

## Information Provision and the Use of Management Information Systems (MIS) in Microfinance Banks in Nigeria

Dr Evarest C. Madu

Department of Library and Information Technology, Federal University of Technology Minna, Niger state

Dr. Mrs. Anthonia Nkechi Idoko

Nnamdi Azikiwe Library, University of Nigeria, Nsukka Nigeria

Mrs. Nancy Emerole

The Library, Federal University of Technology Owerri, Imo State, Nigeria

Dr. (Mrs) Marie Beauty Dirisu

Nigerian Institute of International Affairs, (NIIA) Library, Lagos, Nigeria

### Abstract

This study was undertaken to find out the extent to which Management Information Systems correlate with transactions in microfinance banks. The design adopted for this study is correlational survey, this is used basically as a statistical technique to establish the extent of relationship between two or more variables questionnaire was used as instrument for data collection. A total population of 227 was purposively chosen as the sample size for this study. Data for the research question 1 was analyzed using descriptive statistics. Research questions 2 – 6 were analyzed with the use of Pearson correlation to establish the extent of relationship between variables, Hypothesis I was tested with Stepwise t-test to determine the significance of relationship between Management Information Systems and transactions in Microfinance Banks. The findings of the study revealed that the level of Management Information Systems (MIS) competencies among the staff is very low. On the influence of Management Information Systems on Microfinance Transactions, the study revealed that there is positive relationship. The study recommended staff training and retraining in the area of ICT to improve the competencies and for management to increase financial resource in that area.

**Keywords:** Use, Management, Information, Systems, Microfinance, Bank.

### Introduction:

Information which is basically data that have been processed in such a way as to be useful to the recipients and have value like factors of production. Like money, it gives economic, Political and other forms of powers to those who have or control it, Nzotta, (1995). This includes: the power to achieve things, to take advantages of opportunities, to control people and provide informed decisions for the benefit of the organization. Information therefore can act as an input in the management structure of an organization.

As an input in decision making, information is expected to reduce uncertainty which is relevant in planning and decision making, monitor performance and control operations. The quality of information is therefore determined by the way it is used as it is expected to have influence on the style of decision making thereby making management style highly innovative and personalized, Kelkar, (2009). Management therefore needs information first of all to inform itself about various aspects of business and protect its assets. It also needs information about relevant aspects of business with a view to increasing profit with applicable laws and regulations

The processing of data into information and communicating the resulting information to the user is the very essence of Management Information Systems (MIS), Lucy (1997). Management Information Systems (MIS) therefore according to Lucy (1997), is a system to convert data from internal and external sources into information and convert that information in an appropriate form to managers at all levels in all functions to enable them to make timely and effective decision for planning, directing and controlling the activities for which they are responsible.

According to Kelkar (2009), Information plays a key role in all decision-making. Prior information according to Kelkar (2009), means Wealth, information about money is more important than money itself as providing information to users leads to prosperity.

In order to utilize information effectively and efficiently, managers at all organizational levels are being forced to learn better ways of managing information resources Hussaini and Hussaini, (1992).

Taking a critical look at Management Information Systems (MIS), Lucy (1995), maintained that MIS often using advanced computer equipment, have had relatively little success in providing management with the information it needs. The problems militating against the achievement of the great success expected of the use of Management Information Systems (MIS) in organizations have been articulated by Lucy (1995) to include lack

of management involvement with the designers of the MIS. Sometimes, designers fail to include some objectives of management which make it difficult for management to succeed, closely related to this is management lack of knowledge of computers. Since this is the main tool for MIS, it becomes difficult to achieve the objectives of MIS. Designers of MIS sometimes fail to appreciate management true information requirements and organizational problems, this has in many cases caused a setback for management. The use of MIS is capital intensive which requires top management support, in some cases, there is apparent lack of top management support which has negative effect in the use of MIS.

In the case of Microfinance Banks, These Management Information Systems (MIS) have transformed the way the organizations manage their business models Mohapatra (2011). In essence, resources are managed optimally and compete with global market.

This study is predicated on the theory of Technology Acceptance Model (TAM) which explains how users come to accept or use newly introduced technologies. It also deals with how users perceive new technologies. Accordingly to this theory which was propounded by David (1999), there are two factors which influence the decision of users about how, when and why they would use new technologies.

One of these factors is what is called perceived usefulness of the technology. This is how much a person believes that using the new technology would enhance his or her tasks. The second factor has to do with how a person believes that the new technology would make it ease in term of use and minimize the effort engaged in the manual approach. This factor is called perceived ease of use which makes people to decide if they would use the technology or not. Both factors predict or determine the attitude towards the use of the system.

With regard to Management Information System (MIS) this Technology Acceptance Model (TAM) model is an important theoretical contribution towards explaining information system usage and information system acceptance behavior.

Microfinance banks the world over according to Mohapatra (2011), are considered to be an effective tool in alleviating poverty by increasing the income of poor households and reducing their vulnerability. This position is not different from the reasons for the establishment of microfinance Banks in Nigeria majority of these poor households and low income individuals must be reached to be able to achieve the lofty objectives of Microfinance Banks which include: -

- a. To reduce poverty
- b. To empower people and create employment
- c. To create new business opportunities

The use of information as an imputed in the achievement of these objective is very necessary. Management Information Systems (MIS) can therefore be a strategic tool in making Microfinance Banks in Nigeria more efficient and effective. In this case the microfinance Bank will be in a position to achieve the idea that low income individuals are capable of lifting themselves out of poverty if given access to financial services. According to Alabi, 2003, whenever technology intervenes in human activities, the essential feature is how to bridge time, and spaces, to minimize cost and efforts as well as the maximization of quality, efficiency and effectiveness.

In view of this therefore, what is the influence if any of management information systems in the transactions of Microfinance Banks in Nigeria. This is the central focus of attention of this study as it addresses the following specific objectives: -

1. Access the level of Information Technology competencies possessed by the staff of microfinance banks.
2. Determine the relationship between MIS and Minimization of transaction cost and efforts in Microfinance Banks
3. Ascertain the influence of MIS on increased efficiency and effectiveness.
4. Determine the relationship between MIS and easy to track information of clients in Microfinance Banks.
5. ascertain the relationship between MIS and reduced risk of failure in Microfinance Bank.
6. Determine the influence of MIS on access to accurate and up – to – date information in Microfinance Banks.

#### Research Questions

The following research question guided this study

1. What is the level of information technology competencies possessed by the staff of microfinance bank?
2. What is the relationship between Management Information Systems (MIS) and minimization of transaction in cost and effort of microfinance bank?
3. What is the influence of Management Information Systems (MIS) on increased efficiency and effectiveness of microfinance bank?
4. To what extent is Management Information Systems (MIS) and easy to track information of clients in microfinance bank related
5. To what extent is Management Information Systems (MIS) and reduction of risk of failure in

microfinance bank related?

6. What is the influence of Management Information Systems (MIS) on access to accurate and up – to – date information in microfinance bank?

**Hypothesis**

There is no significant relationship between the used of Management Information Systems (MIS) and the productivity of Microfinance Banks.

**Significance of the study**

This study will be of great benefit to Microfinance Banks in Nigeria. It will be handy to potential beneficiaries of the services of Microfinance banks in Nigeria. For the Microfinance Banks the use of Management Information Systems (MIS) will transform the ways they do business. The Microfinance bank will also take advantage of MIS to reach out to the poor and needy people in the society. The customers on their own part will benefit from reduced interest rate resulting from reduced cost of operation. This will impart positively on their business.

**Research Methods:**

The design adopted for this study is correlational survey; this is used basically as a statistical technique to establish the extent of relationship or association between two or more variables. The instrument used for data collection is questionnaire. A total population of 227 was purposively chosen as the sample size for the study. Descriptive statistics was used for the analysis of research question one, while Pearson correlation was used to analyze research questions 2 – 5. The only hypothesis was analyzed with stepwise t – test to determine the significance of the relationship between the use of Management Information Systems (MIS) and transactions in microfinance banks.

**Data analysis (Research question 1)**

Table One: - Level of ICT competencies possesses by the Microfinance banks. What is the (very low, low, high and very high) of Management Information Systems (MIS) available in the Microfinance Bank.

Table 1: Microfinance Bank and MIS COMPETENCY

Levels	Frequency	Percentage
0 – 40 (very low)	59	25.7
41 – 60 (low)	89	39.4
61 – 80 (High)	38	16.8
81 – 100 (very High)	0	0
	229	100.00

Table one shows clearly that the level of competency of Management Information Systems (MIS) in Microfinance bank is very low. The findings revealed that the largest percentage 39.4% of the staff of Microfinance bank have the lowest level of MIS competency.

What is the relationship between Management Information Systems (MIS) and minimization of transaction in cost and efforts of microfinance banks.

Table 2. Correlation Coefficient (r) for the relationship between transaction cost resource availability and academic productivity of academic staff in Nigeria University and efforts of Microfinance banks and Management Information Systems (MIS).

Productivity	Pearson Correlation	1	691
	Sig. (2 - Tailed)		004
	N	227	227
	Pearson Correlation	691	1
	Sig. (2 - Tailed)	004	
	N	227	227

Table 2 shows the correlation (r) for relationship between reduction in transaction cost and efforts and Management Information Systems (MIS) in Microfinance banks.

Result revealed that the coefficient is 0.69; the relationship is positive and strong.

The implication of this is that the use of Management Information Systems (MIS) in the operation of Microfinance banks will reduce the transaction cost and the effort put in. This position is in line with Alabi 2003, who argued that the intervention of ICT in any Human Endeavour minimize cost and effort put in.

**Research Question Three**

What is the relation between efficiency and effectiveness and Management Information Systems (MIS) in Microfinance bank.

**Table 5: Correlation Coefficient (r) for the relationship between increased efficiency and effectiveness and Management Information Systems (MIS) in Microfinance banks.**

	Pearson Correlation	1	710
Productivity	Sig. (2 - Tailed)		289
	N	227	227
Result Eva	Pearson Correlation	710	1
	Sig. (2 - Tailed)	289	
	N	227	227

Table 3: Shows the correlation (r) for relationship between increased efficiency and effectiveness and Management Information Systems (MIS) in Microfinance banks.

Result revealed that the coefficient is 0.710; the relationship is positive and very strong. The result is collaborated by Madu (2005) who argued that the introduction of information as an input in manage increases efficiency and effectiveness.

**Research Question Four:**

To what extent is reduction of risk of failure in Microfinance bank and Management Information Systems (MIS) related.

		MIS	Reduction of risk of Factors
Productivity	Pearson Correlation	1	612
	Sig. (2 - Tailed)		489
	N	227	227
Find Information	Pearson Correlation	612	1
	Sig. (2 - Tailed)	489	
	N	227	227

Table 4, Shows the correlation (r) for relationship between reduction of risk of failure and Management Information Systems (MIS) in Microfinance banks.

Result revealed that the coefficient is 0.612; the relationship is positive and strong. This position is in line with that of Mohapatra:2011, who argued that Management Information Systems (MIS) had Transformed and reduced that risk associated with the way organizations manage their business models.

**Research Question Five:**

To what extent is access to accurate and up-to-date information in Microfinance Bank and Management Information Systems (MIS) related.

**Table 5: Correlation Coefficient (r) for the relationship between access to accurate and up-to-date information in Microfinance Bank and Management Information Systems (MIS) related.**

		MIS	access to accurate and up-to-date information
Productivity	Pearson Correlation	1	518
	Sig. (2 - Tailed)		106
	N	227	227
Ethic Responsibility	Pearson Correlation	518	1
	Sig. (2 - Tailed)	106	
	N	227	227

Table 5 Correlation Coefficient (r) for the relationship between access to accurate and up-to-date information and Management Information Systems (MIS) in Microfinance Bank.

Result revealed that the coefficient is 0.518; the relationship is positive and fairly strong.

**Research Six**

What is the relationship between easy to track information of clients in Microfinance Bank and Management Information Systems (MIS).

**Table 6: Correlation Coefficient (r) for the understanding easy to track information of clients in Microfinance Bank and Management Information Systems (MIS).**

		MIS	Easy to track information
Productivity	Pearson Correlation	1	526
	Sig. (2 - Tailed)		585
	N	227	227
Share Find	Pearson Correlation	526	1
	Sig. (2 - Tailed)	585	
	N	227	227

Table 6: Show the correlation coefficient (r) for the relationship between easy to track information of clients and Management Information Systems (MIS) in Microfinance Bank.

Result revealed that the coefficient is 0.528; the relationship is positive and fairly strong.

#### Hypothesis

There is no significant relationship between the uses of Management Information Systems (MIS) and the productivity of Microfinance Bank.

**Table 7: Step wise t – test for the significant of correlation coefficient**

	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
Productivity	.810	.048	.750		.1708	.000

Table 7 shows that the t-value for the test of significant relationship between the use of Management Information Systems (MIS) and the productivity of Microfinance Bank is 17.028; this t-value is significant at 0.000. However, the t-value is also significant at 0.05, this is because, 0.000 is less than 0.05 ( $0.000 < p < 0.05$ ). Therefore, the hypothesis is not accepted; hence, there is significant relationship between the use of Management Information Systems (MIS) and the productivity of Microfinance Bank.

#### Conclusion and Recommendations

The following recommendations have been made based on the findings of the study. This study was undertaken to find out the extent to which Management Information Systems (MIS) and transactions in microfinance bank correlate.

In view of the fact that acquisitions of information communication technology by staff in microfinance bank, it is recommended that the staff in microfinance bank be encouraged to acquire more skills in information communication technology. This is to be through training and retaining.

It is also recommended that Management Information Systems (MIS) should be used as an input in the management of microfinance bank in view of the numerous advantages that the use of Management Information Systems (MIS) offers.

Managements of microfinance bank must appreciate the fact that Management Information Systems (MIS) is capital intensive therefore should increase the finance resources to acquire ICT facilities necessary for effective function and operation of Management Information Systems (MIS) in the microfinance banks.

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