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## **CONTRIBUTION OF INFORMATION TECHNOLOGY ADAPTED TO FINANCIAL DISTRESS FACING LOCAL AUTHORITIES IN KENYA.**

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### **Abstract**

**Purpose:** The purpose of this study was to establish the contribution of Information Technology adapted to financial distress facing Local Authorities in Kenya.

**Methodology:** A descriptive research design was used to conduct the study. The study population comprised of the 175 Local Authorities in Kenya. A sample of 20 Local Authorities was selected using a stratified random sampling technique. A questionnaire was used to collect data from both the Local Authorities officers and customers of Local Authorities. The data collected was analyzed using descriptive and inferential statistics. Qualitative responses were analyzed using content analysis.

**Results:** Results indicated that Information Technology was inadequate in Local Authorities. In addition, the Management Information System was not enhancing the growth of Local Authorities. The results further indicated that Information Technology was a significant determinant of financial distress in Local Authorities.

**Unique contribution to theory, practice and policy:** It was recommended that ICT skills for Local Authority staff should be enhanced through training. The Local Authorities should invest in more computers and ICT software as doing so would improve the financial fortunes of such local authorities. It was further recommended that all Local Authorities should prioritize the implementation of LAIFOMS.

**Keywords:** *Information Technology, financial distress, Local Authorities*

## **1.0 INTRODUCTION**

### **1.1 Background of the Study**

The terms Local Governments and Local Authorities are used interchangeably in this thesis so as to avoid being bogged down by terminological quagmires. Local government means an intra-sovereign governmental unit within the sovereign state dealing mainly with Local affairs, administered by Local Authorities and subordinate to the state government (Khan & Ara, 2006; Jahan, 1997).

Local government is also defined as a political sub – division of a nation or state which is constituted by law and has substantial control of Local affairs, including the power to impose taxes or to enact prescribed purpose (Ajayi, 2001). Wanjohi (2003) and Institute of Economic Affairs (2009) too defined Local Government as an institution whose operations addresses the needs and aspiration of the citizenry and also extends the administrative and political control to the community. These two definitions forms the accepted view of LAs for the purpose of this study.

Local Authorities according to Institute of Economic Affairs (IEA, 2009) constitute one of the layers of Government. The other layers of Government are Central government, national government or (where applicable) federal government. Local Authorities derive their mandate from powers delegated to it by legislation or directives of the higher level of government (Central government or federal government) (IEA, 2009). The nature of Local Authorities differs from country to country.

The formation of Local government may have been motivated by the need to reduce bureaucracy and the growth of institutional power to the detriment of the citizens. This is exemplified by the quote from a letter from Thomas Jefferson to J. Cabell.

"The way to have good and safe government is not to trust it all to one, but to divide it among the many, distributing to everyone exactly the function he is competent to. Let the National Government be entrusted with the defense of the nation and its foreign and federal relations; the State governments with the civil rights, laws, police, and administration of what concerns the State generally; the counties with the Local concerns of the counties, and each ward direct the interests within itself" (Thomas, 1816).

## **1.2 Problem Statement**

Financial distress in Local Authorities exists in various forms (Walker & Jones, 2007). For instance Local Authorities are often unable to pay current liabilities such as salaries and short term obligation to creditors (Omamo, 1995). In order to meet their short term financial obligations they are forced to operate on overdrafts with high interest rates. Local Authorities are also unable to meet long term liabilities such as bank loans. An example of such financial distress include those currently being experienced by Mombasa City council which is staggering under heavy borrowing as it owes the creditors a whopping Ksh 1.9 billion according to Mombasa City Council Budget of 2011, while City Council of Nairobi owes its creditors Kshs 5.3 billion (CCN budget, 2011), just to mention but a few.

Furthermore financial distress exist in the form of revenue deficits forcing the Authorities to always rely on the central government for fiscal transfers such as Local Authority Transfer Fund (LATF) and bank overdrafts (Omamo, 1995). Also other studies (Mcluskey & Fransen, 2005; Gachuru & Olima, 1998 and Muia, 2005), noted that the financial and budget deficits in Local Authorities in Kenya were growing and that there was urgent need to arrest the situation. Consequently a number of councils had their employees demonstrate due to unpaid salaries and salary arrears that have gone for several months (Muia, 2005, Muganda & Belle, 2009).

Financial distress in Kenyan Local Authorities has been a persistent phenomenon. For example, it was recorded in the Kenya Parliamentary sessions that Local Authorities were facing financial challenges due to a weak financial base (ROK, 2001). This led to the introduction of Local

Authority Transfer Fund (LATF) as a move to strengthen the financial base. However, these policy instruments together with internal sources of revenue have not mitigated the occurrence of financial challenges in Local Authorities. The persistence of this problem is exemplified in the quote from the Kenya Parliamentary session by ROK (2000) which went on to record that;

“Mr. Speaker Sir, the Nairobi City Council is in a state of chronic financial distress. It has been spending beyond its means, and it has debt payments arrears that exceed its annual income, before even taking into account its large future debt repayment obligations”. Kenya Parliamentary Hansard 15<sup>th</sup> June 2000, pg.1095.

The financial health of Local Authorities in any country is crucial in ensuring the sustainable delivery of services to the community (Capalbo, Grossi, Ianni & Sargiacomo, 2010). The Presence of financial distress in Local Authorities such as inability to pay salaries leads to staff demotivation (IEA, 2009; Muganda & Belle, 2009). This is manifested through increase in shirking, laziness and corruption among the staff. This manifestation negatively affects the revenue collection which further compounds the problem of financial deficits (Institute of Economic Affairs, 2009).

However, other studies (Institute of Economic Affairs, 2009; Omamo, 1995; Mcluskey & Fransen, 2005; Gachuru & Olima, 1998 and Ekwubi, 2010) on Local Authority financial distress in developing countries in general, and Kenya in particular are inadequate because they do not exhaustively address the determinants of financial distress in Local Authorities. These studies acknowledge the presence of financial distress in Kenyan Local Authorities, which they claim inhibit service delivery but fails to address the causes of the same.

In addition, such studies are lacking in depth assessment and give generalized conclusions of the presence of financial distress in Kenyan Local Authorities, without analyzing the causal relationship between financial distress in Local Authorities and its determinants. In fact no adequate studies have been conducted specifically to establish the factors that contribute to financial distress facing Local Authorities in Kenya. This study therefore sought to bridge this evident research gap by investigating the Information Technology adapted to financial distress facing Local Authorities in Kenya.

### **1.3 Research Objective**

The objective of this study was to determine the contribution of corporate governance practices to financial distress facing local authorities in Kenya.

## **2.0 LITERATURE REVIEW**

### **2.1 Theoretical Review**

#### **2.1.1 Financial Distress Theory**

Financial distress can be subdivided into four sub-intervals: deterioration of performance, failure, insolvency, and default. Whereas deterioration and failure affect the profitability of the company, insolvency and default are rooted in its liquidity. Theoretically, the outcome of each interval can be positive, implying that the company breaks the downward trend, or negative indicating the continuing deterioration of the firm value and a movement downwards from one sub-interval of the spiral to another. In many real cases, when entering financial distress, the company traverses all the stages of decline (Mueller, 1986).

Financial distress is characterized by a sharp decline in the firm's performance and value (Opler & Titman, 1994). This part of the overall process has two important characteristics; moving down the spiral from one phase to another the sharp decline accelerates, whereas the length of each stage becomes shorter and shorter. Obviously, this decline of performance can continue longer than the economic failure of the company. The length of insolvency depends on the maturity structure of the firm's debt, whereas default is dependent on the date of maturity followed by renegotiation and turnaround or liquidation and is, therefore, the shortest stage of financial distress.

The biggest challenge in financial distress is to recognize adverse processes as early as possible in order to gain more time for response. The later financial distress is anticipated, the more time pressure and the more questionable is the success of counter measures (Opler & Titman, 1994). The theory of financial distress may be useful in explaining the causes of financial challenges facing Local Authorities. In addition, it may be used to give indicators of financial distress in Local Authorities and how the challenges can be resolved.

## **2.2 Empirical Review**

The value of information technology in Local governments cannot be overemphasized. In this case, Pradhan (2002) attempted to define information technology as "all computing and communication technologies". Organizations such Local governments would not afford to lag behind in adopting information technology. Information technology is that critical that it facilitate collection, storage and retrieval of information. Authors such as Odedra (1996) again concluded that information technology can be defined as "a tool of socio-economic development" and he was of the opinion that use of information technology enhances faster and broader communication of information.

Awe (1997) was of the view that information technology is defined as "technologies that ensure a more accurate and cost effective knowledge to support decision making, reduces mental and physical efforts in solving certain tasks; reduces or eliminates inefficient practices, it rivals the manual system and improves services rendered to customers". Finally, International Foundation for Information Technology (IF4IT) also defines Information technology as "the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware". Information technology is used by many organizations such as Local governments to facilitate effective and efficient provision of services to citizens. Implementation of Information technology leads to increased efficiency and effectiveness of services and as a result there is occurrence of cost reduction (Schelin, 2006).

Waema and Mitullah (2007) conducted a study on E-governance in Local Authorities in Kenya. The authors concluded that ICTs are at an infancy stage in Kenya and ICTs have potential of reversing the trend of ineffective governance and improving participation, transparency, accountability, responsiveness, effectiveness and efficiency which are major governance constructs. The authors further observed that (Local Authority Integrated Financial Operations and Management System) LAIFOMS was limited to financial management and that it was still to penetrate other aspects and engagement with citizens. They also observed that Access to computers and internet was limited and hope for ICT application lies on mobile phones.

A study by Jensen (2002) observed that Local municipalities in Africa are a fertile ground for the application of ICTs. They are at the front lines of government in their service-oriented interaction

with the public and business, often in transaction based systems with many, interlinked components. As such, municipalities have considerable potential to assist in the process of integration of ICTs into the daily lives of its citizens. Municipal operations from an information technology perspective can be divided into three areas – 1) internal, 2) intra-governmental, and 3) external (with the public). This study concluded that ICT adoption in African Local Authorities would substantially improve their financial fortunes.

The current study endeavored to demonstrate how the common components of ICT have been adopted in Kenyan Local Authorities and how this state of affairs has contributed to financial challenges facing Local Authorities. These components included people, hardware, software, data, and information procedures (Jensen, 2002; Waema & Mitullah, 2007 & Schelin, 2006).

### 3.0 RESEARCH METHODOLOGY

A descriptive research design was used to conduct the study. The study population comprised of the 175 Local Authorities in Kenya. A sample of 20 Local Authorities was selected using a stratified random sampling technique. A questionnaire was used to collect data from both the Local Authorities officers and customers of Local Authorities. The data collected was analyzed using descriptive and inferential statistics. Qualitative responses were analyzed using content analysis.

### 4.0 RESULTS AND DISCUSSIONS

#### 4.1 Response Rate

The number of questionnaires that were administered were 320, out of these, 200 was administered to senior officers/employees and 120 were administered to customers of the sampled Local Authorities.

**Table 1: Response Rate**

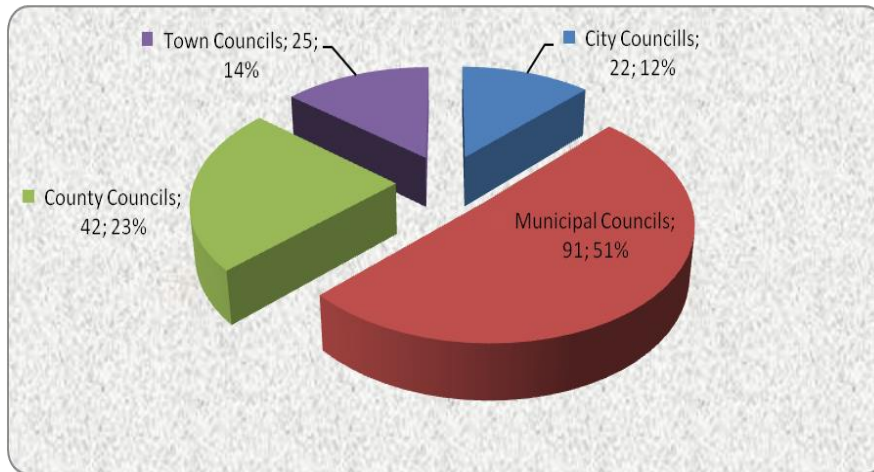
	Successful	Unsuccessful	Total
Officers/Employees	188 (94%)	12(6%)	200
Customers	107 (89%)	13(11%)	120
Total	295 (92%)	25(8%)	320

A total of 295 questionnaires were properly filled and returned, which included 188 questionnaires from the officers and 107 questionnaires from the customers.

#### 4.2: Demographic data

##### 4.2.1: Category of Local Authority

Figure 1 presents results on category of local authority of the respondents

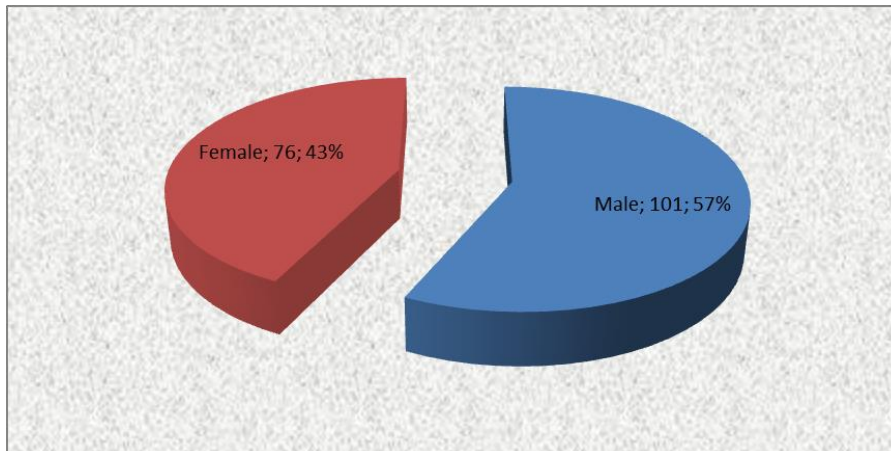


**Figure 1: Category of Local Authority**

As demonstrated in figure 1, a majority (51%) which is slightly more than half the respondents were from municipal councils. Twenty-three percent (23%) were from county councils, 14% were from town councils, and 12% were from the three city councils. The findings imply that the study respondents were well spread across all categories of Local Authorities (representative of the population) and this may have a positive effect on the generalization, application and representativeness of the data.

#### 4.2.2: Gender of Local Authority Officers

Respondents were asked to indicate their gender. Figure 2 presents the results.



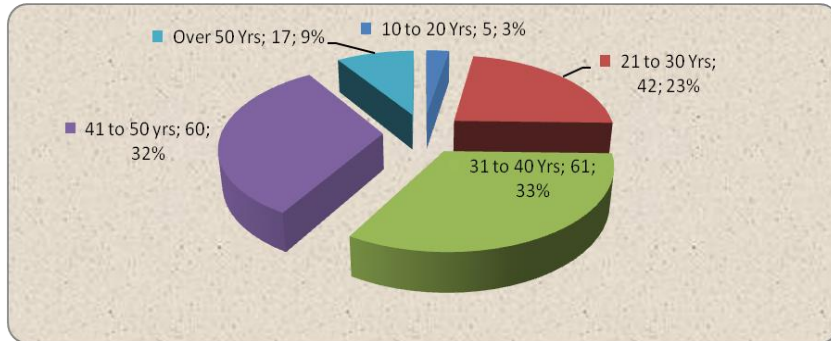
**Figure 2: Gender of Local Authority Officers**

Figure 2, illustrates that a majority (57%) which is slightly more than half of the respondents were males. Females formed 43% of the total number of respondents. The findings reflect the fact that the Local Authority is a male dominated field. According to Ellis, Cutura, Dione, Gillson, Manuel and Thongori (2007), in spite of women being major actors in Kenya's economy, and notably in agriculture and the informal business sector, men dominate in the formal sector citing the ratio of men to women in formal sector as 74%:26%. Perhaps the gender disparity may have an implication on the level of financial distress in Local Authorities. This is supported by (Stevenson and St-

Onge, 2005; Gakure, 1995; Gakure, 2001; Gakure, 2003) who argued that women are more prudent in resource management compared to their men counterparts.

#### 4.2.3: Age Bracket of Respondents

Respondents were asked to indicate their age bracket. Figure 2 presents the results.

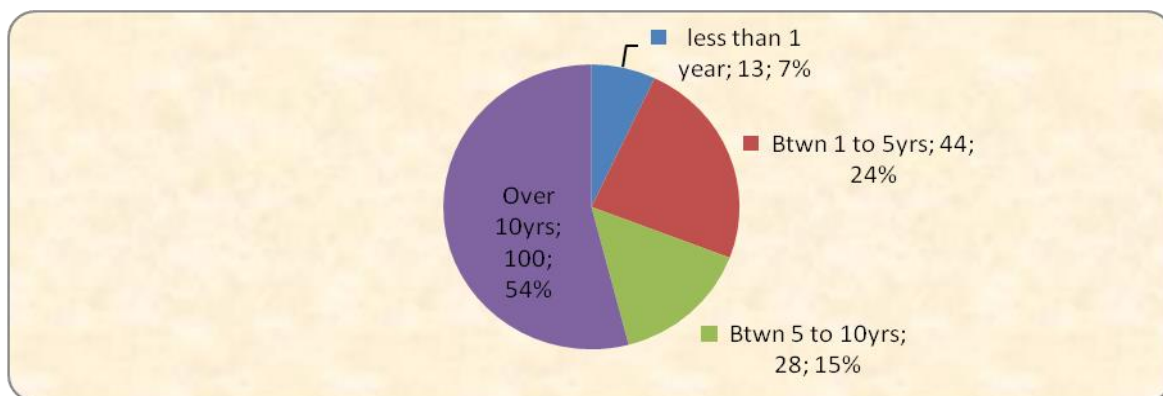


**Figure 3: Age Bracket of Respondents**

As revealed in Figure 3, a third of the respondents were aged between 31 to 40 years, 61, (33%) which was followed by 41 to 50 years, 60, (32%), 21 to 30 years, 42, (23%), over 50 years, 17, (9%) and 18 to 20 years, 5, (3%). The findings concur with those of Watson Wyatt Worldwide Study (2006) which asserted that the aging workforce exists in many countries including the U.S. and many European countries. The study by Watson also found that by 2050, Asia Pacific will be home to most of the world's elderly with 998 million people aged 60 and over.

#### 4.2.4: Length of Service

Respondents were asked to indicate the length of time in service. Figure 2 presents the results



**Figure 4: Length of Service**

Figure 4 reveals that a majority (54%), which was slightly more than half the respondents, had worked for the Local Authorities for a period of over 10 years. It was also observed that 24% of the respondents had worked for the Local Authorities for 1 to 5 years, followed by those who had



worked for the Local Authorities for 5 to 10 years (15%). Only (7%) of respondents had worked for the Local Authorities for less than 1 year.

#### **4.3: Information Technology and Financial Distress**

The current study sought to find out whether the effectiveness and adequacy of information technology is a determinant of financial distress in Local Authorities. Specifically, the study focused on the following variables; Provision of relevant information by Local Authority Information Management System (LAIFOMS); Reliability of Local Authority Information Management System (LAIFOMS); Local Authority Information Management System in enhancing Growth of Local Authorities (LAIFOMS); Ability of Local Authority Information Management System to incorporate new products and meeting new reporting needs (LAIFOMS); User friendliness of Local Authority Information Management System (LAIFOMS); Ability of Local Authority Information Management System (LAIFOMS) to interact with applied technologies such as PDAs, POS and ATMS;

##### **4.3.1 Provision of Relevant Information by Local Authority Information Management System (LAIFOMS)**

Descriptive results in Table 2 indicate that 55.3% disagreed while another 9.0% strongly disagreed, bringing to a more than half majority (64.3%) of those respondents under officers category who generally disagreed with the statement that the Management Information System used in Local Authorities does provide relevant information for the right people at different levels of the Local Authority to enable informed decision making. Meanwhile, 14.9% neither agreed nor disagreed while a further minority total of (20.8%) generally agreed with the statement.

The findings imply that Local Authority Information Management System does not provide relevant information for management purposes. Therefore lack of provision of relevant information has translated into increased financial distress in Local Authorities.

##### **4.3.2 Reliability of Local Authority Information Management System (LAIFOMS)**

Table 2 indicated that 53.7% agreed while a further 6.4% strongly agreed, bringing to a more than half majority (60.1%) of those officers who generally agreed with the statement that the information from Management Information System used in Local Authorities is not reliable. Meanwhile, 20.2% neither agreed nor disagreed while a further minority total of (19.7%) generally disagreed with the statement.

The findings imply that Local Authority Information Management System should provide reliable information for management and planning purposes. However, the provision of unreliable information has compounded problem of financial distress in Local Authorities.

##### **4.3.3 Local Authority Information Management System in Enhancing Growth of Local Authorities (LAIFOMS)**

Table 2 reveals that 55.9% disagreed while a further 10.1% strongly disagreed, bringing to a more than half majority (66.0%) of officers who generally disagreed with the statement that the Management Information System used in Local Authorities is not enhancing the growth of Local

Authorities. Meanwhile, 15.4% neither agreed nor disagreed, while a further 18.6% generally agreed with the statement.

The findings imply that Local Authority Information Management System may have a relative advantage over manual systems but it provides little in invigorating the growth of Local Authorities financial base. It is perceived that a relevant information system is useful in the management and planning purposes of the Local Authority. Consequently if the software does not aid growth of an organizations financial base then it leads to increased financial distress in Local Authorities since the cost of installing and maintaining such a system is enormous.

#### **4.3.4 Ability of (LAIFOMS) to Incorporate New Products and Meeting New Reporting Needs**

Table 2 reveals that 56.9% agreed while a further 11.7% strongly agreed, bringing to a more than majority (68.6%) of those officers who generally agreed with the statement that Management Information System used in Local Authorities cannot easily incorporate new products or expand to accommodate new reporting needs. Meanwhile, 14.9% neither agreed nor disagreed while another 16.5% generally disagreed with the statement.

The findings imply that Local Authority Information Management Systems is not a flexible system. The Management Information System used in Local Authorities therefore cannot easily incorporate new products or expand to accommodate new reporting needs, hence LA's have no powers to adjust or modify the system to suit their financial reporting needs. This has therefore compounded the problem of financial distress in Local Authorities.

#### **4.3.5 User Friendliness of Local Authority Information Management System (LAIFOMS)**

Results in Table 2 reveal that 59.0% disagreed while a further 8.5% strongly disagreed, bringing to a majority (67.5%) of officers who generally disagreed with the statement that the Management Information System used in Local Authorities is user friendly to staff, that is, easy to understand and operate. Meanwhile, (13.85%) neither agreed nor disagreed, while a further minority total of (18.65%) generally agreed with the statement.

The findings imply that Local Authority Information Management System is not a user friendly system. The Management Information System used in Local Authorities is therefore considered not easy to use by Local Authority staff. Therefore in the process of evading its use some other employees have become gurus in its use thus using it to fleece the Councils their meager financial resources thus contributing to financial distress in Local Authorities.

#### **4.3.6 Ability of LAIFOMS to Interact with Applied Technologies such as PDAs, POS and ATMS**

Table 2 reveals that 47.3% disagreed while a further 5.3% strongly disagreed, bringing to a slightly more than half majority (52.6%) of officers who disagreed with the statement that the Management Information System used in Local Authorities can interact with any applied delivery technologies, such as handheld computers, point-of-service (POS) terminals, and automated teller machines (ATMs). Meanwhile, 26.1% neither agreed nor disagreed while a further 21.3% agreed with the statement.

The findings imply that Local Authority Information Management System is not compatible with applied technologies such as personal Digital Assistant (PDAs), Point of Sale (POS) and Automated Teller Machines (ATMS). The Management Information System used in Local Authorities is therefore considered not compatible with other systems. Therefore the non-compatibility of Local Authority Information Management System (LAIFOMS) has contributed to financial distress in Local Authorities, due to the fact that it cannot host e-payment systems effectively.

Overall, the findings imply that Local Authorities have a very optimistic view about information technology and how it has impacted on the operations of the Local Authorities. To reduce levels of corruption and instill efficiency in the operations of LAs there is need to have a software system that is compatible to other innovations in the area of information technologies. Lack of such systems compounds the problem of financial distress in local Authorities in Kenya.

**Table 2: Information Technology and Financial Distress**

Statement	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
The MIS/LAIFOMS does provide relevant information for the right people at different levels of the LA	17, 9.0%	104, 55.3%	28, 14.9%	31, 16.5%	8, 4.3%
The information from LAIFOMS is reliable	12, 6.4%	101, 53.7%	38, 20.2%	33, 17.6%	4, 2.1%
The MIS/ LAIFOMS is enhancing the Growth of Local authorities	19, 10.1%	105, 55.9%	29, 15.4%	29, 15.4%	6, 3.2%
MIS/ LAIFOMS can easily incorporate new products or expand to accommodate new reporting needs	22, 11.7%	107, 56.9%	28, 14.9%	25, 13.3%	6, 3.2%
The MIS/ LAIFOMS is user friendly to staff i.e. easy to understand and operate	16, 8.5%	111, 59.0%	26, 13.8%	26, 13.8%	9,4.8%

MIS/ LAIFOMS does interact with any applied delivery technologies, such as handheld computers, point-of-service (POS) terminals, and automated teller machines(ATMs)	10, 5.3%	89, 47.3%	49, 26.1%	27, 14.4%	13, 6.9%
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Descriptive results in table 3 indicated that county councils were the most optimistic about the benefits of Management Information System with a mean score of 11.25 followed by town councils (10.64), municipal councils (10.4) and the city councils spotting the least confidence in the benefits of Management Information System (10.05). The finding implies that larger local authorities such as Nairobi and Mombasa find the level of Information technology or the Local Authority Information and Operation Management System as restrictive and inadequate. It may therefore also imply that smaller local authorities are more likely to find LAIFOMS to be adequate and growth enhancing compared to larger councils such as Nairobi and Mombasa.

**Table 3: Descriptive Statistics for Management Information System**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
City Councils	22	10.05	3.629	.774	8.44	11.66	2	18
Municipal Councils	91	10.40	4.322	.453	9.50	11.30	0	23
County Councils	42	11.25	4.544	.701	9.83	12.66	2	18
Town Councils	25	10.64	3.782	.756	9.08	12.20	3	17
Total	180	10.59	4.212	.314	9.97	11.21	0	23

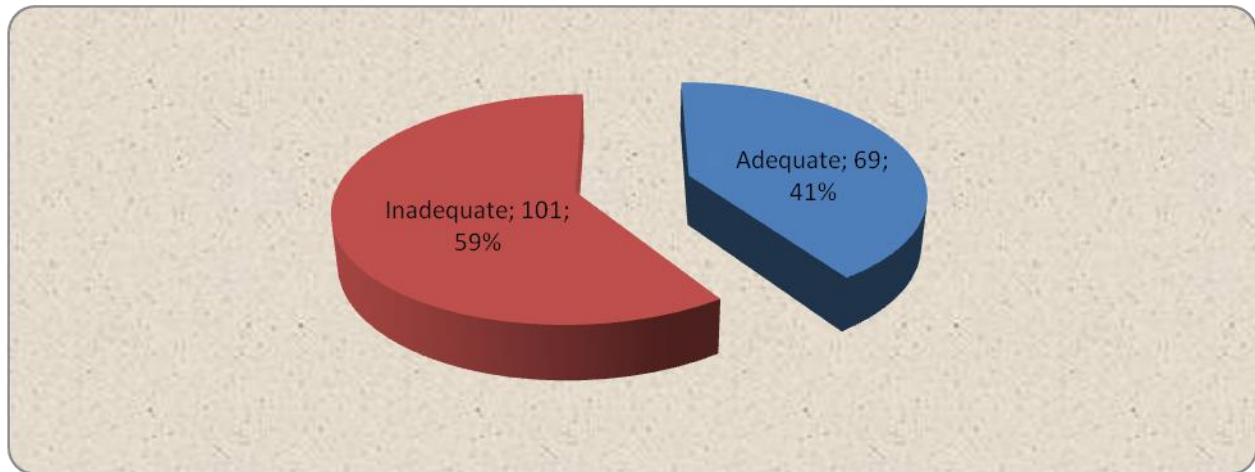
An ANOVA test was carried out to see whether the category of local authority influenced the level of optimism about Local Authority Information and Operation Management System (Table 4 ).

**Table 4: ANOVA between Groups for Management Information System**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	27.894	3	9.298	.520	.669
Within Groups	3147.656	176	17.884		
Total	3175.550	179			

The difference in optimism were not significantly different across the four categories of Local Authorities ( $F=0.520$ ,  $p$  value= $0.669$ ). The observation may be explained by the fact that all the local authorities are using the same system (LAIFOMS) and hence have no other system to compare with.

#### 4.3. 7: Rate the Adequacy of Information Technology in the Local Authority



**Figure 5. Adequacy of Information Technology in Local Authorities**

Results in figure 5, reveals that majority (59%) of respondents in the officer's category, rated the information technology of Local Authorities as inadequate. Meanwhile, a further 41% rated the information technology as adequate. The findings are in agreement with regression results which show that Local Authorities have inadequate Information technology.

Local Authority officers were also asked to explain why they rated Information Technology poorly. The officers explained that;

“A bigger percentage of the workforce, are not I.T Compliant”, “Lack of LAIFOMS in the L.As.”, “The council is not yet on LAIFOMS.”, “LAIFOMS are not utilised hence creates loophole for siphoning of funds.”, “They need to Purchase Computers.”, “IT is yet to be fully developed, LAIFOMS is yet to be fully operationalized”, “they do not work effectively as required”, “it does not incorporate all the needs of the council”, “not all sections are compliant”, “more computers”, “not all staff members are computer literate”, “not all functions have been automated”.

Content analysis indicates that most of the officers rated the information technology poorly because of inadequate investment in hardware (computers), software (Implementation of LAIFOMS), and lack of IT skills among the workforce. The Local Authority officers were

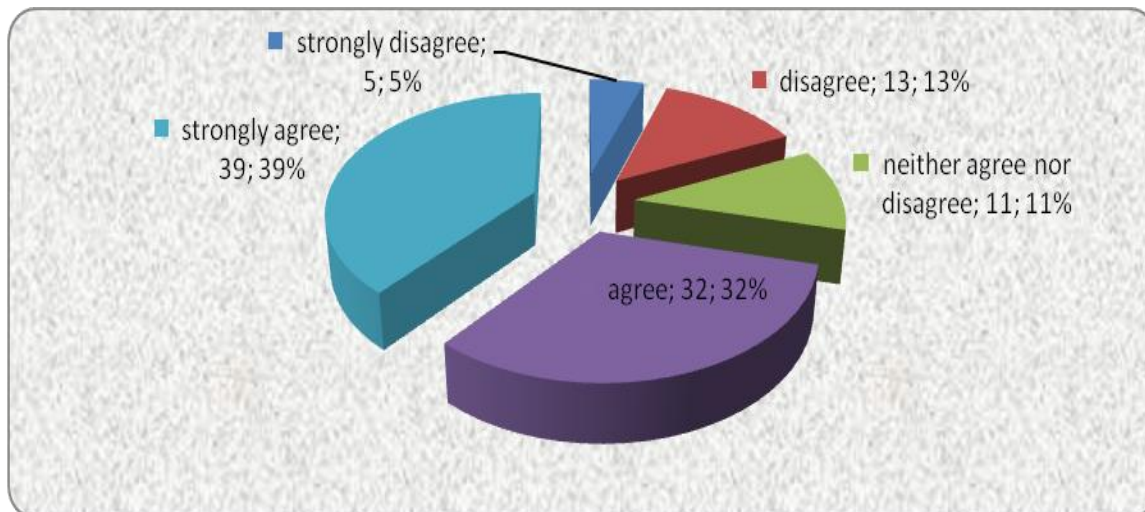
requested to suggest recommendations for improvement of Local Authorities' information technology. Some of the suggested recommendations included;

“The Government should compel all Local Authorities to implement LAIFOMS as first priority project.” All Local Authority should have LAIFOMS to computerize their accounts”, “All modules to be fully operationalized and staff training on IT “, “the personnel should be well trained and informed”, “People should get education about information technology, chances to reduce illiteracy’. “Make the functions to be online compliant.”, “Enhancement of capacity building from any development partner.”

Content analysis indicates that the suggested recommendations for improvements of information technology include; ICT skills enhancement for Local Authority staff through training, investment in ICT hardware such as computers. Most importantly, the officers recommended that all Local Authorities should prioritize the implementation of LAIFOMS. In addition, those Local Authorities who have already implemented LAIFOMS should ensure that all modules should be fully operationalized, for instance, integration of payroll and statutory deductions with the main accounting system.

#### 4.3.8: Customers' Opinion on Whether Financial Distress Could be Attributed to Inadequate Information Technology

Customers were also requested to give an opinion on whether information technology and lack of automation contributed to the financial distress of Local Authorities.



**Figure 6: Customers' Opinion on Whether Financial Distress Could be Attributed to Inadequate Information Technology**

Results in figure 6 indicated that 39% of customers strongly agreed while a further 32% agreed, bringing to a majority total 71% of customers who generally agreed with the statement that lack of automation contributed to the financial challenges facing Local Authorities. Meanwhile, 11% neither agreed nor disagreed while a further 18% strongly disagreed with the statement.

#### 4.3.9: Relationship between Information Technology and Financial Distress

Regression analysis was conducted to empirically determine whether Information Technology was a significant determinant of financial distress in Local Authorities. Regression results in table 4.17 indicated that the goodness of fit for the regression between Information Technology and financial distress is unsatisfactory. An R squared of 0.224 indicates that 22.4% of the variances in the financial distress of Local Authorities are explained by the variances in the Information Technology.

**Table 5: Model Summary and Parameter Estimates**

	R Square	Constant	b1
Coefficient	0.224	16.432	-0.484
P Value		0.000	0.000

Table 5 reveals that the relationship between Information Technology and financial distress is negative and significant ( $b_1 = -0.484$ , p value, 0.000). This implies that an increase in the effectiveness of Information technology by 1 unit leads to a decrease in financial distress by 0.484 units.

Therefore, the results reveal that the null hypothesis which stated that “Adoption of Information Technology does not have a significant contribution to financial distress facing Local Authorities in Kenya” is rejected at the critical value of 0.05 since the reported p value is 0.000. The alternative hypothesis which states that “Adoption of Information Technology has a significant contribution to financial distress facing Local Authorities in Kenya is accepted. The regression equation is as follows;

**Table 6: ANOVA for Information Technology.**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	773.254	1	773.254	53.707	.000
Residual	2677.952	186	14.398		
Total	3451.205	187			

The overall model significance was presented in table 6. An F statistic of 53.707 indicated that the overall model was significant. This was supported by a probability value of (0.000). The reported probability of (0.000) is less than the conventional probability of (0.05). The probability of (0.000) indicated that there was a very low probability that the statement “overall model was insignificant” was true and it was therefore possible to conclude that the statement was untrue.

**Table 7: Descriptive Statistics for Information Technology**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Lowly Distressed	61	12.53	4.818	.617	11.30	13.77	3	20
Moderately Distressed	64	10.79	3.449	.431	9.93	11.65	4	23
Highly Distressed	63	8.38	3.172	.400	7.58	9.17	0	21
Total	188	10.55	4.206	.307	9.94	11.15	0	23

Descriptive statistics in table 7 indicates that highly distressed Local Authorities have a mean score on Information Technology adequacy (8.38). Moderately distressed Local Authorities have a mean score of 10.79 for Information Technology while lowly distressed Local Authorities have the highest mean score for Information Technology adequacy (12.53).

**Table 8: ANOVA between Groups for Information Technology**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	541.693	2	270.847	18.116	.000
Within Groups	2765.841	185	14.950		
Total	3307.534	187			

Analysis of Variance (ANOVA) results in table 8 indicates that there exists a significant difference in the adequacy of Information Technology among the three categories of financially distressed Local Authorities (F=18.116, P value=0.000).

Post hoc tests were carried out to establish if significant differences in information technology adequacy exist across different categories of financial distress. Multiple comparison results in table 4.21 indicated that significant differences in Information Technology adequacy exist between lowly distressed and moderately distressed local authorities (probability value = 0.013). Significant differences in Information Technology adequacy exist between lowly distressed and highly distressed local authorities (probability value = 0.00). Significant differences in Information Technology adequacy exist between moderately distressed and highly distressed local authorities (probability value = 0.00).

The finding revealed that information technology adequacy differs across all categories of financially distressed local authorities. The findings imply that Information Technology inadequacy contributes to financial distress in Local Authorities. The findings further imply that



those Local Authorities that score lowly on the adequacy of the Information Technology also face higher levels of financial distress.

**Table 9: Multiple Comparisons**

(I) Distress Category	(J) Distress Category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Lowly Distressed	Moderately Distressed	1.743*	.692	.013	.38	3.11
	Highly Distressed	4.158*	.695	.000	2.79	5.53
Moderately Distressed	Lowly Distressed	-1.743*	.692	.013	-3.11	-.38
	Highly Distressed	2.416*	.686	.001	1.06	3.77
Highly Distressed	Lowly Distressed	-4.158*	.695	.000	-5.53	-2.79
	Moderately Distressed	-2.416*	.686	.001	-3.77	-1.06

\*. The mean difference is significant at the 0.05 level.

The regression results and ANOVA results indicate that information technology is a significant determinant of financial distress among Local Authorities. The findings are consistent with those of a study by Jensen (2002) who observed that Local Municipalities in Africa are a fertile ground for the application ICTs. They are at the front lines of government in their service-oriented interaction with the public and business, often in transaction based systems with many, interlinked components which can be achieved through e-payment. As such, municipalities have considerable potential to assist in the process of integration of ICTs into the daily lives of its citizens.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Conclusions

The study concludes that local Authorities rated the effectiveness of information technology highly. However, they also rated the information technology as inadequate. This indicated that they were optimistic about the information technology and how it had impacted on the operations of the Local Authorities but also noted that it is a case of “too little too late” since the adoption of information technology was inadequate. The management information system (MIS) also known as LAIFOMIS has only been introduced in very few Local Authorities and are therefore inadequate. For large councils it is inadequate because it does not give room for expansion. Majority of the Local Authorities have just been trained on how to use the MIS software and it has not been fully rolled out in majority of the Local Authorities.

## 5.2 Recommendations

It was recommended that ICT skills for Local Authority staff should be enhanced through training. The Local Authorities should invest in more computers and ICT software as doing so would improve the financial fortunes of such local authorities. It was further recommended that all Local Authorities should prioritize the implementation of LAIFOMS.

## REFERENCES

- Ajayi, K. (2001). Theory and Practice of Local Government. Ado Ekiti, UNAD
- Awe, J. (1997). Learning Computer Operations and Usage, Jidaw Systems Ltd, Lagos, 1-4
- Capalbo, E., Grossi, G., Ianni, L., & Sargiacomo, M. (2010). Financial Distress and Italian Local Governments. Debating the national special.
- Ekwubi, C. C. (2010). The Problems of Effective Utilization of Revenue Available To Local Governments in Nigeria. A Case Study of Aninri Local Government Area of Enugu State. Unpublished B.sc Project. Caritas – University
- Gachuru, M. and Olima, W.H.A. (1998): Real Property Taxation: A Dwindling Revenue Source for Local Authorities in Kenya, Journal of Property Tax Assessment and Administration: An International Journal for Research in Property Tax Vol. 3 No. 2, University of Ulster
- Institute of Economic Affairs- IEA. (2009). Understanding the Local Government System in Kenya. A Citizen's Handbook Institute of Economic Affairs (IEA)
- Jahan, M. (1997). The Changing Structure of Local Government in Bangladesh: An Overview. in Administration, Communication and Society, Vol. 1, No. 1, January- June, Dhaka: Shiskha O Shanskriti Charcha Kendra. pp. 91-105.
- Jensen, Micheal & Meckling, W. (1976). Theory of the firm: Managerial behaviour agency costs and Capital structure. Journal of Financial Economics.
- Khan, R. & Ara, F. (2006). Women, Participation And Empowerment In Local Government: Bangladesh Union Parishad Perspective .*Asian Affairs*, Vol. 29, No. 1:73-00, January-March, 2006.
- Mcluskey, W. & Fransen, R. (2005). Land value taxation; an applied analysis .Ash gate Publishing limited
- Mueller, R. (1986): Krisenmanagement in der Unternehmung: Vorgehen, Massnahmenund Organisation, 2. Auflage, Frankfurt am Main.

Muganda-Ochara, N., & van Belle, J. (2009). Managing E-Government Adoption Process in Kenya' s Local Authorities. *Communications of the IBIMA*, 1, 98-109.

Muia, D. M. (2005). Devolution: Which Way for Local Authorities in Kenya? Discussion Paper No. 073, Institute of Policy Analysis and Research, Nairobi.

Odedra, M. (1996). "Introduction", *Information Technology and Socio-economic Development: Challenges and Opportunities*, League Publishing, Marietta, GA.

Omamo, W. O. (1995). *The Commission of Inquiry on Local Authorities in Kenya*, Government Printer, Nairobi.

Opler, T., Titman, S. (1994): Financial Distress and Corporate Performance. In: *The Journal of Finance*, 49(3), 1015-1040.

Pradhan, J. (2002) *Information Technology in Nepal: What Role for the Government?* *The Electronic Journal on Information Systems in Developing Countries*. Volume 8 - March 2002, 1-11

ROK. (2001). Kenya parliamentary hansard, (2001).

Schelin, S. (2006). *Local Government Information Technology, Article 24, County and Municipal Government in North Carolina*

Thomas J. (1816). *The Works of Thomas Jefferson*, Federal Edition (New York and London, G.P. Putnam's Sons, 1904-5). Vol. 12. Chapter: 1820. Accessed from <http://oll.libertyfund.org/title/808/88397> on 2012-06-11

Walker, R. & Jones, S. (2007). 'Explanators of Local Government Challenges. *Abacus*, Vol 43. No 3. 396-418, September 2007

Wanjohi, N. G. (2003). *Modern Local Government in Kenya, (KAS) and (ADEC)*, Nairobi