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Effect of Steering Committee and Technology on the Implementation of Credit Scoring at Kenya Women Fund Trust

[1*] Kipkemoi Kibet & [2] Isabella Sile

[1*]Postgraduate Student, Management University of Africa

[2] Lecturer, Management University of Africa

***E-mail of corresponding author: kkibet@gmail.com**

Abstract

Implementing credit scoring programs/projects, especially in a microfinance environment, is difficult and has been met with poor implementation outcomes. The volume of micro finance applications is insufficient to allow most lenders to develop their own scorecards using their own data and many microfinance institutions do not track applications and have insufficient systems to develop an elaborate scoring process. The study established the effect of steering committee and technology on the implementation of credit scoring at Kenya Women Microfinance Bank (KWFT). The study adopted a descriptive research design. The target population was over 1,500 Business Development Officers and Credit Risk Managers who were working in KWFT of which 250 of them were based in South Rift and 125 respondents were selected using a random sampling approach. Data was collected using the questionnaire and analyzed using descriptive and inferential statistic. A multiple linear regression analysis model was used to establish the relationship between steering committee, technology and the implementation of credit scoring. The study found out that committee steering and implementation of credit scoring were positively and significantly related. Similarly the findings indicated that technology was positively and significantly related to implementation of credit scoring. Based on the findings the study concluded that steering committee and technology influenced the implementation of credit scoring at KWFT. The study recommends for an effective use of the management steering committee and technology because they are instrumental in guiding the design, implementation and management of the credit scoring system through its various development stages in a microfinance environment.

Keywords: *Steering committee, Technology, Credit scoring, and Kenya Women Microfinance Bank*

1.0 Introduction

1.1 Background of the Study

Microfinance Institutions largely focus on loans as a main source of their income. The environment in which they operate faces uncertainty and risks relating to the loan approval process (Shanmugan & Bourke, 2012). Microfinance Institutions in Kenya remains one of the most important players in provision of financial services since they have an extensive outreach than the retail banks. They provide savings, credit and insurance services to a large portion of the population that has been considered to be the lower pyramid of financial access. Conversely, they have contributed to a large extent to the continuous economic development in Kenya by offering financial services to the poor and small scale businesses (Shanmugan & Bourke, 2012).

In Kenya, microfinance lenders have challenges of accessing credit bureaus. Most of their borrowers are poor and self-employed hence their credit information is unlikely to be with the credit bureaus. The key innovation of microfinance loans to groups whose members use social capital to screen out bad risks, and loans to individuals whose loan officers know them well enough to screen out bad risks rely fundamentally on qualitative information held in human memory. Scoring, in contrast, relies fundamentally on quantitative information stored in lenders' computers (Korir, 2012).

KWFT was founded in 1981 to enable and support the entrepreneurial activities of women given the failure of banking systems in meeting the financial needs of women especially low income, poor and vulnerable women. Kenya Women Fund Trust (KWFT) focus is on women as the focal point of the family and its purpose in doing so is to improve the economic and social status of women and their families. KWFT provides financial and non-financial services to low income women entrepreneurs. Its membership is mainly composed of women over 18 years who can join KWFT as individuals, groups and women led organizations. Therefore it was prudent to study the effect of steering committee and technology on the implementation of credit scoring at KWFT.

1.2 Statement of the Problem

Implementing credit scoring programs/projects, especially in a microfinance environment, is difficult and has been met with poor implementation outcomes (FSD, 2008). The volume of micro finance applications and accounts is insufficient to allow most lenders to develop their own scorecards using their own data. Moreover, many microfinance institutions do not track applications and have insufficient systems to develop an elaborate scoring process (FSD, 2008). The existing credit bureaus are at their infancy, mandatory reporting of positive and negative credit performance information has just recently be introduced, and a lack of standardized collections and calculations of key financial data, all of which impede the development of a generic, pooled-data scoring model that could be used by all lenders. (Mwirigi, 2006).

However, most studies focusing on credit risk management practices covered the use of credit scoring models in credit risk management. Among them are credit risk management practices and the level of non-performing loans of microfinance institutions in Nyeri county (Mwithi, 2012), credit risk management practices and financial performance of deposit taking microfinance institutions in Kenya (Korir, 2012) and credit risk management practices and loan losses in microfinance institutions in Kenya (Wambua, 2012). From the above studies, it is evident that no

study has been done on the effect steering committee and technology the implementation of credit scoring in KWFT.

1.3 Specific Objectives

i. To establish how the steering committee affects implementation of credit scoring at KWFT.
ii. To determine how effect of technology affects implementation of credit scoring at KWFT.

1.4 Research Questions

i. How does steering committee influence implementation of credit scoring at KWFT?
ii. To what extent does technology influence implementation of credit scoring at KWFT?

2.0 Literature Review

2.1 Theoretical Review

The study presented theories that informed the variables underlined in the current study. These theories include portfolio theory and moral hazard theory.

2.1.1 Portfolio Theory

This theory was propagated by Sharpe in 1970. The theory argues that companies recognize how credit concentrations can adversely impact financial performance. As a result, a number of institutions are actively pursuing quantitative approaches to credit risk measurement. Microfinance institutions are also making significant progress toward developing tools that measure credit risk in a portfolio context. They are also using credit derivatives to transfer risk efficiently while preserving customer relationships. Portfolio quality ratios and productivity indicators have been adapted. (Gakure, 2012). This theory is relevant to this study since it informs implementation of credit scoring which is one of the approaches to credit risk measurement. Based on the changes identified, credit identification, credit review, and credit risk rating systems, management can make necessary modifications to portfolio strategies or increase the supervision of credits in a timely manner.

2.1.2 Moral Hazard Theory

Moral hazard theory was propagated by Helpman in 1970. The theory argues that Information sharing can reinforce borrowers' incentives to perform, either via a reduction of banks' rents or through a disciplinary effect (Pagano and Jappelli, 2002). The exchange of information between banks reduces the informational rents that banks can extract from their clients within lending relationships. Padilla and Pagano (1997) as cited in Pagano and Jappelli, (2002) make this point in the context of a two-period model where banks are endowed with private information about their borrowers. Moral hazard theory is relevant to this study since it informs organizational culture, steering committee, technology and staff competence variables. By banks committing to exchange information about borrowers' types, they restrain their own future ability to extract informational rents. This reduces the probability of default of each borrower and the interest rate he is charged, and increases total lending relative to the regime without information sharing.

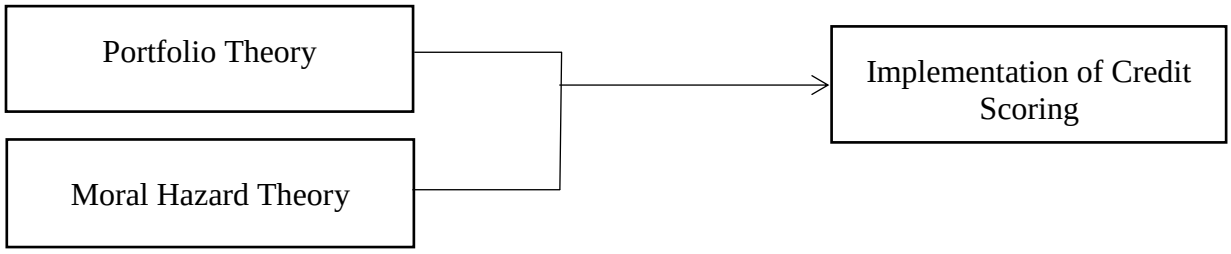

Figure 1: Theoretical Framework

2.2 Empirical Review

A management steering committee is instrumental in guiding the design, implementation and management of the credit scoring system through its various development stages. The design and implementation of a scoring system involves careful planning among and coordination of various functional areas of the bank, so each functional area should be represented in the committee from the outset, or strategy formulation phase (Caire, & Kossman, 2003).

Shirazi (2010) conducted a study on the impact of the Steering Committee Configuration and Decisions on Project Success in Pakistan. The results clearly represent the need to emphasize the importance of the role of Steering Committees (with a special focus on the engineering sector of Pakistan) as they play an integral part in the configuration to the execution of a project.

According to Englund and Bucero, (2006), a Project Steering Committee is recognized as an important structural element in project implementation. Steering Committees are an essential building block in Managing Projects in an organization. They exist under separate names in separate organizations, some of which may be governing bodies, project valuation Steering Committees, board of directors and Steering Committees. An Effective Steering Committee needs to be small enough to make decisions, but must have all the important stakeholders of the organization/ project represented (Symons, 2003).

Radovic-Markovic, (2014) argued that new technologies have led to new information and knowledge based economy. In this context, technology has changed the work environment, where organizations have become increasingly complex and competitive. Namely, the technologically induced a "virtual" environment has resulted in the adoption of new organizational structures and work skills and practices. On the one hand, the workplace increasingly requires employee to work in teams, collaborating across companies, communities, and continents. These changes and the new organizational structures have also made an impact on role of managers and their management styles, on the other hand. In line with this, there a very rich collection of thinking and empirical research findings on the subject.

According to McNamee and Selim (1999), the rapid advance in computer technology changed supply conditions. In addition, financial regulations became more and more burdensome. Financial institutions found that many of the old ways of doing business were no longer profitable; the financial services and products they had been offering to the public were no longer selling. Many financial intermediaries found that they were no longer able to acquire funds with their traditional financial instruments, and without these funds they would soon be out of business. To survive in the new economic environment, financial institutions have to research and develop new products and services that would meet customer needs and prove profitable, a process referred to as financial

engineering. The financial innovation that occurs suggests that there are three basic types of financial innovation: responses to changes in demand conditions, responses to changes in supply conditions, and avoidance of regulations (Ball & Shivakumar, 2004).

2.3 Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. A conceptual framework shows the relationship between independent variable and dependent variables. The study concentrated on steering committee and technology on the implementation of credit scoring at KWFT. This was represented in figure 2.

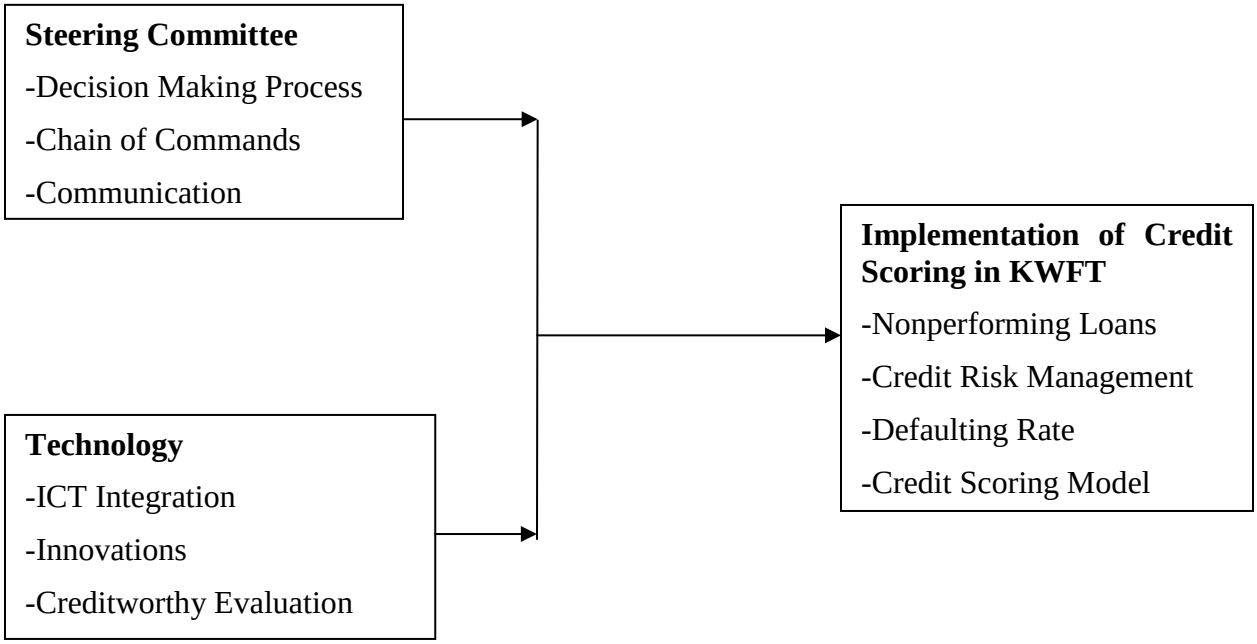

Figure 2: Conceptual framework

3.0 Research Methodology

The study employed a descriptive research design and was based on a survey of KWFT which is the largest Microfinance Institution in the Country. The study focused on 250 Business Development Officers and Credit Risk Managers of KWFT in South Rift. Stratified random sampling technique was used to determine the sample size of 125 respondents. Data was collected through the administration of the questionnaires and analyzed using descriptive and inferential statistics.in particular correlation and regression was used to establish the relationship between the steering committee, technology and implementation of credit scoring at KWFT. A multiple regression model was used to test the significance of the effect of steering committee, technology on the implementation of credit scoring.

The multiple regression model will be laid as below.

$Y= \beta_0+ \beta_1 X_1+ \beta_2 X_2+ e$

Where:

Y = Implementation of Credit Scoring

X_1 = Steering Committee

X_2 = Technology

e is error term

β_0 represents the constant

4.0 Results and Findings

4.1 Steering Committee

The study established if steering committee affects implementation of credit scoring at KWFT.The respondents were asked to respond on statements on steering committee. The responses were rated on a five likert scale as presented in Table 1. Majority of 79.8% of the respondents agreed that steering committee configuration always discussed which hierarchical levels or chain of command and which credit scoring areas were symbolized in the committee, 71.4% agreed that the steering committees always elaborated on credit scoring decisions making process., 67.3% of the respondents agreed that the steering committee determined whether the credit scoring achieved maximum efficiency and desired outcomes, 79.8% of the respondents agreed that steering committee enhanced better communication during the credit scoring implementation process, while 82.3% of the respondents agreed that steering committee improved mutual trust among members regarding decision making and directing a process and further improved the chances of success for credit scoring implementation. Overall 82.0% of the respondents indicated that top steering committee influenced the implementation of credit scoring at KWFT. On a five point scale, the average mean of the responses was 3.91 which meat that majority of the respondents were agreeing with most of the statements; however the answers were varied as shown by a standard deviation of 1.10.

Table 1: Steering Committee

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev.
Steering Committee Configuration always discusses which hierarchical levels or chain of command and which credit scoring areas are symbolized in the committee	4.20%	6.70%	9.20%	50.40 %	29.40%	3.94	1.02
The steering committees always elaborate on credit scoring decisions making process.	4.20%	10.90%	13.40%	36.10 %	35.30%	3.87	1.14
The steering committee determines whether the credit scoring achieved maximum efficiency and desired outcomes	10.90%	4.20%	17.60%	38.70 %	28.60%	3.70	1.24
Steering committee enhances better communication during the credit scoring implementation process	6.70%	8.40%	5.00%	57.10 %	22.70%	3.81	1.09
Steering committee improves mutual trust among members regarding decision making and directing a process and further improves the chances of success for credit scoring implementation.	0.00%	10.90%	6.70%	29.40 %	52.90%	4.24	0.99
Average						**3.91**	**1.10**

4.2 Technology

The study also established if technology affects implementation of credit scoring at KWFT. The results were presented on table 2 show that 69.8% of the respondents agreed that Information and communication technology (ICT) facilitated communication and improved integration thus contributed to the success of credit scoring implementation, 71.4% of the respondents agreed that the development of technology over the years had seen KWFT adopt credit scoring models as part of their evaluation of a creditworthy borrower, 79.9% of the respondents supported that technology attempted to simplify the task of implementing credit scoring in their organization, 82.4% of the respondents agreed that innovative technology eased the implementation of credit scoring thus translated to providing better service as well as managing credit risks while 70.6% of the

respondents agreed that New technologies had led to improved credit risk management. Overall 68% of the respondents indicated that technology influenced implementation of credit scoring. Using a five point scale likert mean, the overall mean of the responses was 3.91 which indicated that majority of the respondents agreed to the statement of the questionnaire. Additionally, the standard deviation of 1.21 indicated that the responses were varied. The results herein imply that technology affected implementation of credit scoring at KWFT.

Table 2: Technology

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev.
Information and communication technology (ICT) facilitates communication and improves integration thus contributing to the success of credit scoring implementation	17.60%	4.20%	8.40%	11.80%	58.00%	3.88	1.56
The development of technology over the years has seen KWFT adopt credit scoring models as part of their evaluation of a creditworthy borrower.	4.20%	15.10%	9.20%	40.30%	31.10%	3.79	1.16
Technology attempts to simplify the task of implementing credit scoring in my organization.	4.20%	4.20%	11.80 %	41.20%	38.70%	4.06	1.03
Innovative technology eases the implementation of credit scoring thus translating to providing better service as well as managing credit risks.	4.20%	5.00%	8.40%	41.20%	41.20%	4.1	1.04
New technologies have led to improved credit risk management	10.90%	5.00%	13.40 %	42.00%	28.60%	3.72	1.24
Average						**3.91**	**1.21**

4.3 Correlation Analysis

The association between steering committee, technology and implementation of credit scoring at KWFT. The results revealed that committee steering and implementation of credit scoring were positively and significant related (r=0.133, p=0.015). Similarly the result indicated that technology

and implementation of credit scoring were positively and significantly related (r=0.209, p=0.022). This implies that an increase in any unit of the steering committee or technology leads to an improvement in implementation of credit scoring. Results were presented on Table 3.

Table 3: Correlation Matrix

		Implementation of Credit scoring	Committee Steering	Technology
Implementation of Credit scoring	Pearson Correlation	1.000		
Steering Committee	Pearson Correlation	0.133*	1.000	
	Sig. (2-tailed)	0.015		
Technology	Pearson Correlation	.209*	-0.006	1.000
	Sig. (2-tailed)	0.022	0.947	
	Sig. (2-tailed)	0.010	0.285	0.376

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

4.4 Regression Analysis

The study established the relationship between steering committee, technology and implementation of credit scoring in KWFT. The results presented on table 4 presented the fitness of model used of the regression model in explaining the study phenomena. Steering committee and technology were found to be satisfactory variables in explaining the implementation of credit scoring. This was supported by coefficient of determination also known as the R square of 48.1%. This meant that Steering committee and Technology explained 48.1% of the variations in the dependent variable which is implementation of credit scoring in KWFT. This results further means that the model applied to link the relationship of the variables (steering committee, technology and implementation of credit scoring) was satisfactory.

Table 4: Model Fitness

Indicator	Coefficient
R	0.693
R Square	0.481
Adjusted R Square	0.429
Std. Error of the Estimate	0.46187

Results on the analysis of the variance (ANOVA) was presented on table 5. The results indicated that the overall model was statistically significant. Similarly, the results imply that the steering committee and technology were good predictors of implementation of credit scoring. This was supported by an F statistic of 5.498 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level.

Table 5: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.677	4	1.169	5.498	**.000**
Residual	24.247	114	0.213		
Total	28.924	118			

Regression of coefficients results in table 6 shows that committee steering and implementation of credit scoring were positively and significant related (r=0.109, p=0.018). This finding is consistent with that Shirazi (2010) who conducted a study on the impact of the Steering Committee Configuration and Decisions on Project Success in Pakistan and found out that results clearly represent the need to emphasize the importance of the role of Steering Committees (with a special focus on the engineering sector of Pakistan) as they play an integral part in the configuration to the execution of a project. The presence of a Steering Committee in the project management industry in Pakistan is not an entirely new concept. It has existed under different names in Pakistan's work environment for decades.

The result further indicated that technology and implementation of credit scoring are positively and significantly related (r=0.105, p=0.028). This finding agrees with that of Radovic-Markovic, (2014) who argued that new technologies have led to new information and knowledge based economy. In this context, technology has changed the work environment, where organizations have become increasingly complex and competitive. Namely, the technologically induced a "virtual" environment has resulted in the adoption of new organizational structures and work skills and practices. On the one hand, the workplace increasingly requires employee to work in teams, collaborating across companies, communities, and continents. These changes and the new organizational structures have also made an impact on role of managers and their management styles, on the other hand. In line with this, there a very rich collection of thinking and empirical research findings on the subject.

Table 6: Regression of Coefficients

Variable	B	Std. Error	t	Sig
(Constant)	2.228	0.436	5.112	0.000
Committee Steering	0.109	0.081	2.339	**0.018**
Technology	0.105	0.047	2.231	**0.028**

The optimal model was therefore;

The multiple regression model will be laid as below.

$Y = 2.228 + 0.109X_1 + 0.105X_2$.

Where:

Y = Implementation of credit scoring

X_1 = Steering Committee

X_2 = Technology

5.0 Conclusions

The study concluded that credit scoring has been championed in KWFT to be a better means of evaluating a creditworthy borrower as compared to the traditional methods of risk assessment. The development of technology over the years has seen many banks adopt credit scoring models as part of their evaluation of a creditworthy borrower. Credit scoring attempts to simplify the task of estimating the probability of default and calculate the loss given default from a range of complicated possible scenarios at KWFT. The study also concluded that steering committee is an important structural element in implementation of credit scoring. Steering committees are an essential building block in managing the implementation process.

6.0 Recommendations

The study recommended the Government, Ministry of Finance, Central Bank of Kenya as the regulator of MFIs of both deposit taking MFIs and credit only MFIs to ensure that proper policies steered towards implementation of credit scoring is adopted. The study recommends for the critical prudential regulations that the Government needs to issue to the microfinance sector to prevent moral hazards and information asymmetry. Association of Microfinance Institutions (AMFI) is the umbrella body of microfinance in Kenya. The study recommended for critical information for AMFI to aid in the development of a code of ethics and best practices in management of various credit risks facing the sector. The study also recommended for portfolio managers of KWFT and other emerging microfinance institutions to develop sound credit risk policies that will help them come up with efficient credit scoring tools.

The study further recommended for KWFT to improve on Information and communication technology (ICT) so as to facilitate implementation of credit scoring. Although scoring brings a number of benefits which can help improve access to finance for micro finance institutions in Kenya, it is a technology and a system with a number of requirements. To realize the benefits, the right conditions for a scoring-based risk management system must be in place. This will help in improving the implementation of credit scoring.

7.0 References

Caire, D., & Kossman, R. S. (2003). Credit Scoring: Is It Right for Your Bank?. In *Bannock Consulting, Credit Risk Conference*.

Englund, R. L., & Bucero, A, (2006). Project sponsorship, achieving management commitment for Project Success. New York: Wiley.

FSD Kenya, (2008). *The potential for credit scoring for SME lending in Kenya*.

Gakure, R.W., Ngugi, J.K., Ndwiga, P.M., & Waithaka, S.M. (2012). Effect of Credit Risk Management Techniques on the Performance of Unsecured Bank Loans Employed By Commercial Banks in Kenya. *International Journal of Business and Social Research (IJBSR), 2*(4), 221-236.

Kenya, F. S. D. (2008). The potential for credit scoring for SME lending in Kenya. *Financial Sector Deepening (FSD) Publication*.

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.

Mwirigi, P.K. (2006). *An Assessment of Credit Risk Management Techniques Adopted by Microfinance Institutions in Kenya* (Master's Thesis). University of Nairobi, Kenya.

Mwithi, S. (2012). *Relationship between Credit Risk Management Practices and the Level of Non-Performing Loans of Microfinance Institutions in Nyeri County* (Master's thesis). University of Nairobi, Kenya.

Pagano, M. & Jappelli, T. (2002). Information sharing, Lending and Defaults: Crosscountry Evidence. *Journal of Banking and Finance, 26*(10), 2017-2045.

Radovic-Markovic, M. (2014). Virtual organisations: employee competency and managerial issues. *Annals of the University of Petrosani, Economics, 14*(1), 287-290.

Shirazi, S. S (2010). Impact of Steering Committee Configuration and Decisions on Project Success in Pakistan.