

Assessing the Effects of Information Technology on Micro-Financial Institutions in the Shama District of Ghana

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ABSTRACT

Microfinance is a source of financial services for entrepreneurs and small businesses lacking access to banking and related services. For some, microfinance is a movement whose object is "a world in which as many poor and near-poor households as possible have permanent access to an appropriate range of high quality financial services, including not just credit but also savings, insurance, and fund transfer. Management of such entities has from time immemorial been very difficult. With the advent of information technology it was anticipated that management of micro-financial institutions would take a different shape. As if by design most of these institutions have adopted the use of information technology since the propagation of this new technology in Ghana. The influx of the so many micro-financial organisation in Ghana with their adoption of the information technology has become an interesting area to explore. In the Shama district the case is more interesting. It is against this backdrop that this study attempts to investigate the various effects the information technology has on these micro-financial institutions especially in the Shama district. The study adopted exploratory method of research and a sample of twenty respondents were chosen for the study. The study showed that, there is a positive relationship between information technology and business growth in terms of profitability, creation of new jobs and increase number of employees.

Keywords: Information Technology, 'Susu', Micro finance institutions (MFIs).

1.0 Introduction

Information lies at the very heart of microfinance. Whether by hand or by computer, microfinance institutions (MFIs) hold and maintain large amounts of important business data, from basic client information to detailed analyses of portfolio statistics.

Technology is consistently cited as one of the greatest challenges faced by MFIs around the world. While efficient use of technology can help reduce costs, improve efficiency, and increase outreach, many MFIs continue to make poor technology investments or simply do not invest in technology thus limiting their ability to grow and respond to demand.

"Information technology is the hardware, software, telecommunications, database management, and other information-processing technologies used to store, process, and deliver information". (Daft 1997).

Carter (1991) looks at information technology as the use of innovative engineering science to aid the capture, processing, memory, and retrieval, and communication of data, whether in the contour of mathematical information, text, audio, or picture.

But for this study, information technology is termed as the innovative technology which uses microprocessor-based machines: microcomputers, automated machines, telecommunication equipment to gather, process, store, generate, disseminate, rearrange and exploit of information.

Feeny and Willcocks (1998) have it that organization later became dependent on information technology for survival as they arose. This still goes forward, as companies today implement and apply information technology to discover resolutions to business problems, to enhance management decision-making, enhance efficiency and tone, and strive for new marketplaces in our global and aggressive business environment.



Since managers can instantly generate and access complex databases for customers via information technology most organizations have today become so hooked on this technology. Employees can now use information technology to execute so many tasks previously not possible.

The concept of microfinance is not new in Ghana. There has constantly been the custom of people saving and are taking small loans from individuals and groups within the context of self-help to start businesses or farming ventures.

For example, available evidence suggests that the first credit union in Africa was established in Jirapa in the Upper West Region Ghana in 1955 by a German Catholic missionary. However, "Susu", which is one of the microfinance schemes in Ghana, is believed to have originated from Nigeria and spread to Ghana in the early twentieth century (Asiama and Osei, 2005).

Since the commencement of the official introduction of validation of micro-financial institutions in the 1980s the Shama district has had a tremendous organization and presentation of these micro-banking institutions, both real and fraudsters alike. Presently the district harbors about 20 micro-financial institutions working within several communities in the territory. Information from the Shama District Assembly indicates that micro-banks are the commonly registered organizations than any other formal institution within the territory.

Referable to the widespread utilization of information and communication technologies (ICTs), these arrangements have also placed a large sum of time and money to the adoption of IT equipment. The majority even begins operation fully computerized. (This is the prime cause why the researcher intends to discover the effects rather finding an impact within a time frame).

We stick this query from the background that do these institutions really benefit from these Information Technology (IT) investments or they have only acquired them because IT usage is the society of the day. For this reason there ought to be a thorough investigation to measure the effects IT has on these creations. This could help determine why micro-banks invest in it, a multimillion dollar question that may be bothering people's minds.

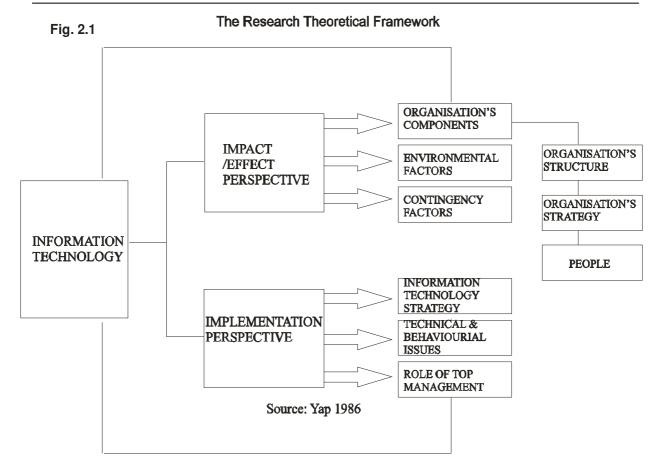
2.0 Literature

This study looks at the relationships between information technology and organizational features. As Yap (1986) suggested, the relationships would be tested from two main perspectives: the impact/effect and the implementation (see Figure below). The impact/effect perspective is concerned with examining the impact/effects of employing information technology on the organization's components (structure, strategy, and people), the environmental factors (competition, economic, political etc.) And the contingency factors (firm size, business sector etc.). The implementation perspective focuses on issues referred to the implementation and use of information technology in organizations.

2.1 The Impact/Effect Viewpoint

For numerous decades, scholars in the field of information engineering and management have studied the impact of applying information processing schemes and other information technology facilities on line systems. Many of the studies that were conducted tried to describe the relationships between the use of these technologies and the major characteristics of the scheme. In that situation were many issues related to the impact/effect of information engineering. In the first subsection of this department we will review the main stopping points that have emerged from the literature on organizational characteristics which stand on the use of information technology, while the second subsection will review some of the published studies linked to the impact of employing information technology on line organizations.





2.2 Why Organisations Use Information Technology

Bird and Lehrman, (1993) said that in the 1960s and 1970s, information technology was widely used by many systems, primarily for achieving routine clerical and administrative activities such as processing data related to bookkeeping and accounting activities. They utilized it as a monitor of the firm's internal and external environment or as a supportive element for the other organizational system components (Blili and Raymond, 1993). Bird and Lehrman, (1993) again wrote that the economies have been enhanced by advancement in the technological field. Information technology can provide organizations more impressive help today. Information technology has also become a competitive weapon that can change an industry's structure.

Galliers, Merali, and Spearing (1994) wrote that organisations use information technology to exploit business advantages. There is an increase in the role of information technology within small businesses which can be attributed to two things. Firstly, the striking fall in the monetary value of technology, and secondly, the improvements in technology that have made information technology more user-friendly.

Many authors like Child (1987) think information technology has become a real strategic tool, a new tool in the competitive race. IT can reduce the cost of business by getting and processing data on markets, suppliers and competition, thus improving organizational efficiency and reactivity.

2.3 The Implementation Viewpoint

According to McKersie and Walton (1991), information technology implementation consists of three broad subtasks: designing the information technology system and the organisation that will operate it, developing enabling human resources policies, and managing the implementation process. A major concern in such efforts is the recognition by management of the critical issues to be raised and solved throughout the implementation processes. Leavitt and Whisler (1958) speculated that the introduction of information technology into an organisation involves organisational change.

Organisational change happens because of internal and external pressures such as competition, advancement in technology, and customer demands. The kinds of changes that have to take place if an organisation is to



successfully compete through the decade of the 1990's require a challenging degree of organisational "reengineering" (McKersie and Walton, 1991).

The implementation of information technology to an organisation will create changes in all areas of that organisation and these changes need to be well managed if that technology is to be successful. Cooper and Zmud (1990) have defined information technology implementation as an organisational effort directed toward diffusing appropriate information technology within a user community. Because the implementation is a complex contingent process, today's top-level management faces an imminent and critical problem in dealing with adapting to the organisational changes that information technology is generating (Sankar, 1991). The problem for most executives is that managing change is unlike any other managerial task they have ever faced. As one top manager at a large corporation pointed out, when it comes to handling even the most complex operational problem, he has all the skills he needs, but when it comes to managing change, the model he uses for operational issues doesn't work (Duck, 1993). The implementation research suggested that there are varieties of factors which affect the success or failure of information technology, including organisational context, technical factors, human factors, and attitudes and the decision style of management.

3.0 Methodology

An exploratory methodology of research comprising both primary and secondary sources was used for this study. Employing both quantitative and qualitative methods, a sample of twenty (20) respondents who were all managers of the selected microfinance institutions in the shama district was used. It is important to note that the selection stands to reason that the managers are the decision makers when it comes to the application of any information technology.

4.1 Results/Discussion

This part of the study is concerned with the presentation, analysis and interpretation of data collected through the administration of the research instrument and secondary data collected from various sources.

Table 4.1 Demographic Data
Sex distribution of respondents

Sex	Number of Respondents	Percentage (%)				
Male	10	50				
Female	10	50				
Total	20	100				

Source: Fieldwork 2015

Table 4.1 presents the sexes of the respondents who took part in the study. The presentations indicate that 10 out of the 20 respondents that took part in the study were males and formed 50% percent of the total respondents while the other 50% were females. This implies that the views presented by managers of various micro-financial institutions in the Shama district are that of both males and females. Hence the findings can be generalized.



Table 4.2

Age distribution of respondents

Age category	Number of Respondents	Percentage (%)
18 – 30	7	35
31 – 40	12	60
41 – 50	1	5
51 – 60	0	0
61 and above	0	0
Total	20	100

Source: Fieldwork 2015

From Fig. 4.2, it is clear that majority of the respondents forming about 60% of the respondents are between the ages of 31 and 40 years. 35% were also between 18 and 30 while 5% were between 41 and 50. None of the respondents was above the age of 50.

Table 4.3

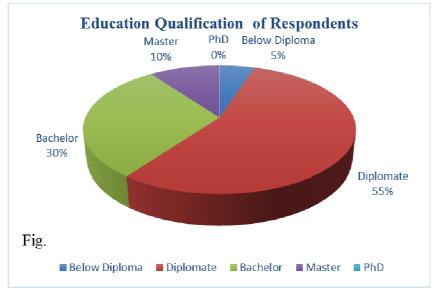
Level of Education of Respondents

Level of Education	Number of Respondents	Percentage (%)
Below Diploma	1	5
Diplomate	11	55
Bachelor	6	30
Master	2	10
PhD	0	0
Total	20	100

Source: Fieldwork 2015

The levels of education of respondents were ascertained and the resultant data is captured in table 4.3 above and fig. 4.2 below. It can be said that the findings of the study reflect the perceptions of managers with different levels of education.





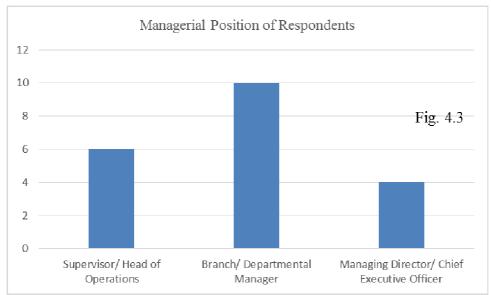


Fig. 4.3 displays the various managers who took part in the study. Respondents were drawn from all the managerial levels to ensure that views of respondents will reflect that of all management positions. It was revealed that the bar chart of the managerial position of respondents seems to be normally distributed. This implies the respondents knew about the use of IT to micro – financial institutions. Hence the perceptions revealed in the findings are that of all levels of management.



Table 4.4 Scheme of micro-financial institution of respondents

Scheme of Micro – financial institution of respondents	Number of Respondents	Percentage (%)
Rural and Community Banks	3	15
Savings and Loans Company	10	50
Financial NGO	1	5
Credit Union an Co-op. Society	3	15
Susu Collectors	2	10
Micro Insurance and Leasing	1	5
Total	20	100

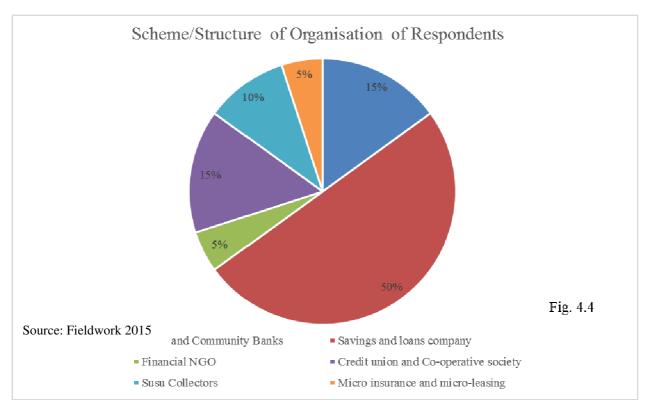


Table 4.4 and fig.4.4 above illustrates the various schemes or structures of micro-financial institutions that were selected to partake in the study. The findings are therefore the reflection of all the schemes of micro-financial institutions in Ghana and generalizations can be made as such.



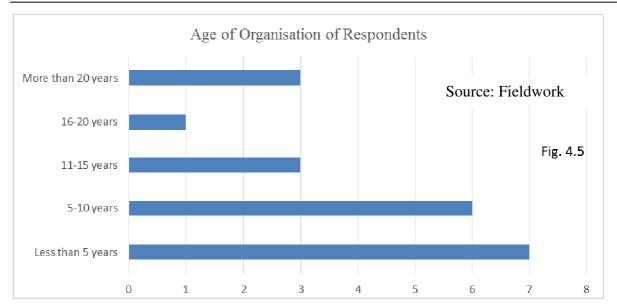
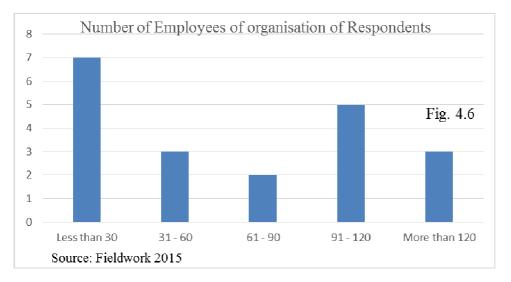


Fig. 4.5 above depicts the number of years of existence of respondents' organisations. According to the simple horizontal bar charts, the majority forming about 35% of the respondents claim their organisations are between the ages of one and five. However there were another 15% whose organisations have been in existence for more than 20 years. This makes the findings very interesting as the views of the respondents are known to cover that of both young and fully - fledged organisation.



The number of employees of an organisation determines its size and structure. Effect of IT on the structure of the organisation is one of the core objectives of this study. Hence the sizes of the various organisations that form part of this study are very indispensable so far as this study is concerned. Fig. 4.6 above shows the various numbers of employees of the organisations that are part of the study.



Table 4.5 The extent to which IT is useful to respondents' organisation

Category	Frequency	Percent
Completely not useful	1	5
Not useful	2	10
Neutral	1	5
Useful	4	20
Highly useful	12	60
Total	20	100

Table 4.5 above presents the usefulness of IT to the various micro-financial organisations and confirms the importance of the study problem and the objective to ascertain the importance of IT as a useful resource. From the background information to the study the researcher was of the view that IT could be useful to various micro-financial institutions in the Shama district due to its proliferation by these micro-banks. This confirms the writeups of Galliers et al (1994), Robey and Azevedo (1994), Scott Morton (1995), Baskerville and Smithson (1995), Raymond et al 1989, Magal and Lewis (1995), Porter and Millar (1985) and Bread and Ives (1986) when they acclaimed that IT has become indispensable to business organisations and the corporate world for various purposes.

Importance of Information Technology and usage

If IT is that important to the micro-financial organisations in Ghana then management is expected to embrace its usage and training. The researcher presented this as the second research question. The table below explains the extent to which micro-financial institutions provide training to their employees.

Zuboff (1988) explains the importance of training by organisations on Information Technology. Inadequate training could be the cause of resistance to the implementation of IT by some employees.

Table 4.6 The extent to which organisations train employees about the use of IT

Category	Frequency	Percent
Provide no training	3	15
To a little extent	2	10
To some extent	5	25
To a great extent	9	45
To a very great extent	1	5
Total	20	100

Source: Fieldwork 2015

Table 4.6 above presents the extent to which organisations train employees about the use of IT to the various micro-financial organisations and confirms the importance of the study problem and the objective to ascertain the importance of IT as a useful resource.

Most micro-financial institutions provide no training about the use of IT to their employees, hence yielding no output in the work field when they acclaimed that IT has become indispensable to business organisations and the corporate world for various purposes. On the other hand, there are more half than of the sampled respondents who give some kind of training to a very great extent and demonstrate that IT enhances efficiency and increases productivity.



Table 4.7 Cross tabulation of number of employees of micro - financial institutions and their usage of IT

Rate of usage of I against number o employees	T	Very Limited Use	Limited Use	Moderate	High Use	Very high Use	Total
Less than 30	Count	4	2	1	0	0	7
	% within	57.1%	28.6%	14.3%	.0%	.0%	100.0%
31-60	Count	0	0	3	0	0	3
	% within	.0%	.0%	100.0%	.0%	.0%	100.0%
61-90	Count	0	0	0	2	3	5
	% within	.0%	.0%	.0%	40.0%	60.0%	100.0%
91-120	Count	0	0	0	2	3	5
	% within	.0%	.0%	.0%	40.0%	60.0%	100.0%
Total	Count	4	2	4	4	6	20
	% within	20.0%	10.0%	20.0%	20.0%	30.0%	100.0%

Source: Fieldwork 2015

From table 4.7 it could be deduce that the number of employees of a micro-financial institution influences its usage of IT. A similar one-way analysis has been made on this at table 4.17. The findings explains that the higher number of employees of a micro-finance the higher its usage of IT. A vivid analysis has been done at table 4.17

Table 4.8 Cross tabulation of period of existence of microfinance and their usage of IT

Rate of usage of IT against period of existenc of org.	e	Very Limited Use	Limited Use	Moderate	High Use	Very high Use	Total
Less than 5 years	Count	4	2	1	0	0	7
	% within	57.1%	28.6%	14.3%	.0%	.0%	100.0%
5-10years	Count	0	0	3	3	0	6
	% within	.0%	.0%	50.0%	50.0%	.0%	100.0%
11-15 years	Count	0	0	0	1	2	3
	% within	.0%	.0%	.0%	33.3%	66.7%	100.0%
16-20years	Count	0	0	0	0	1	1
	% within	.0%	.0%	.0%	.0%	100.0%	100.0%
More than 20 years	Count	0	0	0	0	3	3
	% within	.0%	.0%	.0%	.0%	100.0%	100.0%
Total	Count	4	2	4	4	6	20
	% within	20.0%	10.0%	20.0%	20.0%	30.0%	100.0%



The study was also geared toward finding a relationship between the period of existence of a micro-financial organisation and the effects it has on the organisation's usage of IT. It was realized that the longer the period of existence the higher the usage of IT. This is depicted in the table 4.8 above. It could be seen that the organisations that have been in existence for longer period of time have very high usage of IT and vice versa.

Effects of Information Technology on strategy
Table 4.9 Mean and standard deviation for the effect of IT on the various strategic items

	Mean	Std. Deviation	N
Can save the company money by reducing labour costs	3.90	1.165	20
Can reduce time for job to be done	4.55	.759	20
Allow organizations to provide a better service to customers	4.35	1.137	20
Make the decision making process easier	4.45	.945	20
Assist executives/managers to set strategies and future plans	4.00	1.522	20
Improve the overall productivity of the organization	4.50	.761	20
Increase profitability	4.40	.821	20
Increase competitiveness	3.85	1.182	20
Reduce the total workforce and eliminate some jobs	3.45	1.276	20
Reduce the number of managerial levels therefore smaller and flatter organization	3.30	1.174	20

Source: Fieldwork 2015

Various scholars have mentioned the strategic importance of IT in business organisations as reviewed in the second section of the study. It was the study's objective to find out the strategic role IT plays in micro-financial institutions in Ghana, particularly on efficiency and effectiveness. The findings captured above in table 4.9 demonstrate that IT enhances efficiency and increases productivity. Administratively it improves effectiveness by making organisations flatter in terms of control. In all responses the mean are higher than the deviations which indicate that the majority of the respondents either agree or strongly agree to the item. From the introduction of the study it was mentioned that organisations still perceive IT becoming the key to cost reduction and improving organisational efficiency as postulated by Kraemer and Dedrick (1994).

Influence of structure on the usage of Information Technology Correlation between scheme of micro-finance and the extent respondents agree that the use of IT prove to be useful to their organization

Table 4.10

		Value	Asymp. Std.Error ^a	Approx. T ^b	Approx. Sig.
Interval by Interval	Pearson's R	.654	.085	3.671	.002°
Ordinal by Ordinal	Spearman Correlation	.764	.094	5.025	$.000^{c}$
No. of Valid Cases		20			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.



 H_0 = There is no relationship between the structure/scheme of your micro-financial organization to what extent do you agree that the use of information technology proved to be useful for your organization.

 H_1 = There is a relationship between the structure/scheme of micro-financial organization and the extent to which the use of information technology proved to be useful to that organization.

From table 4.10, both Pearson's R and Spearman Correlation coefficient gave us value/figures less than the alpha value (0.05) thus, 0.001 for both. Therefore we reject the null hypothesis and conclude that there is a relationship between the structure/scheme of your micro-financial organization and the extent to which the use of information technology proved to be useful to the organization. This is further elaborated in the cross tabulations below.

Table 4.11 Cross tabulation of the Scheme of micro-financial organization against the extent they agree that the use of IT prove to be useful to their your organization

The structure/scheme of against usage of IT		Completely not useful	Not useful	Neutral	Useful	Highly useful	Total
Rural and Community Banks	Count	0	0	0	1	2	3
	% within	.0%	.0%	.0%	33.33%	66.67%	100.0%
Savings and loans company	Count	0	0	2	4	4	10
	% within	.0%	.0%	11.1%	44.4%	44.4%	100.0%
Financial NGO	Count	0	0	0	0	1	1
	% within	.0%	.0%	.0%	.0%	100.0%	100.0%
Credit union and Co-operation	Count	0	0	0	0	3	3
society	% within	.0%	.0%	.0%	.0%	100.0%	100.0%
Susu collectors	Count	1	0	0	0	1	2
	% within	50.0%	.0%	.0%	.0%	50.0%	100.0%
Micro insurance and micro-	Count	0	1	0	0	0	1
leasing	% within	.0%	100.0%	.0%	.0%	.0%	100.0%
To	otal Count	1	1	2	5	11	20
	% within	5.0%	5.0%	10.0%	25.0%	55.0%	100.0%

Source: Fieldwork 2015

From the table 4.11 above it could be noticed that 80% of the respondents find the use of IT to be useful or highly useful. These respondents include those from the rural and community banks, the savings and loans organisations, the credit unions and financial NGOs. The conclusions that could be drawn from the table above is that the micro-financial institutions that are into cash mobilization and credit administration perceive the use of IT as either useful, highly useful or neutral, especially because of the supportive nature of the banking software for loan administration while those that are into just mobilization of funds and insurance find the do not find the use of IT useful.



Table 4.12 Cross tabulation of period of existence of microfinance and their usage of IT

Rate of use of IT against period of existence of org	•	Very Limited Use	Limited Use	Moderate	High Use	Very high Use	Total
Less than 5 years	Count	4	2	1	0	0	7
	% within	57.1%	28.6%	14.3%	.0%	.0%	100.0%
5-10years	Count	0	0	3	3	0	6
	% within	.0%	.0%	50.0%	50.0%	.0%	100.0%
11-15 years	Count	0	0	0	1	2	3
	% within	.0%	.0%	.0%	33.3%	66.7%	100.0%
16-20years	Count	0	0	0	0	1	1
	% within	.0%	.0%	.0%	.0%	100.0%	100.0%
More than 20 years	Count	0	0	0	0	3	3
	% within	.0%	.0%	.0%	.0%	100.0%	100.0%
Total	Count	4	2	4	4	6	20
	% within	20.0%	10.0%	20.0%	20.0%	30.0%	100.0%

Source: Fieldwork 2015

It was tried determining the extent to which the period of existence of a micro-financial organisation affects its usage of IT. The result is presented in table 4.12 below and suggests that the lesser the period of existence of a micro-financial institution the more limited its use of IT and the more the period of existence the higher its use of IT.

Resistance to the use of Information Technology

Table 4.13 One- Way Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.433	1	1.433	7.230	.015 ^a
Residual	3.567	18	.198		li
Total	5.000	19			

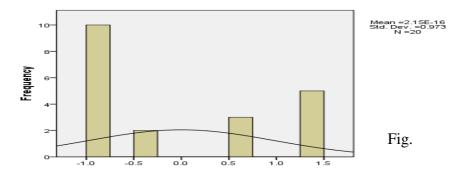
Source: Fieldwork 2015

 H_0 = There is no significance between the means to what extent do you feel that there is a resistance to use information technology in your organization

 H_1 = There is a significance between in the means to what extent do you feel that there is a resistance to use information technology in your organization.

From Table 4.13 above, at 95% confidence interval, the F value was found to be 7.230 with a corresponding significance 'p-value' of 0.015. Since p – value = 0.015 < F value = 0.05 we reject the null hypothesis (H_0). This implies that there is a significance difference in the means of the resistance to use information technology in their organization, meaning majority said is to no extent.





From Fig. 4.7 above, the mean percentage of to what extent do you feel that there is a resistance to use information technology in your organization was found to be greater than the median and the distribution has a short tail to the right, which implies that the distribution of the percentage of to what extent do you feel that there is a resistance to use information technology in your organization is positively skewed, which means resistance to use information technology is to no extent.

Table 4.14 Factors that cause resistance to the use of IT in micro-financial organisations

Factor	N	Mean	Std. Deviation				
Unskilled workers	20	2.25	1.410				
Fear of losing job/position	20	2.05	1.099				
Technophobia	20	1.20	.523				
Lack of Training Programs	20	1.60	.598				
Inadequate education	20	1.20	.523				
High Cost of Purchasing/Maintenance of IT materials	20	2.45	1.605				
Limited size of firm's operations	20	1.60	.681				
Lack of creative administrative leadership	20	1.05	.224				
Anticipation of positive effects of IT on organisation in future							
Increased positive effect of information technology on the Micro-financial organizations still ahead in the near future.	20	4.50	1.147				

Source: Fieldwork 2015

The above statistics shows that the majority of the respondents' are of the view that high cost of IT equipment has been a bane to use of IT by micro-financial institutions as anticipated by the researcher. Magal and Lewis (1995) mentioned this as especially a deterrent to most organisations for adopting IT.

Unskilled workers follows with the next highest mean to depict those respondents perceive that micro-financial institutions are not making use of IT because of unskilled labour. As already envisaged and confirmed by the findings Pappard (1993) had already written that the skills and abilities of organisational members and the attitude of both management and employees will determine the adoption of IT by an organisation. Sankar (1991) also pointed out that attitudes toward computer technology are one of the components of the psychological



climate within the organisation that determine how users react or behave when confronted by the need to interact with some aspect of an information system, whether it be the technology itself or those who implement it.

Another factor to be considered is the fear of losing job/position which to respondent has been a canker to IT adoption by micro-financial organisations in Ghana. The researcher wanted to verify whether or not people reject the adoption of IT because it is a threat to their job or position. This was confirmed by the mean that was acquired for that factor.

However, respondents are optimistic about the fact that there will be positive effects of IT on micro-financial institution in the near future. This implies that organisations are going to make heavier investment on IT and end-usage.

Effects of Information Technology on organisational structure

Table 4.15 Use of IT makes decision making more centralized at the strategic level

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	7	35.0	35.0	35.0
Disagree	10	50.0	50.0	85.0
Neutral	1	5.0	5.0	90.0
Agree	1	5.0	5.0	95.0
Strongly Agree	1	5.0	5.0	100.0
Total	20	100.0	100.0	

Source: Fieldwork 2015

Table 4.15 above shows that out of the total number of 20 respondents, 10 respondents constituting 50% disagree that the use of information technology can cause the decision making process to become more centralized at the strategic level, 7 respondents constituting 35% strongly disagree to that, 1 respondent constituting 5% agree, 1 respondent constituting 5% strongly agree and 1 respondent also remain neutral. Hence it could be said that at the strategic level respondents perceive that with the use of IT decision making is still decentralized.

Table 4.16 Cross tabulation of rate of usage of IT against the effects of the use of IT by top management on middle management

Rate of usage of IT against the effects of the use of IT by top management on middle management		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Very Limited Use	Count	0	0	1	0	0	1
	%	.0%	.0%	100.0%	.0%	.0%	100.0%
Limited Use	Count	0	0	1	1	0	2
	%	.0%	.0%	50.0%	50.0%	.0%	100.0%
Moderate	Count	0	0	0	4	0	4
	%	.0%	.0%	.0%	100.0%	.0%	100.0%
High Use	Count	0	0	0	4	0	4
	%	.0%	.0%	.0%	100.0%	.0%	100.0%
Very high Use	Count	1	2	0	4	2	9
	%	11.1%	22.2%	.0%	44.4%	22.2%	100.0%
Total Count		1	2	2	13	2	20
%		5.0%	10.0%	10.0%	65.0%	10.0%	100.0%



From table 4.16 above it is realized that the 3 respondents whose usage of IT are either very limited or limited agree or are neutral about the fact that the use of IT by top management can eliminate some middle management positions. All 4 respondents who moderately use IT agree to this assertion while 13 respondents who either highly use IT or very highly use IT highly disagree, disagree, agree or highly agree. 75% either agree or highly agree. Hence it could be said that the usage of IT affects the structure of a micro-financial organization especially in terms of control and decision making.

This affirms the assertion by the likes of Bird and Lehoman 1993, Scott and Morton 1991, Dawson and Mclaughlin 1986 and Gurbaxani and Whang 1991, that the use of IT decentralizes the decision-making process and increases access to information within the organization.

Table 4.17 Use of IT cause growth in business creating more new jobs and increasing the total workforce

Category	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly Disagree	1	5.0	5.0	5.0	
Disagree	3	15.0	15.0	20.0	
Neutral	2	10.0	10.0	30.0	
Agree	10	50.0	50.0	80.0	
Strongly Agree	4	20.0	20.0	100.0	
Total	20	100.0	100.0		

Source: Fieldwork 2015

From table 4.17 respondents constituting 50% agree that the use of computers and other information technology facilities can lead to growth in business, therefore creating more new jobs and increasing the total workforce, 4 respondents constituting 20% strongly agree to that, 3 respondents constituting 15% disagree, 1 respondent strongly disagree and 2 respondents remain neutral. A cross tabulation of the rate of use of IT and effects of use of IT on growth and total work force below explains this assertion better.

Table 4.18 Cross tabulation for rate of usage of IT against effects of IT on growth and total workforce

Rate of usage of IT against effects of IT on growth and total workforce		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Very Limited Use	Count	0	1	0	0	0	1
	%	.0%	100.0%	.0%	.0%	.0%	100.0%
Limited Use	Count	0	0	2	0	0	2
	%	.0%	.0%	100.0%	.0%	.0%	100.0%
Moderate	Count	0	0	0	4	0	4
	%	.0%	.0%	.0%	100.0%	.0%	100.0%
High Use	Count	0	0	0	4	0	4
	%	.0%	.0%	.0%	100.0%	.0%	100.0%
Very high Use	Count	1	2	0	2	4	9
	%	11.1%	22.2%	.0%	22.2%	44.4%	100.0%
Total Count		1	3	2	10	4	20
%		5.0%	15.0%	10.0%	50.0%	20.0%	100.0%

Source: Fieldwork 2015

The table above confirms that a firm's usage of IT is informed by the perception of contribution the use of IT has on overall growth of the organization. As indicated in table 4.18 above the 3 respondents who claim their use of



IT is very limited or limited disagree or are neutral about the fact that the usage of IT can contribute to overall growth of the organization.

However the other 17 respondents who use IT moderately, highly or very highly are of the conviction that the usage of IT has a positive effects on growth in business and total workforce.

This finding defies the discoveries of Bahrami 1992, Dewitt 1992, Vollmann and Brazas 1993, Carrol 1994 and Tomaska 1987 when they claim that the adoption of IT would eventually result in downsizing. Nevertheless, it confirms the works of Osterman 1986, Morrison 1991, and Turbman et al 1996 as reviewed in the second section of this study that the use of IT increases employment and creates new jobs.

References

- Alshoaibi, A., A. (1998). *The Impact of Information Technology on Organisations: the case of the Saudi Private Sector*. University of St. Andrews, United Kingdom.
- Asiama J. P., and V. Osei (2007). Economics web Institute, Bank of Ghana. *Micro-finance in Ghana: An Overview*. 1(1)
- Bahrami, H. (1992). The emerging flexible organization. California Management Review, 34(4), 33-52.
- Bird, A., and Lehrman, W. (1993). The effects of major information technology adoption in Japanese corporations. *Japan and The World Economy*, 5, 217-242.
- Breath, C., and Ives, B. (1986). Competitive information-systems in support of pricing. *MIS Quarterly*, 10(1), 85-96.
- Blili, S., and Raymond, L. (1993). Information technology: Threats opportunities for small and medium-sized enterprises. *International Journal of Information Management*, 13(6), 439-448.
- Carroll, G. R. (1994). Organizations... The smaller they get. California Management Review, 37(1), 28-41.
- Carter, R. (1989). Students' guide to information technology. Oxford Heinemann Newnes.
- Carter, R. (1991). Information technology: made simple. Oxford: Butterworth-Heinemann.
- Child, J. (1987). Information technology, organization, and the response to strategic challenges. *California Management Review, Fall, 30(1), 33-50.*
- Cooper, R., and Zmud, R. (1990). Information technology implementation research: A technological diffusion approach. *Management Science*, *36*(2), 123-139.
- Culpan, O. (1995). Attitudes of end-users towards information technology in manufacturing and service industries. *Information and Management*, 28, 167-176.
- Daft, R. L. (1997). Management. Orlando, FL: The Dryden Press.
- Dawson, P., and McLaughlin, I. (1986). Computer technology and the redefinition of supervision: A study of the effects of computerization on railway freight supervisions. *Journal of Management Studies*, 23, 116-132.
- Duck, J. D. (1993). Managing change: The art of balancing. *Harvard Business Review, November-December*, 71(6), 109-118.
- Feeny, D. F., and Willcocks, L. P. (1998). Core IS capabilities for exploiting information technology. *Sloan Management Review, Spring*, 39(3), 9-21.
- Galbraith, J. R. (1977). Organizational design. Reading, MA: Addison-Wesley Publishing Company.
- Galliers, R., Merali, Y., and Spearing, L. (1994). Coping with information technology? How British executives perceive the key information systems management issues in the mid-1990s. *Journal of Information Technology*, 9, 223-238.
- Leavitt, H. J., and Whisler, T. L. (1958). Management in the 1980s. *Harvard Business Review, November-December*, 36(6), 41-48.
- Magal, S. R., and Lewis, C. D. (1995). Determinants of information technology success in small businesses. *Journal of Computer Information Systems, spring*, 35(3), 75-83.
- McKersie, R., and Walton, R. (1991). Organizational change. In M. S. Scott Morton (Ed.), *The corporation of the 1990s: Information technology and organizational transformation* (pp. 244-277). New York, NY: Oxford University Press.
- Osterman, P. (1986). The impact of computers on employment of clerks and managers. *Industrial and labor Relations Review*, 39(2), 175-186.
- Peppard, J. (1993). IT strategy for business. London: Pitman.
- Porter, M. E., and Millar, V. E. (1985). How information gives you competitive advantage. *Harvard Business Review, July-August*, 63(4), 149-160.



- Robey, D., and Azevedo, A. (1994). Cultural analysis of the organizational consequences of information technology. *Accounting, Management and Information Technology*, *4*(1), 23-37.
- Sankar, B. Y. (1991). Implementing information technology: A managerial audit for planning change. *Journal of Systems Management, November*, 42(11), 32-37.
- .Scott Morton, M. (1995). Emerging organizational forms: Work and organisation in the 21st century. European Management Journal, 13(4), 339-345.
- Steiner, T. D. and Teixeira, D. B. (1990). Technology in banking New York, NY: Dow Jones Irwin.
- Tomaska, R. (1987). *Downsizing: Reshaping the corporation of the future*. New York, NY: American Management Association.
- Turban, E., Mclean, E., and Wetherbe, J. (1996). *Information technology for management: Improving quality and productivity*. New York, NY: John Wiley and Sons, Inc.
- Vollmann, T., and Brazaz, M. (1993). Downsizing. European Management Journal, 11(1), 18-29.
- Watanabe, K., and Arao, Y. (1995). Omron's creative information system. Long Range Planning, 28(2), 39-48.
- Yap, C. S. (1986). *Information technology in organisations in the service sector*. Unpublished Ph.D. Thesis, University of Cambridge, UK.
- Zuboff, S. (1988). In the age of the smart machine. New York, NY: Basic Books