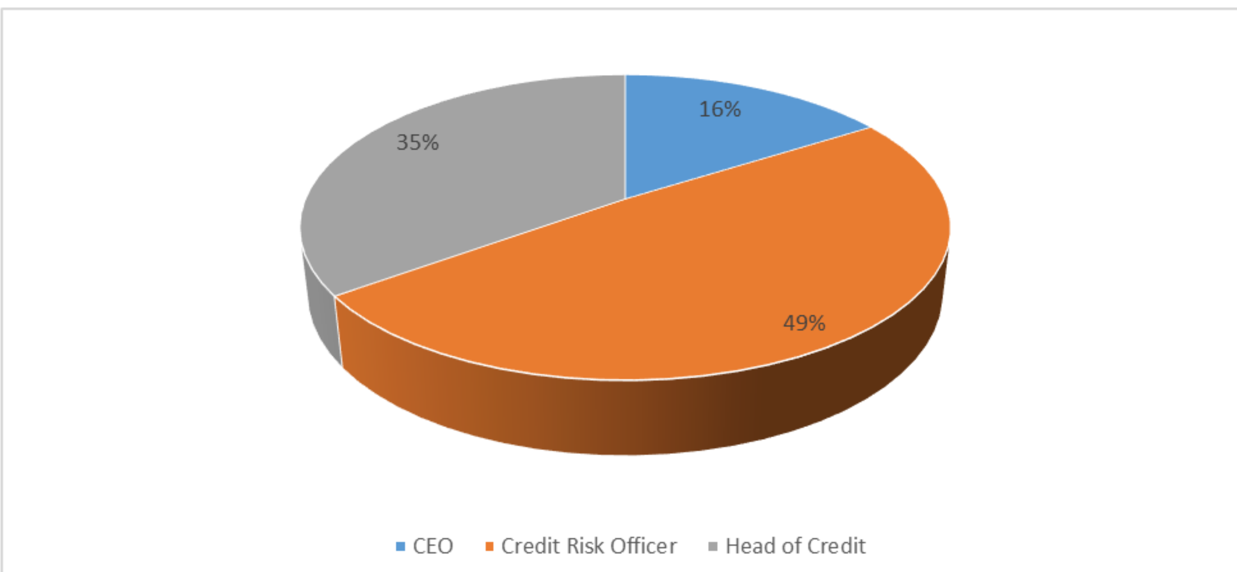
4.3. Bio data

The general information included current designation within the firm, period that the firm had been in operation, and average the proportion of non-performing loans of the digital credit firms in Kenya shillings.

4.3.1. Current Designation within the Firm

The[1] respondents were[1] requested to[1] indicate their[1] current designation[1] within the[1] firm. Accordingly, [1]the findings [1]are as[1] presented in[1] the figure[1] 4.2.

Figure 4.2 Current Designation within the Firm



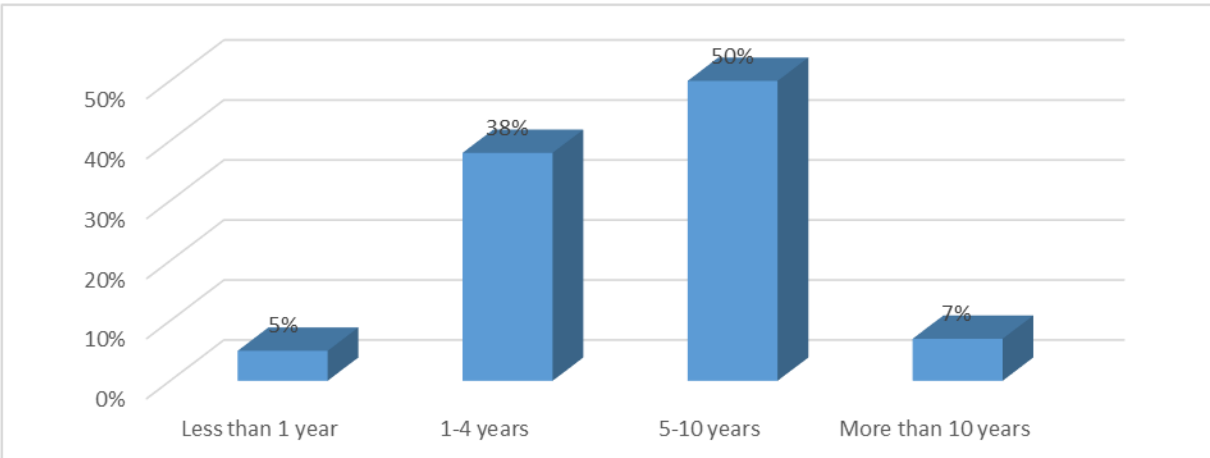
Source: Researcher (2020)

From the findings, most (49%) of the respondents were credit officers, 35% were head of credit, while 16% were the CEOs. This[1] implies that[1] majority of[1] the respondents[1] were credit[1] officers and[1] thus were[1] in a position[1] to offer more[1] credible [1]information required for the study.

4.3.2. Period the Firm Has Been in Operation

The respondents were requested to indicate the period that their firm has been in operation. The findings are as shown in figure 4.3

Figure 4.3 Period the Firm Has Been in Operation



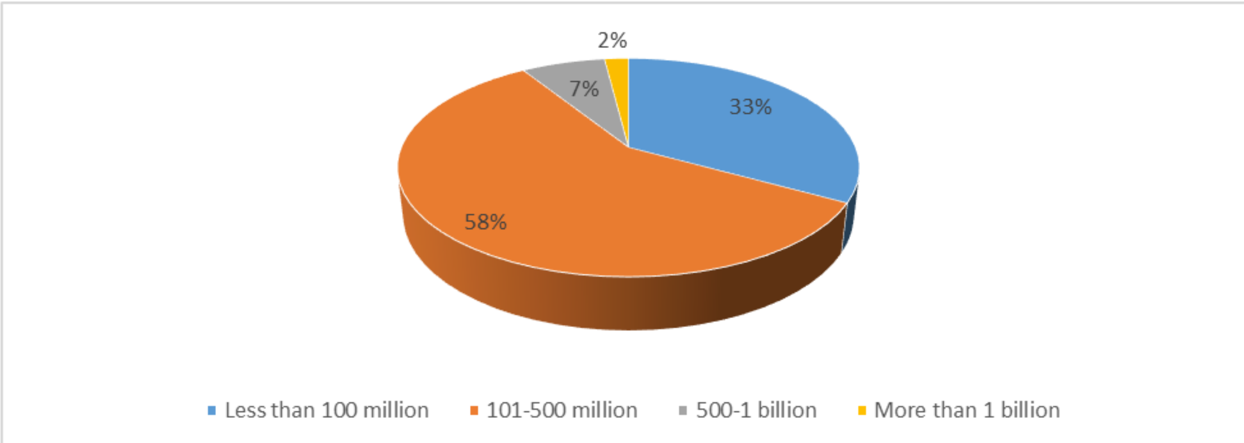
Source: Researcher (2020)

From[1] the[1] findings[1] majority[1] (50%) of[1] the respondents[1] indicated that[1] their[1] firm had[1] been in operation[1] for a[1] duration[1] of 5-10[1] years, 38%[1] indicated[1] 1-4 years, 7%[1] indicated [1]more[1] than 10[1] years, while[1] 5% indicated[1] less than[1] 1 year. This[1] depicts [1]that most[1] of the[1] firm' s had[1] been[1] in operation[1] for a[1] long duration[1] and thus[1] high chances[1] of getting[1] credible[1] information.[1]

4.3.3. Average Level of Non-Performing Loans

The[1] respondents were[1] requested to[1] indicate the[1] average the proportion of non-performing loans of the digital credit firms in Kenya shillings. The[1] findings are[1] shown in[1] figure 4.4.

Figure 4.4 Average Level of Non-Performing Loans



Source: Researcher (2020)

From[1] the findings[1] majority (58%) of[1] the respondents[1] indicated that[1] the average[1] level of[1] non-performing[1] loans of[1] the digital[1] credit firms[1] in Kenya shillings was between 101-500 million, 33% indicated less than 100 million, 7% indicated 500-1 billion, while 2% indicated over 1 billion. This depicts that the average level of non-performing loans of the digital credit firms in Kenya shillings was between 101-500 million.

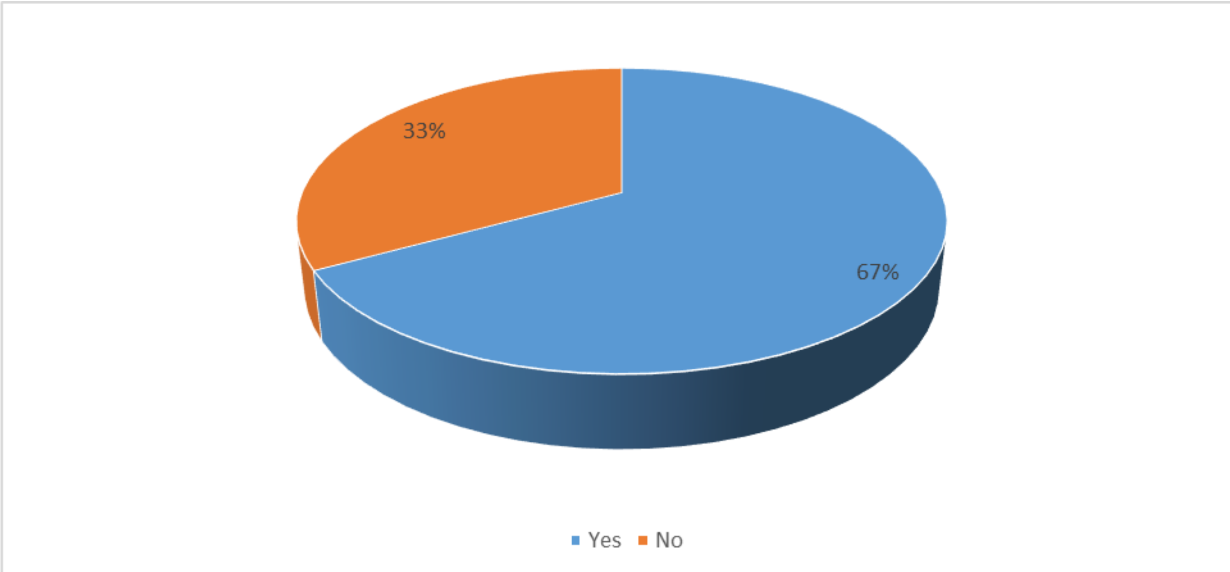
4.4. Credit Scoring

This section presents findings on credit scoring which are presented in the following subsection:

4.4.1. Credit Policies for Managing Loan Risks

The[1] respondents were[1] requested to[1] indicate whether[1] their organization[1] have specific[1] credit policies for managing loan risks. The findings are shown in the figure 4.5

Figure 4.5 Credit Policies for Managing Loan Risks



Source: Researcher (2020)

From[1] the findings[1] majority (67%) of[1] the respondents[1] indicated that[1] their organization[1] have specific[1] credit policies[1] for managing[1] loan risks[1] while 33% were[1] of the[1] contrary[1] opinion. This [1]depicts that[1] the organization[1] have specific credit[1] policies for[1] managing loan[1] risks.

4.4.2. Credit Scoring and Lending Decisions

The respondents were requested to indicate the extent to which indicators of credit scoring play influence lending decisions. The[1] findings are[1] shown in[1] table 4.4.[1]

Table 4.2. Credit Scoring and Lending Decisions

Statements	Mean	Std. Dev
Payment history	3.66	0.2569
Amounts payable	3.72	0.2378
Length of credit history	3.86	0.2109

Credit mix	3.57	0.2245

Source: Researcher (2020)

From[1] the findings[1] the respondents[1] agreed to[1] a great extent[1] that the[1]length of credit history is considered in decision making (mean=3.86), followed by amounts payable (mean=3.72), the payment history (mean=3.66) and credit mix (mean=3.57). This depicts that to a great extent, the length of credit history is considered in lending decision making.

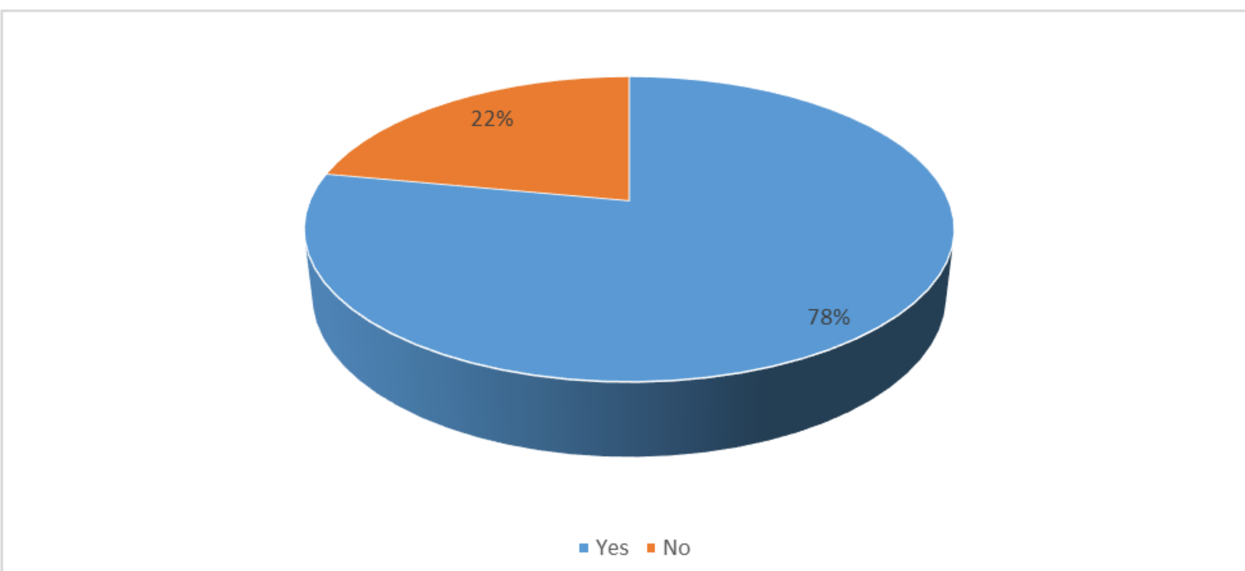
4.5. Loan Review Practices

This[1] section presents[1] findings on[1] loan review[1] practices which[1] are provided in the following subsections:

4.5.1. Loan Review System to Reduce Loan Defaults

The respondents were requested to indicate whether they have loan review system to reduce loan defaults. The[1] findings are[1] shown in[1] figure 4.6.[1]

Figure 4.6 Loan Review System to Reduce Loan Defaults



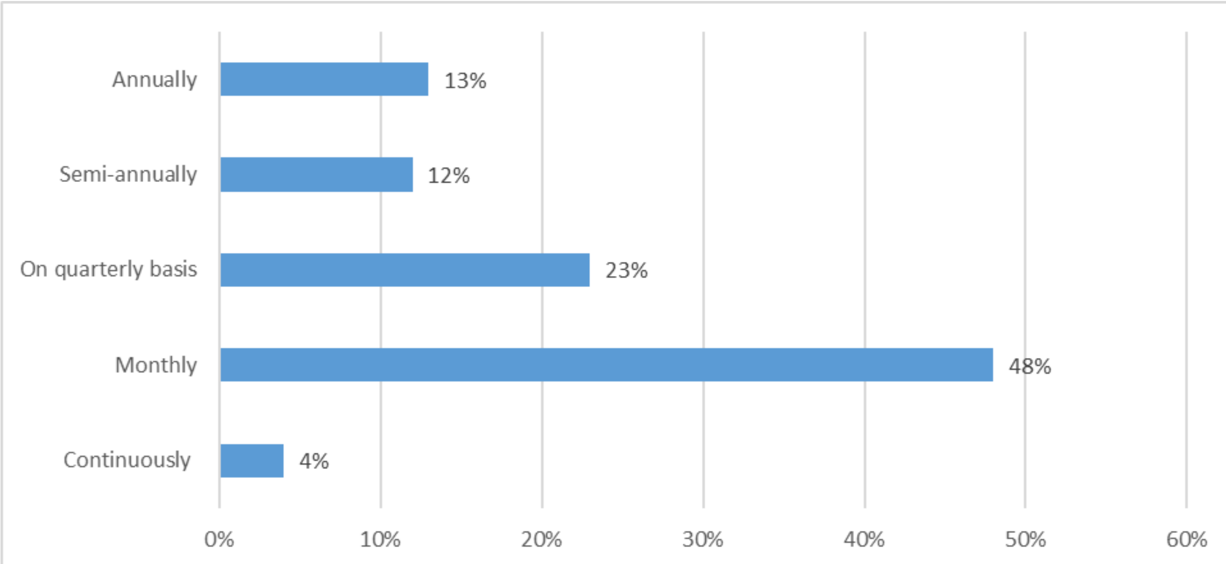
Source: Researcher (2020)

From the findings majority (78%) of the respondents indicated that they had loan review system to reduce loan defaults while 22% were of the[1] contrary[1] opinion. This [1]depicst that[1] the firms had a loan review system to reduce loan defaults.

4.5.2. Frequency of Loan Review System in the Company

The[1] respondents were[1] requested to[1] indicate how[1] often is the loan review system done in their[1] company. The[1] findings are[1] shown in[1] figure 4.7.[1]

Figure 4.7 Frequency of Loan Review System in the Company



Source: Researcher (2020)

From[1] the findings[1] most (48%) of[1] the respondents[1] indicated that[1] the loan[1] review[1] system is done monthly, 23% indicated quarterly basis, 13% indicated annually, 12% indicated semi-annually, while 4% indicated continuously. This depicts that loan review system is done monthly in most of the companies.

4.5.3. Loan Review practices and Lending Decisions

The respondents were requested to indicate to what degree are the subsequent issues of loan review practices considered in making lending decisions. The findings are shown in table 4.3

Table 4.3. Loan Review System Considered in Making Lending Decisions

Loan Review System	Mean	Std. Dev
Loan policies	3.95	0.1834
Loan period	4.12	0.1324

Loan size	3.73	0.2081
Number of credit loans	3.89	0.2002

Source: Researcher (2020)

From[1] the findings[1] the respondents[1] indicated to[1] a great extent[1] the loan period is considered in decision making (mean=4.12), followed by the Loan policies (mean=3.95), number of credit loans (mean=3.89), (mean=3.8), and loan size (mean=3.73). This depicts that to a great extent that the loan period is considered in decision making.

4.6. Consumer Protection

This section presents findings on consumer protection which are presented in the following subsections:

4.6.1. Consumer Protection and Lending Decisions

The[1] respondents were[1] requested to[1] indicated the[1] extent to[1] which the[1] following issues[1] on consumer protection and regulation considered in making lending decisions. The findings are shown in table 4.4

Table 4.4. Consumer Protection and Lending Decisions

Consumer Protection And Regulation	Mean	Std. Dev
Borrower empowerment	3.52	0.8901
Disclosure provisions	3.68	0.7723
Prohibition of unfair practices	3.58	0.9240
Provisions dealings	3.72	0.8245

Source: Researcher (2020)

From[1] the findings[1] the respondents[1] agreed to[1] a great[1] extent that[1] provisions dealings are considered in decision making (mean=3.72), followed by disclosure provisions (mean=3.68), prohibition of unfair practices (mean=3.58), and borrower empowerment (mean=3.52). This depicts that to a great extent that provisions dealings are considered in decision making.

4.6.2. Measures to Protect the Consumers

The respondents were requested to indicate the measures the company has taken to protect consumers. According to the in-respondent' s measures to protect consumers include laws. Consumer protection laws in the company work to protect the consumers' against[1] improper[1] business practices. They[1] provide credit[1] protection, debt[1] collection[1] protection, identity[1] theft protection, and[1] bankruptcy and [1]reorganization protection. [1]

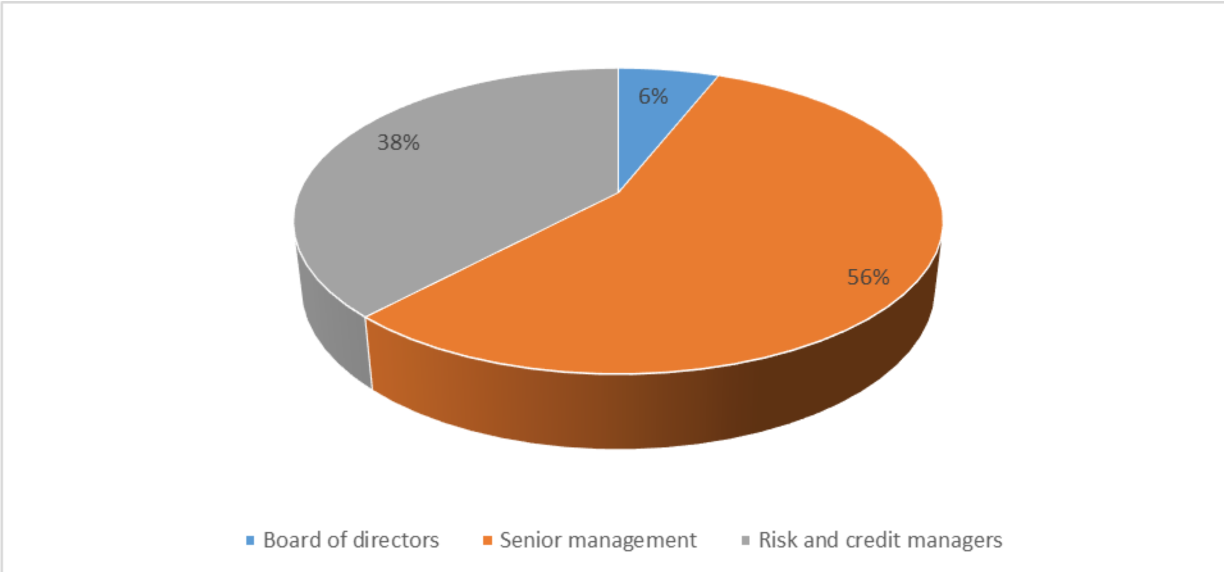
4.7. Financial Literacy

This[1] section presents[1] findings on[1] financial literacy[1] and the[1] findings are[1] presented in[1] the following[1] subsections:

4.7.1. Credit Risk Sanctions and Approval of Credit in the Firm

The[1] respondents were[1] requested to[1] indicate who[1] is responsible for credit risk sanctions and approval of credit in the firm. The findings are shown in the figure 4.8

Figure 4.8 Credit Risk Sanctions and Approval of Credit in the Firm



Source: Researcher (2020)

From[1] the findings[1] majority (56%) of[1] the respondents[1] indicated that[1] senior management[1] is responsible for credit risk sanctions and approval of credit in the firm, 38% indicated risk and credit managers, while 6% indicate the board of directors. This depicts that senior management is responsible for credit risk sanctions and approval of credit in the firm.

4.7.2. Customer Financial Literacy

The[1] respondents were[1] requested to[1] indicate their[1] customer financial[1] literacy. The[1] findings are shown[1] in table[1] 4.5.

Table 4.5. Customer Financial Literacy

Customer Financial Literacy	Mean	Std. Dev
Financial negotiations	4.12	0.1872
Debt management	3.88	0.1623

Budgeting & savings	4.09	0.1997
Tracking finances	3.72	0.1283

Source: Researcher (2020)

From[1] the findings[1] the respondents[1] indicated to[1] a great extent[1] that they had customer financial literacy on financial negotiations (mean=4.12), followed by budgeting & savings (mean=4.09), debt management (mean=3.88), and tracking finances (mean=3.72). This depicts that the respondents had customer financial literacy on financial negotiations.

4.7.3. Credit Management Practices and Lending Decisions

The respondents were requested to indicate in what ways do credit management practices help them in lending decisions. According to the respondents, credit management practices help understanding[1] the borrower. A[1] common approach[1] is by evaluating[1] them by[1] the 5 Cs[1] of credit to[1] obtain a[1] profile on[1] their financial[1] risks. This assessment[1] runs on[1] the belief[1] that past payment[1] performance[1] (as well as current finances) can be[1] an indicator of[1] a borrower’ s future actions. The respondents also indicated that credit management practices enabled them to continuously the borrower. Continuously monitoring helps them to be[1] proactive in[1] how they need[1] to interact[1] with a[1] borrower or[1] manage their[1] reserves.

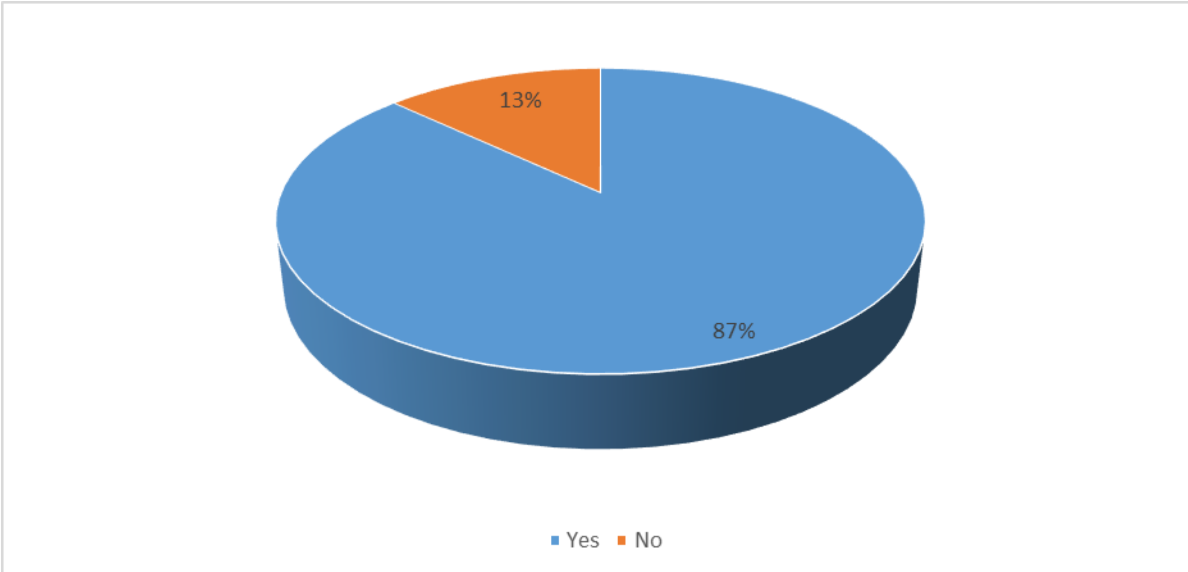
4.8. Self-Regulation

This section presents findings on self-regulation. The findings are presented in the following subsections.

4.8.1. Self-Regulation and Lending Decisions

The respondents were requested to indicate whether self-regulation influence the lending decisions by digital financial institutions. The findings are shown in figure 4.9

Figure 4.9 Self-Regulation and Lending Decisions



Source: Researcher (2020)

From[1] the findings[1] majority (87%) of[1] the respondents[1] indicated that self-regulation influence the lending decisions by digital financial institutions while 13% were of the contrary opinion. This depicts that self-regulation influences the lending decisions by digital financial institutions.

4.8.2. Extent of Effect of Self-Regulation

The[1] respondents were[1] requested to[1] indicate the[1] extent to[1] which self-regulation[1] affect various issue[1] on lending decision. The[1] findings[1] are as[1] shown[1] in table 4.6

Table 4.6 Extent of Effect of Self-Regulation

Self-regulation	Mean	Std. Dev
Credit scoring and lending decisions	3.50	0.2135
Loan review practices and lending decisions	4.05	0.2098
Consumer protection and lending decisions	3.98	0.2111
Financial literacy and lending decisions	3.67	0.2436

Overall lending decisions	4.14	0.2285

Source: Researcher (2020)

From[1] the findings[1] the respondents[1] indicated to[1] a great[1] extent loan review processes and lending choices (mean=4.05), consumer protection and lending decisions (mean=3.98), financial literacy and lending decisions (mean=3.67), and credit scoring and lending decisions (mean=3.5) are the factors that influence total lending decisions (mean=4.14). This shows that self-regulation has a significant impact on total lending decisions.

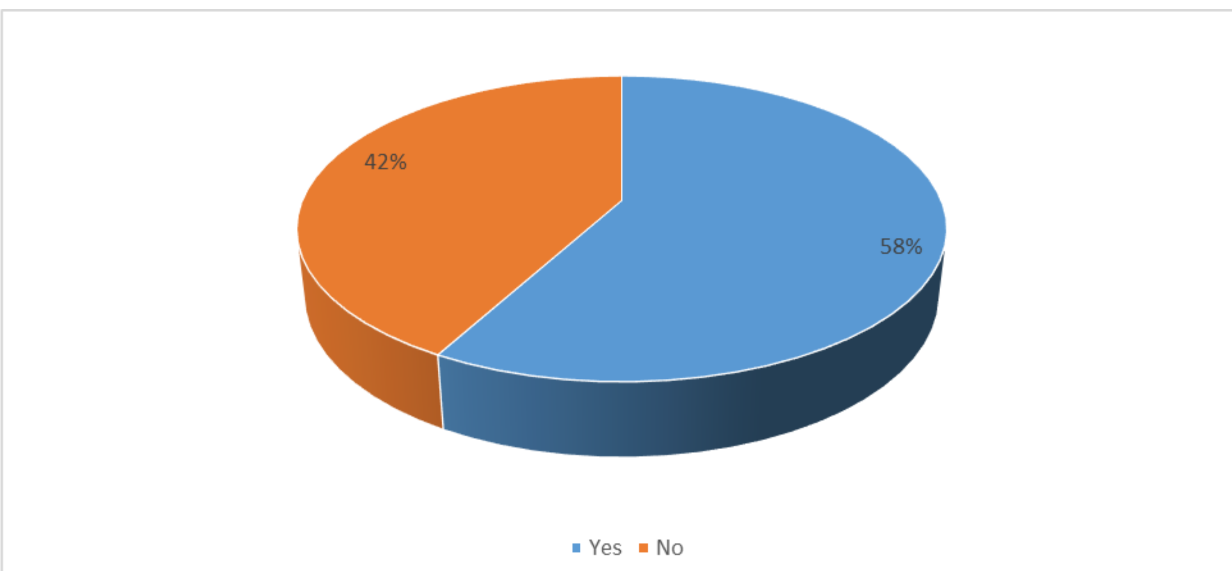
4.9. Lending Decision

This section presents findings on lending decisions. The findings are presented in the following subsections.

4.9.1. Nature of Customers and Lending Decisions

The respondents were requested to indicate whether the nature of their customer influence the lending decisions of the firm. The findings are shown in figure 4.10

Figure 4.10 Nature of Customers and Lending Decisions



Source: Researcher (2020)

From the findings majority (58%) of the respondents indicated that the nature of their customer influence the lending decisions of the firm while 42% were of the contrary opinion. This depicts that the nature of their customer influences the lending decisions of the firm. In addition, the respondent indicated that the safest borrower is the customer whose credit rating is high and who has not defaulted to pay a loan from the digital firms.

4.9.2. Influence of Lending Decisions

The respondents were requested to indicate the extent to which various issues influence the lending decision. The findings are shown in table 4.7

Table 4.7 Influence of Lending Decisions

Lending issues	Mean	Std. Dev
How much to lend	3.89	0.7901
Credit limit available for lending	3.40	0.8464
The interest rate to be charged on the loan	3.29	0.9613
Duration through which the loan will last	4.18	0.9005
Number of credits	3.60	0.9612

Source: Researcher (2020)

From the findings the respondents indicated to a great extent that duration through which the loan will last influences the lending decision (mean=4.18), followed by how much to lend (mean=3.89), number of credit (mean=3.6), credit limit available for lending (mean=3.4), and the interest rate to be charged on the loan (mean=3.29). This depicts that to a great extent that duration through which the loan will last influences the lending decision.

4.10. Diagnostic Tests

By assessing normality, multicollinearity, and homoscedasticity for various types of variables, the research study was able to determine how appropriate the data was. The next section goes through the results.

4.10.1 Test for Normality

The assumption of normalcy is verified in order to properly apply the parameters of inferential statistics. This is done to guarantee that the data's kurtosis and skewness are checked. This is simply a check to see if the data being studied is regularly distributed. The Kolmogorov-Smirnov Test and the Shapiro-Wilk Test were used to determine the data's normality. When the sample size of the data is tiny, say fewer than fifty, the second approach is optimal. The approach is far more reliable, especially for determining kurtosis and data skewness. When the result is less than 0.05, the data is steadily diverging from a normal distribution.

Table 4.8 Test for Normality

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Self regulation	0.216	48	0.328	0.725	48	0.456
Financial literacy	0.348	48	0.328	0.675	48	0.456
Consumer protection	0.316	48	0.328	0.726	48	0.456
Loan review practices	0.326	48	0.328	0.743	48	0.456

Credit scoring	0.349	48	0.328	0.636	48	0.456
Lending decisions	0.085	48	0.328	0.9768	48	0.456

Source: Researcher (2020)

In accordance to the results, the Kolmogorov-Smirnov tested significant values were at 0.328 for Self-regulation, Financial literacy, Consumer protection, loan review practices, credit scoring and lending decisions each. Shapiro-Wilk tested significant values were at 0.456 for Self-regulation, Financial literacy, Consumer protection, loan review practices, credit scoring, and lending decisions each. This brings an implication that the p-value is far much greater than the significance level of 0.05, hence the prediction that the data was normally distributed cannot be denied.

4.10.2 Test for Linearity

To validate the linear link utilizing the positive direction plus the strength of the coefficients as well as the significant level of the association, the study used a linear correlation coefficient to test for linearity.

Table 4.9 Results of linearity

Variable		Lending Decisions
Credit scoring	Pearson Correlation	0.562*
	Sig. (2-tailed)	0.000
	N	272
Loan review practices	Pearson Correlation	0.683*
	Sig. (2-tailed)	0.000
	N	272
Consumer	Pearson Correlation	0.673*

protection		
	Sig. (2-tailed)	0.000
	N	272
Financial literacy	Pearson Correlation	0.576*
	Sig. (2-tailed)	0.000
	N	272

Correlation is significant at the 0.05 level of significance (2-tailed).

Source: Researcher (2020)

Correlation analysis was used to check for linearity in the observed data, and the Pearson's correlation coefficient for each of the independent factors and the dependent variable was recorded, as shown in table 4.9. According to the findings of the linearity test, all four factors have a linear connection with lending choices (p0.05). Loan review processes had the strongest linear association with lending choices (r=0.683), followed by consumer protection (r=0.673), financial literacy (r=0.576), and credit scoring (r=0.562), according to the findings. Given the underlying requirement that the relationship between the dependent and independent variables be linear, as well as its sensitivity to outlier effects, the linearity assumption is critical in linear regression.

4.10.3 Test for Multicollinearity

Because multicollinearity inflates standard errors and produces erroneous findings, it is important to test for it before running a multiple linear regression model. The research variables were tested for multicollinearity using the variance inflation factor (VIF) technique. Because all of the VIF values were between 1 and 10, the findings in Table 4.10 indicated that there was no multicollinearity. As a result, regression analysis was justified in comprehending credit management procedures on lending choices in digital financial businesses.

Table 4.10 Coefficients

	Collinearity Statistics Tolerance	VIF
Self Regulation	.500	2.000
Financial literacy	.608	1.646
Consumer protection	.633	1.580
Loan review practices	.493	2.027
Credit scoring	.242	2.083
Lending decisions	.655	1.505

Source: Researcher (2020)

4.11. Regression Analysis

Regression analysis was used to determine the connection between the variables (both dependent and independent). The model was used to investigate the link between credit scoring, loan review processes, consumer protection, financial literacy, and lending choices (independent variables). The coefficient of determination describes how much variation in the dependent variable (lending choices) can be explained by changes in the independent variables, or how much variation in the dependent variable (lending decisions) can be explained by all four independent variables (Zhang, 2017). To code input and compute the measurements of the multiple regressions, the researchers utilized the Social Science Statistical Package (SPSS V21.0).

4.11.1. Model Summary

The model summary in Table 4.11 shows the relationship between the predictor variable and lending decisions by digital financial firms in Kenya. The results are as indicated in Table 4.11

Table 4.11 Model Summary

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate	F	P-value
1	.942[a]	.887	.848	.02424855	2.244	.001

Source: Researcher (2020)

a. Predictors: (Constant), credit scoring, loan review practices, consumer protection, and financial literacy

b. Dependent Variable: Lending Decisions by Digital Financial Firms in Kenya

Adjusted R squared can be attributed to independent variable changes which cause the variance in the dependent variable. From the table above, the R squared value was 0.887, which implied 88.7% variation on lending decisions in digital financial firms due to changes in credit scoring, loan review practices, consumer protection and financial literacy at 95% confidence interval. This indicates that 88.7% of lending decisions in digital financial firms, can be attributed to the foregoing variables. The study findings show a strong positive association among the study variables at an R value of 0.942.

4.11.2 ANOVA Results

Table 4.12 presents the findings on ANOVA results of the relationship between the predictor variables and lending decisions by digital financial firms in Kenya. The findings are as shown in Table 4.12

Table 4.12 ANOVA of the Regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.18	4	0.545	4.618	.0420[a]
	Residual	2.95	25	.118		
	Total	**5.13**	**29**			

Source: Researcher (2020)

I. Predictors: (Constant), credit scoring, loan review practices, consumer protection, and financial literacy

II. Dependent Variable: Lending Decisions by Digital Financial Firms in Kenya

From the findings it was found that the significant value was 0.0420 which is way below 0.005 thus showing the model was statistically significant. This depicted that the model would be used in predicting the relationship between the predictor variables and lending decisions by digital financial firms in Kenya. From the model it was further found that the F critical was less that the F calculated (value = 4.618) and thus the model was statistically significant.

4.11.3 Regression results

To analyze the effects of credit management practices on lending decisions, regression analysis was employed to obtain coefficients for interpretation. Table 4.14 indicates the regression output.

Table 4.13 Regression results

	Unstandardized	Standardized

	Coefficients		Coefficients		
	B	Std. Error	Beta	T	Sig.
Model 1(Constant)	0.349	0.573		0.610	0.546
Credit Scoring	2.955	0.146	0.747	20.239	0.004
Loan Review Practices	2.582	0.626	3.272	4.125	0.0240
Consumer Protection	2.463	0.523	3.214	4.709	0.0312
Financial Literacy	2.345	0.457	3.337	5.131	.05001

a. **Dependent Variable:** Lending Decisions by Digital Financial Firms in Kenya

Source: Researcher (2020)

Simple regression analysis was conducted to determine thei nfluence of credit scoring, loan review practices, consumer protection, and financial literacy on lending decisions by digital financial firms in Kenya. According to the SPSS the following equation was generated:

$$\mathbf{(Y = \alpha + \beta_1 X_{1+} \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + ẹ)}$$

Becomes:

$$(Y= 0.349+ 2.955+2.582 +2.463+2.345 + \varepsilon)$$

From[1] the regression[1] taking the[1] independent[1] variable at[1] constant (credit scoring, loan review practices, consumer protection, and financial literacy) constant at zero, lending decisions by digital financial firms in Kenya was 0.349. The data findings also indicated that holding other independent variables at constant zero, a unit increase in credit scoring will lead to a 2.955 increase in lending decisions by digital financial[1] firms in[1] Kenya, a[1] unit increase[1] in loan review practices will lead to a 2.582 increase in lending decisions by digital financial firms in

Kenya, a unit[1] increase in[1] consumer[1] protection will lead to a 2.463 increase in lending decisions by digital financial firms in Kenya, and a[1] unit increase[1] in financial[1] literacy will lead to a 2.345 increase in lending decisions by digital financial firms in Kenya.

At 5% level[1] of significance[1] and 95% level[1] of confidence, [1]credit scoring, loan review practices, consumer protection, and financial literacy were all significant on lending decisions by digital financial firms in Kenya. This is in line with Orgler (1971), who evaluated outstanding consumer loans using a regression technique. In analyzing future loan quality, he came to the conclusion that information not provided on the application form had better predictive power than information contained on the original application form. The introduction of regression analysis broadened the scope of such applications.

The effect of Loan review practices being significant concurs with a study by Dallami and Guigale (2009) who pointed out that fiscal performance rely on the strength with which credit examination frameworks can effectively oversee client credit lines. Loan evaluation minimize the risks to borrowers, over-reserving and insolvencies. The credit valuation gives the banks a piece of information on the pace of premiums to charge the purchasers which may not push them hard to the corner by thinking about the customer's monetary quality, financial assessment history and instalment designs.

Cain, Loewenstein, and Moore (2011) discovered confirmation that, advisers with contending interests give more prejudiced advice than in the absence of disclosures. This overblown advice, together with poor limiting by advisees as expressed in the past segment, realizes advisees earning lower adjustments when irreconcilable circumstances are disclosed than when they are not uncovered. This concurs with the findings of effects of consumer protection being significant.

Agarwal et al., (2010) investigated the impact of required monetary proficiency on credit reimbursement for urban female microfinance customers in India, finding that microfinance packs that received advanced education preparation had higher reimbursement execution, confirming the positive effect of budgetary proficiency. This is in line with the findings, which indicate that financial literacy has a significant influence.

4.12. Stepwise Regression for Regulation

Objective five of this study was to examine the moderating influence of self-regulation on lending decision by digital financial firms. The following hypothesis was formulated and tested:

H_0: self-regulation does not moderate the relationship between credit management practices and lending decisions by digital financial firms in Kenya.

The hypothesis was tested using the following linear regression model

Lending Decisions by Digital Financial Firms = f (self-regulation)

$$Y = \beta_0 + \beta_5 X_5 + \varepsilon$$

Where

Y = Lending Decisions by Digital Financial Firms

X_5 = self-regulation

β_0: = Constant term

ε = Error term

This The four-step approach of Baron and Kenny (1986) was used to test the hypothesis. In each phase, linear regression was employed. Step one involved regressing loan choices made by digital financial institutions on credit management procedures. The process will proceed to step two if the R2 and beta coefficients are statistically significant. If they are not substantial, the procedure ends, and it is determined that self-regulation has no effect on the link between credit management1 practices and lending choices made by digital financial businesses.

The second step entailed regressing credit management methods on self-control. If the results are substantial, the procedure proceeds to step 3 since the conditions for moderation have been met. A simple linear regression model is used to test the impact of self-regulation on lending decisions made by digital financial firms in step three. In order to test for moderation, a statistically significant effect of self-regulation on lending choices by digital financial businesses is required. After that, the investigation continues on to stage 4. Finally, Step four looked at the impact of credit management methods on digital financial institutions' lending choices while controlling for self-regulation. Simple linear regression analysis was used to conduct these tests. When self-regulation is managed, the impact of credit management techniques on lending choices by digital financial businesses should not be statistically significant. This is a requirement for testing for moderation .

Step one: Test of the influence of influence of credit management practices on lending decisions by digital financial firms. The results of the regression analysis are presented in Table 4.15

Table 4.14 Regression Results from the Test of the Influence of credit management practices on lending decisions by digital financial firms

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.814	.663	.671	.71399

Predictors: (Constant), Credit Management Practices

ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.404	4	.351	.688	.000

Residual	12.75	25	.510			
Total	13.154	29				

Dependent Variable: Lending Decisions by Digital Financial Firms

Predictors: (Constant), Credit Management Practices

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	3.372	.584		18.332	.000
1	Credit management practices	.243	.151	.042	.830	.000

Dependent Variable: Lending Decisions by Digital Financial Firms

Predictors: (Constant), Credit management practices

Source: Researcher (2020)

Table 4.11 shows that credit management procedures have a somewhat favorable connection with digital financial company lending choices (R=.814). The model described 66.3 percent of the variation in digital financial company loan choices, which was significant (R2=663, F=.689, P0.05), leaving 33.7 percent unaccounted for. As a consequence, the first phase of testing for self-regulation between credit management procedures and lending choices by digital financial businesses was validated.

Step two involves examining the effect of credit management techniques on self-regulation in the link between credit management practices and lending choices by digital financial institutions. Table 4.16 summarizes the outcomes of the testing.

Table 4.15 Regression Results from the Test of the Effect of Credit Management Practices on Self-Regulation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.871	.759	.767	.64597

Predictors: (Constant), Credit Management Practices

ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	.444	1	.444	1.065	.004[b]
1	Residual	11.676	28	.417		
	Total	12.12	29			

Dependent Variable: Self-Regulation

Predictors: (Constant), Credit Management Practices

Coefficients

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.228	.166		19.397	.000
	Credit management practices	.248	.146	.052	1.031	.004

Dependent Variable: Self-Regulation

Predictors: (Constant), Credit Management Practices

Source: Researcher (2020)

Credit management techniques had a favorable strong and substantial influence on self-regulation (R=.871 P0.05), according to the data reported in Table 4.12. The model described 75.9% of the variance in self-regulation (R2=759, F=1.065, p 0.05), leaving 24.1 percent unexplained. As a consequence, the results show that the second stage of testing validates self-regulation in the link between credit management procedures and lending choices by digital financial businesses, allowing research to proceed to step three.

The third step of the test for the moderation of self-regulation in the relationship between credit management practices and involved testing the influence of parental mediation on lending decisions by digital financial firms. The results for the step 3 are presented in Table 4.13

Table 4.16 Regression Results Depicting Intervening Effect of self-regulation on the Relationship between credit management practices and lending decisions by digital financial firms.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.111	.012	.014	.2989

ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	.188	2	.094	1.057	.307
1	Residual	2.403	27	.089		
	Total	2.591	29			

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
Self-regulation	.015	.061	.030	.252	.006
Credit management practices	.087	.055	.186	1.566	.307

Predictors: (Constant), Credit Management Practices, Self-Regulation
Dependent Variable: Lending Decisions by Digital Financial Firms

Source: Researcher (2020)

Table 4.13 shows that self-regulation has a weak positive connection with digital financial company lending decisions (R=.111). The model explained 1.2 (0.012) percent of the volatility in digital financial institutions' lending decisions. Other criteria not addressed in the model account for 98.8% of loan decisions made by digital financial businesses. At P=0.05, the results were not statistically significant. As a consequence, the third stage in testing for the moderating impact of self-regulation in the link between credit management procedures and lending choices by digital financial businesses failed to meet the criterion. Self-control (B=.015, t=.252, p>0.05) and credit management techniques (B=.087, t= 1.566, p>0.05) had no statistically significant effects. R2=.012, F=1.057, p>0.05) showed that the model was not statistically significant.

The statistical results at step three are not significant, so they do not support the intervening effect of self-regulation in the relationship between credit management practices and lending decisions by digital financial firms, and thus do not provide the necessary conditions to proceed to step 4 in testing for the moderating effect. As a result, the procedure ended at step 3, and there are no results for step 4 to present.

The findings suggested that credit management techniques interact with self-regulation, and that this interaction has an impact on their influence on lending choices by digital financial businesses, albeit the indirect effect was not obvious from the findings. Self-regulation does not mitigate the link between credit management procedures and lending choices by digital financial businesses, according to the study.

.

4.12. Discussion of Findings

The linear regression model point out that every independent variable has positive coefficient. The regression outcomes point out that a positive link exists between dependent variable (lending decisions) and independent variables (credit scoring, loan review practices, consumer protection and financial literacy). From the results there is an indication that there was a compelling association between the study variables. The value of R Squared was 0.887 indicating that 88.7% of the changes in lending decisions are described by the independent variables for the study that is credit scoring, loan review practices, consumer protection and financial literacy. Fiordelisi, Marques-Ibanez, and Molyneux (2010) found that credit management techniques govern the lending process, which is accomplished through adequate policies that specify the rules and procedures put in place to promote smooth lending operations in microfinance organizations. If adequate risk management measures are not applied, the company may face financial risk if the borrower is unable or unwilling to meet their financial commitments.

The study found that credit scoring has a significant effect on lending decision by digital financial firms**.** This was evident basing on the findings which showed that to[1] a great extent the[1]length of credit history is considered in decision making (mean=3.86), followed by amounts payable (mean=3.72), the payment history (mean=3.66) and credit mix (mean=3.57). This depicts that to a great extent, the length of credit history is considered in lending decision making.

The effect of loan review practices on lending decisions was also found to be significant. From the regression results, For a unit change in loan review practices holding all credit scoring, consumer protection and financial literacy as constant, a[1] unit increase[1] in loan review practices will lead to a 2.582 increase in lending decisions by digital financial firms in Kenya. Chernykh and Theodossiou (2011) showed that the creditor ought to safeguard great decisions are made comparative to allowing of loans with the objective of expanding ROA, and this will be through interest income to be acknowledged. Gobi (2003) further attests that, the lender ought to accumulate data with respect to the potential borrower which will help with landing at a sound and safe loan lending decision

The study found that the nature of their customer influence the lending decisions of the firm. In addition, the study found that the safest borrower is the customer whose credit rating is high and who has not defaulted to pay a loan from the digital firms. Mutegi, Njeru and Ongesa (2015) findings of the examination prescribe that small enterprises who have next to zero financial literacy preparing should get together with related projects to strengthen their abilities. There is need to begin more projects to reach more numerous small enterprises for legitimate credit the board, improvement of advances reimbursement, a suitable comprehension of fiscal summaries because of monetary examination capacities and appropriate dynamic and hazard the board. The study found that to a great extent that duration through which the loan will last influences the lending decision. Finally, the study found at 5% level of significance and 95% level of confidence, credit scoring, loan review practices, consumer protection, and financial literacy were all significant on lending decisions by digital financial firms in Kenya.

CHAPTER FIVE:

SUMMURY, CONCLUSIONS AND RECOMEMMENDATIONS

5.1. Introduction

This[1] chapter presents[1] summary, discussion, [1]conclusion and[1] recommendations on[1] credit management practices on lending decisions by digital financial firms in Kenya.

5.2. Summary of Findings

The financial services business is undergoing major changes as a result of digital innovation. The developing utilization of digital loans is influenced by fast access to assets by the debtors, zero security prerequisites, no paperwork by money creditors, remote accessibility, and utilization of other credit scoring methods like mobile money exchange data to determine capability for credit. This has necessitated the need to investigate credit management practices and lending decisions by digital financial firms.

The research was directed by five particular goals, one of which was to investigate the impact of credit scoring on lending decision by digital financial firms, evaluate the effect of loan review practices on lending decision by digital financial firms, determine the effect of consumer protection on lending decision by digital financial firms, measure the effect of financial literacy on lending decision by digital financial firms, and to examine the moderating self-regulation on lending decision by digital financial firms.

The study found that the credit scoring has a significant effect on lending decisions. This was evident basing on the findings which showed that to[1] a great extent the[1]length of credit history is considered in decision making (mean=3.86), followed by amounts payable (mean=3.72), the payment history (mean=3.66) and credit mix (mean=3.57).

The study also found that the effect of loan review practices on lending decisions was also found to be significant. From the regression results, for a unit change in loan review practices holding all credit scoring, consumer protection and financial literacy as constant, a[1] unit increase[1] in loan review practices will lead to a 2.582 increase in lending decisions by digital financial firms in Kenya.

The study found that senior management is responsible for credit risk sanctions and approval of credit in the firm. The study also found that the respondents had customer financial literacy on financial negotiations. The study found that credit management practices help understanding[1] the borrower. A[1] common approach[1] is by[1] evaluating them[1] by the 5 Cs[1] of credit [1]to obtain[1] a profile[1] on their[1] financial risks. This[1] assessment runs[1] on the[1] belief that[1] past payment performance[1] (as well[1] as current finances) can[1] be an[1] indicator of[1] a borrower' s[1] future[1] actions The[1] study found[1] that self-regulation[1] influences the[1] lending decisions[1] by digital[1] financial institutions. The research also discovered that, to a large extent, that self-regulation affects overall lending decisions.

The study found that the nature of their customer influences the lending decisions of the firm. In addition, the study found that the safest borrower is the customer whose credit rating is high and who has not defaulted to pay a loan from the digital firms. The research also discovered that, to a large extent, that duration through which the loan will last influences the lending decision. Finally, the study found at[1] 5% level[1] of significance[1] and 95% level[1] of confidence, [1]credit scoring, [1]loan review practices, [1]consumer protection, [1]and financial[1] literacy were[1] all significant [1]on lending decisions by digital financial firms in Kenya.

5.3. Conclusion of the Study

The study found that, to a large extent, that amount of outstanding debt is considered in decision making. The study also concluded that to a great extent that provisions dealings are considered in decision making. Further the study concluded that the measures to protect consumers include laws. Consumer protection laws in the company work[1] to protect[1] the consumers[1] against improper[1] business practices. They[1] provide credit[1] protection, [1]debt collection[1] protection, identity[1] theft protection, [1]and bankruptcy[1] and reorganization[1] protection.

The study concluded that senior management is responsible for credit risk sanctions and approval of credit in the firm. The study also found that the respondents had customer financial literacy on financial negotiations. The study concluded that credit management practices help understanding the borrower. understanding[1] the borrower. A[1] common approach[1] is by[1] evaluating them[1] by the 5 Cs[1] of credit [1]to obtain[1] a profile[1] on their[1] financial risks. This[1] assessment runs[1] on the[1] belief that[1] past payment performance[1] (as well[1] as current finances) can[1] be an[1] indicator of[1] a borrower' s[1] future[1] actions The[1] study found[1] that self-regulation[1] influences the[1] lending decisions[1] by digital[1] financial institutions. The study also concluded that to a great extent that self-regulation affects overall lending decisions.

The study concluded that the nature of their customer influences the lending decisions of the firm. Furthermore, the research found that the safest borrower is the customer whose credit rating is high and who has not defaulted to pay a loan from the digital firms. The research found that to a larger extent that duration through which the loan will last influences the lending decision. Finally, the study concluded at 5% level of significance and 95% level of confidence, credit scoring, loan review practices, consumer protection, and financial literacy were all significant on lending decisions by digital financial firms in Kenya.

5.4. Recommendations

Based on the findings the study made the following recommendations:

I. On the effect of policy and decision making of management of digital financial firms in Kenya, it is advisable that sound credit risk management practices are adopted and implemented especially though credit risks management information systems.

II. The study further recommends that digital financial firms should actively participate in the legislation of credit risk management practices by the government through the association of digital financial firms in Kenya in the implementation of the credit sharing information Act.

III. The Association of digital financial firms should consider provisions for specific credit risk management practices to be adopted and implemented uniformly by all digital financial firms to reduce the amount of nonperforming loans of digital financial firms in Kenya. Further the two should establish policies and guidelines of determining NPLs and loans write offs to avert excessive loan losses.

IV. The study further recommends that digital financial firms should put in place collection prioritization strategies through developing a more focused collection strategy by determining which accounts have the highest payment potential. Implementation of advanced scoring and segmentation tools will be helpful in providing.

V. It[1] is also clear[1] that the[1] most digital[1] financial firms[1] use the[1] existing credit [1]policy as the[1] primary document[1] for formulating[1] a new credit[1] policy. It[1] will also[1] be important [1]if digital[1] financial firms[1] consider using[1] credit policy[1] documents from[1] other successful[1] similar organizations[1] as a benchmark[1] for the[1] best credit[1] management practices. [1]

5.5. Suggested Areas for Further Research

Due to the turbulent nature of the business environment for example technology, risks and uncertainties, it will be appropriate to[1] replicate this[1] study after[1] duration of [1]ten years and establish the relationship between credit management practices and lending decisions as at that time then determine whether there are areas of commonalities or unique factors. The fact that this study limited itself to digital financial firms in Kenya, I suggest that comparative study should be conducted in commercial banks or SACCOS in order to assess whether there are any similarities or differences from the results of this study. These results will be useful in to the digital financial firms in benchmarking themselves with other organizations in the finance sector.

REFERENCES

Abdou, H. & Pointon, J. (2011) 'Credit scoring, statistical techniques and evaluation criteria: a review of the literature ', Intelligent Systems in Accounting, Finance & Management, 18 (2-3), pp. 59-88.

ACCION (2018). Demystifying Digital Lending; How Digital Transformation Can Help Financial Service Providers Reach New Customers, Drive Engagement, and Promote Financial Inclusion

Aduda, J., Magutu, P.O., &Wangu, M.G. (2012). The Relationship between Credit Scoring Practices by Commercial Banks and Access to Credit By Small and Medium Enterprises in Kenya. *International Journal of Humanities and SocialSciences, 2* (9), 203-213.

Agarwal, S., Driscoll, J. C., Gabaix, X., & Laibson, D. (2007). The age of reason: Financial decisions over the lifecycle.

Al- Tamimi, H. & Al- Mazroei, M. (2007) Banks Risk Management; A Comparison of United Arab Emirates National & Foreign Banks. The Journal of Risk Finance.

Alhusban, A. (2014). *The importance of consumer protection for the development of electronic commerce: the need for reform in Jordan* (Vol. 39). University of Portsmouth.

Amisi, S. A. R. A. H. (2012). The effect of financial literacy on investment decision making by pension fund managers in Kenya. *Unpublished Master in Business Administration Thesis: University of Nairobi*.

Ansari, S. S., & Krop, P. (2012). Incumbent performance in the face of a radical innovation: Towards a framework for incumbent challenger dynamics. Research policy, 41(8), 1357-1374.

Awan, A. &Ameen, D. (2013) Pakistan Banks Face Rise in Bad Loans. Cover Financial Times.

Bandyopadhyay, A. (2016). *Managing Portfolio Credit Risk in Banks*. Cambridge University Press.

Barua, R., & Sane, R. (2014). Repayment in microfinance: The role of financial literacy and caste. *Discussion papers in Economics, 14*(6), 1-25.

Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. V. (2013). Digital business strategy: toward a next generation of insights. MIS quarterly, 471-482.

Cain, D. M., Loewenstein, G., & Moore, D. A. (2010). When sunlight fails to disinfect: Understanding the perverse effects of disclosing conflicts of interest. *Journal of Consumer Research*, *37*(5), 836-857.

Capgemini, (2018). Non-cash Payments Volume'. http://www.worldpaymentsreport.com/#non-cash-payments-content

Chater, N., Huck, S., & Inderst, R. (2010). Consumer decision-making in retail investment services: A behavioral economics perspective. *Report to the European Commission/SANCO*.

Christensen, C. M. (2013). *The innovator's dilemma: when new technologies cause great firms to fail*. Harvard Business Review Press.

Dallami, k. &Guigale, M. (2009) Reflection to Credit policy in developing Countries Policy.

Dhakal, S. (2011), „Risk management in SACCO"s, Econometric Analysis". Second Edition Macmillan. London.

Staikouras, C. K., & Koutsomanoli- Fillipaki, A. (2006). Competition and concentration in the new European banking landscape. *European Financial Management*, *12*(3), 443-482.

FSD Kenya and Central Bank of Kenya (2017). Results of the FinAccess National Survey. Nairobi, FSD Kenya.

Gatakaa, S. (2010). The relationship between personal financial literacy and lending by commercial banks in Kenya. *Unpublished MBA Project, University of Nairobi*.

Gekondo P.E. (2013). The Effect of M-Shwari Services on Financial Access in Kenya: A Case Study of Kisii County. Unpublished Thesis

Bofondi, M., & Gobbi, G. (2003). Bad loans and entry in local credit markets. *Bank of Italy*.

Chishti, S., & Barberis, J. (2016). The Fintech book: The financial technology handbook for investors, entrepreneurs and visionaries. John Wiley & Sons.

Gorton, G. B. (2015). *The Maze of Banking: History, Theory, Crisis*. Oxford University Press, USA.

Penicaud, C., & Katakam, A. (2013). State of the industry: Mobile financial services for the unbanked. *London, GSMA.*

Guerrieri, V., & Lorenzoni, G. (2017). Credit crises, precautionary savings, and the liquidity trap. *The Quarterly Journal of Economics*, *132*(3), 1427-1467.

Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2017). Entrepreneurship. New York, NY: McGraw-Hill Education.

Honohan, P. (2013). Taxation of financial intermediation theory and practice for emerging economies. Washington: World Bank and Oxford University Press.

Howells, P. G., & Bain, K. (2008). *The economics of money, banking and finance: a European text*. Pearson Education.

Khrawish, H. A. (2011). Determinants of commercial banks performance: Evidence from Jordan. *International Research Journal of Finance and Economics*, *81*, 148-159.

Jones, L. E., Loibl, C., & Tennyson, S. L. (2012). The effects of CARD Act disclosures on consumers' use of credit cards. *Available at SSRN 2034419*.

Kaffenberger, M., & Chege, P. (2016). Digital Credit in Kenya: Time for Celebration or Concern?. *CGAP. October, 3*.

Karanja, G. (2009). The Effect of Credit Risk Management Practices on the Level of Non-performing Loans. A case study of commercial banks' lending to SMEs in Kenya.

Kofi, A.S. (2012). *Determining The Causes and Impact of Non-Performing Loans on The Operations of Microfinance Institutions: A Case of Sinapi Aba Trust* (Master's thesis). Kwame Nkrumah University of Science and Technology, Ghana.

Korir, M.K. (2012) *Effects of Credit Risk Management Practices on Financial Performance of Deposit Taking Microfinance Institutions in Kenya* (Master's thesis). University of Nairobi, Kenya.

Lizal, L. (2002). Determinants of financial distress: What drives bankruptcy in a transition economy? The Czech Republic cases.

Lotto, J. (2018). The empirical analysis of the impact of bank capital regulations on operating efficiency. *International Journal of Financial Studies*, *6*(2), 34.

Mraba, M. (2009). Assessment of Factors that Cause Non-Payments of Loans in Commercial Banks. "A case of Microfinance Bank".

Murray, J. (2011). Default on a Loan, United States Business Law and Taxes guide.

Musabwasoni, G., Mulyungi, P. and Muganamfura, D. (2018). Effects of Financial Literacy on loan Repayment between Small and Medium Entrepreneurs of Microfinance Institutions CaseStudy of Inoza mihigo Umurenge Sacco in Nyaruguru District. *Journal of Business and Management, 20(5), pp. 19-37*

Mutegi, H. K., Njeru, P. W., & Ongesa, N. T. (2015). Financial literacy and its impact on loan repayment by small and medium entrepreneurs.

Mwithi, S. T. E. P. H. E. N. (2012). Relationship between credit risk management practices and the level of non-performing loans of microfinance institutions in Nyeri County. *Unpublished MBA Project, University of Nairobi*.

Nagarajan, M. (2011), " Credit risk management practices for microfinance institutions in Mozambique" . Unpublished MBA project-University of Maputo.

Ng' etich Joseph Collins, K. W. (2011). The effects of interest rate spread on the level of non-performing assets: A case of commercial banks in Kenya. *International Journal of Business and Public Management (ISSN: 2223-6244) Vol*, *1*(1), 58-65.

Njuguna N. (May 2013). Central Bank of Kenya. Technical Cooperation among Developing Countries Programme on " Mobile and agency banking in Kenya" , Kenya School of Monetary Studies, Nairobi Kenya.

NYAMUTE, W., & Maina, J. M. (2011). Effect of financial literacy on personal financial management practices.

Nthiga, A. K., & Simiyu, E. (2021). Credit Management Practices and Lending Decision by Digital Financial Firms in Kenya. Journal of Finance and Accounting, 5(1), 49-69.

Nyorekwa, T. (2014) monetary policy performance in Tanzania. Banks and Bank Systems, Volume 9, Issue 4.

Sangoro, O. O., Ochieng, P., & Bureti, P. (2012). *Determinants of loan repayment among women-owned enterprise in Kenya: A case of Eldoret Municipality*. LAP LAMBERT Academic Publishing.

Fredrick, O. (2013). The impact of credit risk management on financial performance of commercial banks in Kenya. *DBA Africa Management Review*, *3*(1).

Olima, B. (2013). Effect of financial literacy on personal financial management on Kenya Revenue Authority employees in Nairobi. *Unpublished MBA Project). University of Nairobi, Nairobi, Kenya*.

Olokoyo, F. O. (2011). Determinants of commercial banks' lending behavior in Nigeria. *International journal of financial research*, *2*(2), 61-72.

Olomola, A. (2002), „Credit Control Policy for Improved Agricultural Financing in Nigeria". Panacea, Placebo or Structural Bottleneck? African Review of Money Finance and Banking, (1): 23-38‟.

Owino, M. (2012) Effect of the Lending Policies on the Levels of Non-performing Loans (NPLs) on Commercial Banks of Kenya

Oxford Business Group (OBG) (2016) Growth opportunities for Kenya's banking sector. https://www.oxfordbusinessgroup.com/overview/further-scope-sector-robust-and-profitable-and-there-are-growth-opportunities-home-and-region

Oyier J. (2015). How Access to Financial Services influences How Kenyans Use Their Disposable Income: A Case Study of M-Pesa and M-Shwari. Unpublished thesis

Picard, P., & Pinquet, J. (2011). Optimal risk financing in large corporations through insurance captives.

Roberts, M. (2014). Principles of administrative theory. Business Process Management Journal, 4(9), 34-51.

Rogers, E. M. (2003). Diffusion of Innovations (fifth edition). New York, NY: Free Press

Salisbury, L. C. (2014). Minimum payment warnings and information disclosure effects on consumer debt repayment decisions. *Journal of Public Policy & Marketing*, *33*(1), 49-64.

Samreen, A., & Zaidi, F. B. (2012). Design and development of credit scoring model for the commercial banks of Pakistan: Forecasting creditworthiness of individual borrowers. *International Journal of Business and Social Science*, *3*(17).

Samuel, K. S. (2011). Lending practices and causes of loan defaults. *Leading practices and causes of loan default among some selected banks in Ghana*.

Sheila, A. L. (2011). Lending Methodologies and loan losses and default in a Microfinance deposit-taking institution in Uganda. A case study of Finca Uganda Kabala Branch (MDI). *Unpublished research paper*. *Makerere University*.

Shicks J, (2010) ' Microfinance over indebtedness: understanding its drivers and challenging the common myth,' Centre Emile Bernheim working paper 10/048,

Triki T and Faye I, (2013) ' Financial inclusion in Africa' African Development Bank

Taylor M, ' Institutional structures of regulation' in Caprio G Handbook of Safeguarding Global

Financial Stability: Political, Social, Cultural and Economic Theories and Models, 2013

Tilson, D., Lyytinen, K., & Sørensen, C. (2010). Research commentary—Digital infrastructures: The missing IS research agenda. *Information systems research*, *21*(4), 748-759.

Venkata A and Yamiini V, ' Why do microfinance clients take multiple loans?' Microsave India

focus note 33, 2010.

Veit, D., Clemons, E., Benlian, A., Buxmann, P., Hess, T., Kundisch, D., ... & Spann, M. (2014). Business models. *Business & Information Systems Engineering*, *6*(1), 45-53.

Veljanovski C, ‘ Economic approaches to regulation’ in Baldwin R and others, The Oxford handbook of regulation, Oxford Universty press 2010.

World Bank (2014). *Global Financial Development Report: Financial Inclusion*, International Bank for Reconstruction and Development / the World Bank, 2014. Available from: http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR-2014_Complete_Report.pdf.

Yoo, Y., Boland Jr, R. J., Lyytinen, K., & Majchrzak, A. (2012). Organizing for innovation in the digitized world. Organization science, 23(5), 1398-1408.

APPENDICES.

Appendix I: Introductory letter

Anne Karimi Nthiga

School of Accounting and Finance,

Kenyatta University,

P.O.Box 43844.

Nairobi.

July 2019,

Dear Respondent,

RE: REQUEST FOR RESEARCH DATA.

I am a postgraduate student at Kenyatta University perusing a master’ s degree in BA, am currently conducting a research project on the effect of credit management practices on lending decision by digital financial firms in Kenya to achieve the degree requirements. I kindly request you to assist me in gathering information by filling out the questionnaire that I will collect from your office. The data that you will facilitate will be employed only for academic reasons. My supervisor and I guarantee you confidentiality in the information that you provide. On request, you will receive a copy of the final document. Your support will be greatly appreciated.

Yours faithfully,

Anne Nthiga

Student

Appendix II: **Digital Financial Lenders**

Digital Lenders Association of Kenya (DLAK) established in 2019, brought together top digital-first lenders and other key stakeholders to represent and endorse the common interests of digital lenders, customers, and the digital lending sector .They have a clear the Code of Conduct that followers are obligated to stick to. The 12 establishing members are;

1. Tala
2. Alternative Circle
3. Stawika Capital
4. Zenka Finance
5. MyCredit
6. Okolea
7. LPesa
8. Kopacent
9. Four Kings Investment T/A Sotiwa
10. Kuwazo Capital
11. Mobile Financial Solutions
12. Finance Plan Ltd

Appendix III: Work Plan

Activity	June	July	Aug	Sept	Oct	Nov
Proposal draft						
Proposal document						
Defense						
Pilot Study						
Field Data Gathering						
Data Analysis						
Report Writing & submission						

Appendix IV: Budget

Items/activity	No. of items	Amount	Total
Proposal development			
Internet connectivity	Unlimited	10,000	10,000
Library charges	Membership	1,000	1,000
Printing and photocopy	500 prints@ 10	5,000	5,000
Data collection			
Printing and photocopy	500 prints@ 10	5,000	5,000
Travelling		2,000	2,000
Communication	Airtime	2,000	2,000
Research Permits	various	3,000	3,000
Thesis development			
Printing and photocopy	6 copies	6,000	6,000
Publication		20,000	20,000
Miscellaneous			5,000
Total			**59.000**

Appendix V: Questionnaires

Manual questionnaire

Note: The information in this questionnaire will be treated confidentially and will not be used for any other purpose other than academic

Key: USe a scale of 1-5 where 1= Fair, 2= Fair, 3= Good, 4= Very good and 5= Excellent for the specified queries.

Section A: General Information

1. What is your current designation within the firm?

   CEO [ ]

   Credit Risk Officer [ ]

   Head of Credit [ ]

2. Period that your firm been in operation?

   Less than 1 years [ ]

   1 to 4 years [ ]

   5 to 10years [ ]

   More than 10 years [ ]

3. What is the average level of non-performing loans of the Digital credit firms in Kenya shillings?

   Less than 100 million [ ]

   101 to 500 million [ ]

   500 to 1 billion [ ]

   More than 1 billion [ ]

Section B: Credit scoring

4. Does your organization have specific credit policies for managing loan risks?

   Yes [ ]   No [ ]

5. To what extent does credit scoring play role in making lending decisions? Use the scale

Credit scoring indicators	1	2	3	4	5
Payment history					
Amounts payable					
Length of credit					
Credit mix					

Section C: Loan Review practices

6. Do you have any loan review system to reduce loan defaults?

   Yes [ ]   No [ ]

7. How often is the loan review system done in your company?

   Continuously [ ]   Monthly [ ]

   On quarterly basis [ ]   Semi-annually [ ]

   Annually [ ]   Never Happens [ ]

8. To what degree are the subsequent issues of loan review practices considered in making lending decisions? Use the scale

Loan review practices	1	2	3	4	5
Loan policies					
Loan period					

Loan size					
Number of credit loans					

Section D: Consumer protection

9. To what extent are the following issues on consumer protection and regulation considered in making lending decisions? Use the scale

Borrower empowerment	**1**	**2**	**3**	**4**	**5**
Disclosure provisions					
Prohibition of unfair practices					
Provisions dealings					

10. What measure have the company taken to protect consumers?

……………………………………………………………………………………………

……………………………………………………………………………………………

…………

Section E: Financial literacy

11. Who is responsible for credit risk sanctions and approval of credit in your firm?

Board of directors [ ]

Senior management [ ]

Risk and credit managers [ ]

12. Describe your customer financial literacy on the following. Use the scale

Financial negotiations	**1**	**2**	**3**	**4**	**5**

Debt management					
Budgeting & savings					
Tracking finances					

13. In what ways do credit management practices help you in lending decisions?

……………………………………………………………………………………………

……………………………………………………………………………………………

…………

Section F: Self-Regulation

14. Do self-regulation influence the lending decisions by digital financial institutions?

Yes [ ] No [ ]

15. To what extent does self-regulation affect these issues? Use the scale

Self-regulation	**1**	**2**	**3**	**4**	**5**
To what extent does self-regulation impact credit scoring and lending decisions?					
To what extent does self-regulation affect loan review practices and lending decisions					
To what degree does self-regulation influence consumer protection and lending decisions					
To what degree does self-regulation influence financial literacy and lending decisions?					

To what degree does self-regulation impact the overall lending decisions?					

Section G: Lending Decision

16. Does the nature of your customer influence the lending decisions of your firm?

    Yes [ ] No [ ] I don't know [ ]

    1. If Yes in the above, who is the safest borrower, and why?

    ……

    ………………………………………………………………………..

17. To what extent are the following issues influence lending decisions? Using the scale

How much to lend	**1**	**2**	**3**	**4**	**5**
Credit limit available for lending					
The interest rate to be charged on the loan					
Duration through which the loan will last					
Number of credit					

THANK YOU FOR PARTICIPATION

Online questionnaire

Section A

General Information

1. What is your current designation within the firm?

Mark only one oval.

- CEO
- Credit Risk Officer

Head Of Credit

2. For how long has your company been in operation?

Mark only one oval.

- Less than 1 years
- 1 to 4 years
- 5 to 10 years

More than 10 years

3. What is the average level of non-performing loans of the Digital credit firms in Kenya shillings?

Mark only one oval.

- Less than 100 million
- 101 to 500 million
- 500 million to 1 billion
- More than 1 billion

Section B

Credit scoring

4. Does your company have precise credit policies for handling loan risks?

Check all that apply.

- Yes
- No

5. To what extend does credit scoring play role in making lending decisions? use the scale

Mark only one oval per row.

	1	2	3	4	5
Payment history					
Amounts payable					
Length of credit history					

Credit mix

Section C

Loan review practices

6. Do you have any loan review practices to reduce loan defaults?

   Check all that apply.

   - [ ] Yes
   - [ ] No

7. How often is the loan review practice done in your company?

   Check all that apply.

   - [ ] Continuously
   - [ ] On quarterly basis
   - [ ] Annually
   - [ ] Monthly
   - [ ] Semi-annually
   - [ ] Never happens

8. To what extent are the following issues on loan review practices considered in making lending decisions? Use the scale

	1	2	3	4	5
Loan policies					
Loan period					
Loan size					
Number of credit loans					

Section D

Consumer regulation

9. To what extent are the following issues on consumer protection and regulation considered in making lending decisions? Use the scale

	1	2	3	4	5
Borrower empowerment					
Disclosure provisions					
Prohibition of unfair practices					
Provision dealings					

10. What measure have the company taken to protect consumers?

Section E

Financial literacy

11. Who is responsible for credit risk sanctions and approval of credit in your firm?

Mark only one oval.

- Board of directors
- Senior management

Risk management

12. Describe your customer financial literacy on the following. use the scale

*only one oval per row.

	1	2	3	4	5
Financial negotiations					
Debt management					
Budgeting & savings					
Tracking finances					

13. In what ways do credit management practices help you in lending decisions

Section F

Self-regulation

14. Do self-regulation influence the lending decisions by digital financial institutions?

Mark only one oval.

Yes

No

Section G

Lending Decision

15. How does the consumer’ s nature influence the lending decisions of your firm?

Mark only one oval.

Yes

No

I don't know

16. If Yes in the above question, who is the safest borrower, and why?

17. To what extent are the following issues influence lending decisions? Use the scale

	1	2	3	4	5
How much to lend					
Credit risk available to be charged on the loan					
The interest rate to be charged on the loan					
Duration through which the loan will last					
Number of credit					

Mark only one oval per row.

Powered by Google Forms

APPENDIX V: Introductory Letter