

# Assessing the Usability of Integrated Financial Management Information Systems (IFMS) in Uganda: Case Study of Mbale Local Government

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**Abstract:** While numerous challenges are hindering the expected outcome of the Integrated Financial Management Systems (IFMS) in Uganda, one of the most notable challenges affecting IFMS is the usability challenge. Yet, little or no studies have so far examined the usability challenges of IFMS in Uganda. Hitherto, usability challenges can be a serious detriment to the successful implementation and continuous usage of IFMS. To assess the usability level of IFMS in Uganda, the Mbale Local government located in eastern Uganda was selected as a case study. The System Usability Scale (SUS) was used to measure the usability of the IFMS used by the Mbale local government administration. Developed by John Brooke in 1986, the SUS is a simple, ten-item scale used to conduct usability assessments on a system. Open-ended questionnaires were also used as a follow-up tool. The average SUS score findings for the IFMS used in Mbale local government is 67.5 representing about 45 percent usability, which is poor. IFMS users recommended conducting IFMS training, regularly upgrading IFMS modules, providing appropriate user rights and access levels to local government staff, motivating IFMS users with incentives, providing adequate ICT support and assistance to local government staff, implementing robust network infrastructure and providing backup solutions, upgrading the existing infrastructure to be compatible with the IFMS, embracing user centered design of the IFMS among others.

**Key Words:** Usability, Integrated Financial Management System, Local Government

## 1. Introduction

Uganda offers an example of a country where the introduction of a government-integrated Financial Management Information System (IFMS) was overwhelmingly welcomed and adopted from the start. The implementation of the system began in March 2003 with the mapping and necessary configuration followed by user acceptance and testing operations in February 2004. The implementation of IFMIS in Mbale began in July 2012 and 2016 respectively, with the mapping and necessary configuration followed by user acceptance and testing operations, since then no assessment has ever been done to ascertain its success factors, effectiveness, and reliability. This study seeks to get a better understanding of the usability of IFMIS success factors and its dimensions in Mbale local government. According to the MFP&ED [2], the implementation of the Integrated Financial Management System (IFMS) was motivated by the Ugandan Government's desire to

improve efficiency in budget preparation, execution, and financial reporting. Since 2003, the IFMS has been extended across all 22 ministries, 53 departments/agencies, and 40 Local governments. IFMIS was initiated with financial support from the World Bank and Britain through its Department for International Development as a measure of reforming Uganda's public financial management. In the Pilot and ongoing Rollout implementation phases, the IFMS has focused on key Expenditure Management Systems that include:

- Accounting and Reporting (General Ledger),
- Budgeting, Purchasing and Commitment Accounting,
- Payments,
- Cash Management and Revenue Receipting/Accounts Receivable.
- Purchasing
- Public Sector Budgeting including Activity Based Costing and OFA

The implementation of the IFMS has enabled the Government to address many of the fiduciary issues faced before 2003. This has led to greater expenditure control and discipline in budget management as a result of improved oversight and enforcement of internal controls. It has also led to a reduction in the time taken to process payments, improvement in account reconciliation and more accurate and reliable financial reporting. The MFP&ED [2] report (2015) highlights some improvements as a result of the introduction of IFMS especially in financial management as financial reporting has improved in terms of timeliness and accuracy. In addition, the percentage of institutions (Ministries, Departments, Agencies, and Local Governments) with unqualified audit opinions, increased slightly from 47% to 50% over the review period. However, the Ministry of Finance, Planning, and Economic Development is warning that its multi-billion-shilling payment system is now stretched out and could soon collapse. The Ministry of Finance, in a technical interface with chief administrative officers and town clerks, recognized the defaults on overloading the IFMIS platform [12]. Furthermore, it has also been reported that financial misappropriation has remained unchanged which affects service delivery and value for money. For example, the Auditor-General Report (2015) observed that the Wakiso district local government alone failed to effectively report for finances worthy of UGX 30,092,483,676 in the financial year ended 30th June 2015 [10]. Furthermore, in 2015, the Budget Monitoring and Accountability Unit (BMAU) conducted a study on the effectiveness of the IFMS in Uganda. The study was conducted in 59 Ministries, Departments, and Local Governments (12 Ministries, 20 Departments and Agencies, 4Hospitals, and 23 Local Governments) that are currently using the IFMS. The study revealed that the expected outcomes from the IFMS have not been achieved because of the de-incentivized human resources. The users are still operating outside the IFMS even for functions that the system can effectively execute thus limiting the level of effectiveness [39].

The challenges associated with IFMS are not exclusive to Uganda. These challenges are spread across developing countries. Out of 55 completed FMIS projects, 23 were in the International Development Association (IDA) countries (12 were completed in Africa). Almost 66% of the IDA funding (\$747M out of \$1,133M) has been allocated to Africa. Despite these investments, Africa has the highest rate of failure in IFMS projects (4 out of 12 completed projects did not result in any operational PFM system), mainly due to initial attempts to implement ambitious IFMS solutions without adequate consideration of the limitations incapacity and infrastructure [5] While the above studies have investigated the effect of integrated financial management information systems (IFMIS) on operational efficiency in local governments. For example, [13] investigated the Effect of the Integrated Financial Management Information System on Operational Efficiency in Wakiso District, while [14] analyzed the effect of the Integrated Financial Management System (IFMS) on budgetary control in Masaka District. Matovu [15] on the other hand studied the effects of

financial management systems on quality-of-service delivery at the National Planning Authority. Lubega [16] determined the effect of integrated financial management information systems on the financial reporting of public sector organizations, while [17] studied the impact of integrated financial Management information systems in the Ministry of Water and the Environment. Mugaba [10] examined the effects of the Integrated Financial Management Information System on the Financial Reporting Effectiveness of District Local Governments in Uganda. However, little or no studies have so far examined the usability challenges of IFMS in Uganda. Verkijika and Wet [33] concur and assert that, while e-government usability plays a vital role in the success of e-government initiatives, there is still limited knowledge of the usability of e-government websites in SSA. Usability challenges can be a serious detriment to the successful implementation and continuous usage of IFMS. For example, a study conducted by [18] in Kenya found that 77.6% of taxpayers had usability challenges using the Kenya Revenue Authority iTax online system. Another study conducted by Baguma [19] found evidence of inadequate testing of the Uganda Revenue Authority online portal particularly with users before rollout resulting in usability challenges. Dorotinsky and Watkins [20] further identified various usability challenges in the implementation and use of IFMIS including technical interoperability, multi-modal interaction security and privacy, portability, maintainability costs, and social issues including usability, accessibility, and acceptance.

As defined by ISO 9241-11 (1998), usability is the extent to which a product [a portal] can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use. According to the revised definition of usability in ISO FDIS 9241-210, it is the extent to which a system, product, or service can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use. Bral [27] suggested that usability is a necessary condition for the survival of a web page application system.

The purpose of this study was to conduct a usability evaluation of IFMS in selected districts in Uganda and measure the extent to which IFMS achieves the usability goals of efficiency, effectiveness, and satisfaction. Two major objectives were derived to guide the study namely;

- To measure the usability level of IFMS in the local governments in Uganda
- To establish ways for improving the usability of IFMS in the local government.

## **2. Methodology**

### *2.1 Area of Study: Mbale Local Government*

Mbale is one of the districts in the Eastern region of Uganda. It is located in Eastern Uganda (9887.40km from the Equator), bordering the districts of Sironko, Bududa, Manafwa, Tororo, Butaleja, Budaka, Pallisa, and Kumi. The administrative headquarters are located in Mbale town, about 224.8 km from Kampala the Capital City of Uganda. Assessments on the usability of the integrated financial management information system were carried out in Mbale District local governments located in eastern Uganda. The study specifically pointed at these areas because it's among the local governments in Uganda where an integrated financial management system is used and its different stages of implementation and easily accessed by the researcher.

### *2.2 Sample Size of the Participants*

During the study, there was a need to determine the number of participants. Nielsen [22] recommends a minimum of 5 participants for a usability evaluation of a product or service. Using 5 users is expected to find 85 percent of the usability or user experience problems in a test iteration [22]. Additionally, Nielsen [22] observes that Virzi developed a model based

on other usability projects and observed that 80 percent of the usability problems in a test could be detected with 4 or 5 participants. Macefield [25] observes that no “one size focuses on problem discovery, a group size of 3-20 participants is typically valid, with 5-10 participants being a sensible baseline range. For comparative studies where statistically significant findings are being sought, a group size of 8-25 participants is typically valid, with 10-12 participants being a sensible baseline range. Nielsen [22] used yet another benchmark task and found that although tests with 5 users revealed an average of 85 percent of usability problems, the total percentages for each set of 5 participants ranged from nearly 100 percent down to only 55 percent. Groups of 10 participants did much better, finding 95 percent of the problems with a lower bound of 82 percent. Based on the evidence from existing research on sample size for usability evaluation, a total of 15 respondents who use the IFMIS from Mbale local government were identified and given open-ended questionnaires.

### *2.3 Measuring the usability level of IFMS using Simple Usability Scale (SUS)*

The first objective of the study was to measure the usability of the IFMS used in Mbale LG. To measure the usability level of IFMS, a Simple Usability Scale (SUS) was used. For over 30 years now, SUS has been used as a reliable, tested tool for evaluating the usability of a wide range of products and systems. It is also customizable and easily administered via simple survey tools like Survey Monkey, or more advanced survey distribution tools like [23], the SUS is a simple, ten-item scale giving a global view of subjective assessments of the usability of systems. Numerous studies have indicated that the SUS has excellent reliability, and can be used with confidence on both large and small sample sizes [22]. The SUS is also free, easy to set up and administer to participants online or in print. SUS is a Likert scale type of questionnaire based on forced-choice questions, where a statement is made and the respondent then indicates the degree of agreement or disagreement with the statement on a 5 (or 7) point scale. In the Likert scale, a range of SUS ten standard statements was presented to the respondents who responded by either agreeing or disagreeing (based on a Likert scale of 5, that is, Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree) with the following statements.

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this System very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

### *2.4 Ways for improving the usability of IFMS inthe local government.*

The second objective of the study was to establish ways to improve the usability of IFMS used in Mbale LG. To achieve this, open-ended questionnaires were distributed to the 15 respondents who were identified as direct users of the IFMIS at the Mbale LG

### 3. Results

#### 3.1 Demographics

##### 3.1.1 The gender of the respondents

Table 1: Gender of respondents at the Mbale local government

Respondents	Frequency	Percentage
Male	5	33.3
Female	10	66.7
Total	15	100

The results shown in Table 1 above show 5 respondents representing 33.3% of the respondents who were male and 10 respondents representing 66.7% who were female. This shows that both males and females participated in the study and hence both genders contributed to the success of the research on the usability of the integrated financial management system at Mbale local government.

##### 3.1.2 The age group of respondents

Table 2: Age of respondents at Mbale local government.

Respondents years	Frequency	Percentage
18 – 30	2	13.2
31 – 40	7	46.8
41- 50	3	20
50 +	3	20
Total	15	100

Results in Table 2 above show that 2 (13.2%) of the respondents were in the age group of 18-30 years, 7 (46.8%) were in the age group of 31-40 years, 3(20%) were in the age group of 41- 50 years and 3 (20%) were 50+ years. The majority of the respondents were in the age group of 31-40 years and this may imply that Mbale District Local Government has relatively mature people who are responsible and understand the value of service to the public.

##### 3.1.3 Level of education of respondents

Table 3: level of education of respondents at Mbale local government

Level of Education	Frequency	Percentage
Masters	5	33.3
Degree	8	53.4
Diploma	2	13.3
Certificate		
Total	5	100

The findings in the table above project 5 (33.3%) of the respondents had master's, 8 (53.4%) had degrees, and 2 (13.3) had a diploma and did not have a certificate. The findings indicate that the majority of the respondents had reached a level of degree and possess them there this implies that the people employed at Mbale local government the variable of the study in the questionnaire.

### 3.1.4 Occupation of the respondents.

Table 4: Occupation of respondents at Mbale local government

Respondents	Frequency	Percentage
Accounting staff	4	27%
CAO	1	6.7%
D. CAO	1	6.7%
C FO	1	6.7%
DEO	1	6.7%
DE & staff	2	13.3%
DP	1	6.7%
Senior Accountant	2	13.3%
Clerk Caruncle	1	6.7%
District Accountant	1	6.7%

Findings in Table 4 indicate that the respondents included 4 (27%) accounting staff, 1 (6.7%) chief accounting officer(COA), 1 (6.7%) was the Deputy COA, 1 (6.7%) chief finance officer (CFO), 1 (6.7%) district education officer (DEO), 2 (13.3%) District Engineer and his staff, 1 (6.7%) District Planner (DP), 2 (13.3%) senior accountant, 1 (6.7%) Clerk Caruncle and 1 (6.7%) District accountant. The majority of the respondents 4 (27%) were accounting staff and this implies that they use the IFMS daily. Therefore this makes the research valid because the respondents have a great understanding of the system on which the research is being conducted at Mbale local government.

### 3.2 Measuring the Usability of the IFMS at Mbale local government

To measure the usability of the IFMS in Mbale Local government, the SUS scale questionnaire was distributed to the respondents and 13 were collected fully answered and the results are summaries in the table below

Table 5: Summary of the feedback from respondents at Mbale local government

Statement	Disagree	Strongly disagree	Neutral	Agree	Strongly agree
I think that I would like to use the integrated financial management system frequently.			2	9	2
I felt very confident using the integrated financial management system	2	2	2	5	2
I would imagine that most people would learn to use the integrated financial management system very quickly.		2	3	3	5
I found the various functions in the integrated financial management system well integrated.	1	3	2	6	1
I thought there was too much inconsistency in the integrated financial management system.		4	3	6	
I find the integrated financial management system very cumbersome to use.		7	4	2	
I need to learn a lot of things before I could get going with the integrated financial management system.		2	3	6	2
I thought the integrated financial management system was easy to use	1	1	2	7	2
I find the integrated financial management system unnecessarily complex	3	3	3	2	2
I think that I would need the support of a technical person to be able to use the integrated financial management system		2	4	4	3

To assess the usability level of the IFMS system, a Simple Usability Scale (SUS) was used as a reliable, tested tool for evaluating the usability of a wide range of products and systems. SUS is a Likert scale type of questionnaire based on forced-choice questions, where a statement is made and the respondent then indicates the degree of agreement or disagreement with the statement on a 5 (or 7) point scale. Based on the Likert scale of 5, a range of SUS ten standard statements was presented to the respondents who responded by either Strongly Disagree, Disagree, Neutral, Agree, or Strongly Agree, and points or weights were attached to them 1, 2, 3, 4 and 5 respectively. The result of the finding is presented below in a table.

All the odd-number questions were positively framed (1, 3, 5, 7, and 9), and points were attached to them. The sum of their points was then obtained and then 5 points were deducted from the sum of the odd numbers as shown below

*Table 6: SUS Scale for each Participant and Calculation of the SUS Score for the usability of the IFMIS at Mbale local government (odd number questions)*

Response	Odd number questions and their weights					total
	1	3	5	7	9	
Strongly disagree					3*1=3	3
Disagree		2*2=4	4*2=8	2*2=4	3*2=6	22
Neutral	2*3=6	3*3=9	3*3=9	3*3=9	3*3=9	42
Agree	9*4=36	3*4=12	6*4=24	6*4=24	2*4=8	104
Strongly agree	2*5=10	5*5=20		2*5=10	2*5=10	45

$$\sum x = 3 + 22 + 42 + 104 + 45$$

$$\sum x = 216$$

Then we subtract 5 points from it

$$\sum x = 216 - 5$$

$$\sum x = 211$$

Also, the even number questions were negatively framed (2, 4, 6, 8, and 10), and points were attached to them. The sum of their points was then obtained and then subtracted from 25 points, the sum of the even numbers as shown below

*Table 7: SUS Scale for each Participant and Calculation of the SUS Score for the usability of the IFMIS at Mbale local government (even number questions)*

Response	even number questions and their weights					Total
	2	4	6	8	10	
Strongly disagree	2 * 1 = 1	1 * 1 = 1		1 * 1 = 1		4
Disagree	2 * 2 = 4	3 * 2 = 6	7 * 2 = 14	1 * 2 = 2	2 * 2 = 4	30
Neutral	2 * 3 = 6	2 * 3 = 3	4 * 3 = 12	2 * 3 = 6	4 * 3 = 12	39
Agree	5 * 4 = 20	6 * 4 = 24	2 * 4 = 8	7 * 4 = 28	4 * 4 = 16	96
Strongly disagree	2 * 5 = 10	1 * 5 = 5		2 * 5 = 10	3 * 5 = 15	40

For even questions

$$\sum y = 4 + 30 + 39 + 96 + 40$$

$$\sum y = 209$$

Then we subtract the sum of the even numbers from 25 as shown below

$$\sum y = 25 - 209$$

$$\sum y = -184$$

Therefore to get the SUS to score we add the sum of the odd numbers and the even numbers and multiply it by 2.5 the final score is not a percentage but rather a SUS score as shown.

$$\begin{aligned} \text{SUS SCORE} &= (\sum x + \sum Y) \times 2.5 \\ &= (211 + (-184)) \times 2.5 \\ &= 67.5 \end{aligned}$$

**SUS SCORE= 67.5**

Table 10: The Implication of the general SUS Score

SUS	GRADE	ADJECTIVE RATING
>80.3	A	Excellent
68 – 80.3	B	Good
68	C	Okay
<b>51 – 68</b>	<b>D</b>	<b>Poor</b>
<51	E	Awful

Using Table 10, the SUS Score of 67.5 indicates that the usability of the integrated financial management system is poor because the SUS score lies between 51- 68 which confirms a poor use of the IFMS. This could be a result of some of the challenges faced by the users of the system in many local governments.

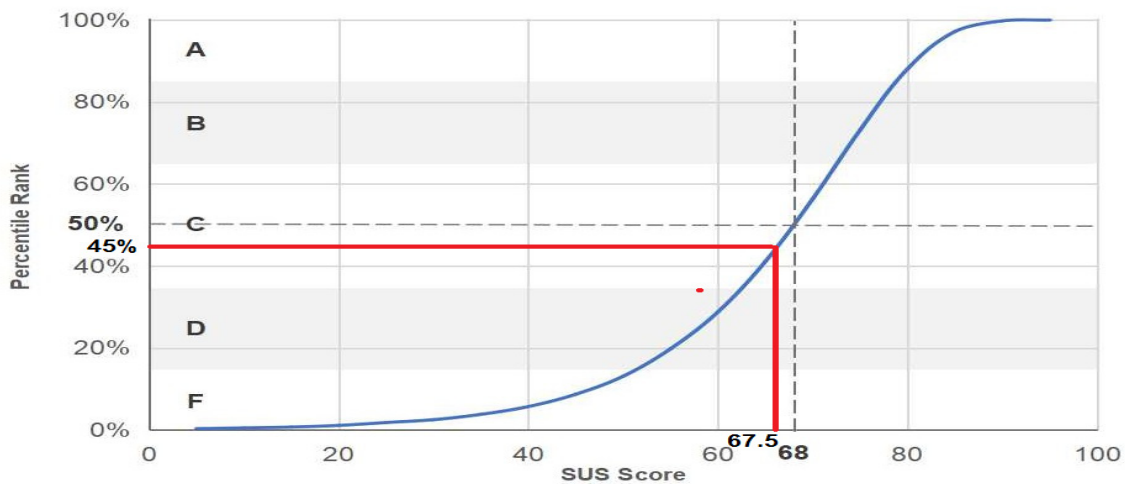


Figure 1. SUS Score and its Percentiles [23]

The SUS score of 67.5 represents 45% usability, which falls below average meaning it is poor. The average score (at the 50th percentile) is 68. That means a raw SUS above 68, which is 50% is above average and below 68 is below average. The usability of the IFMS in Mbale local government is about 45%, which falls below average and is poor. Some respondents indicated reasons why they find it difficult to use IFMS. Some of the challenges include; Inadequate training on how to use the IFMS, lack of motivation, inadequate ICT support services (Help desk), unstable network, regular upgrades of the IFMS without notice and reskilling the users, very limited user rights, IFMS not accessible out of office, the IFMS is incompatible with the existing hard and software, technophobia, insufficient resource to support the IFMS such as internet connection among others.

#### 4. Discussion

The 67.5 SUS score (45% usability) indicates that the usability of the IFMS used at Mbale local government is poor. Generally, poor usability has always been a challenge that

prevents the maximum use of use of e-government services in developing countries. According to Koskie [21], poor usability greatly reduces the productivity of the user. A flawed interface design can make it difficult for users to perform tasks correctly and with confidence [21]. Studies have shown that citizen acceptance and utilization of these e-government websites is still a challenge for many governments, as many e-government websites fail to meet usability expectations

There have been several studies that point out poor usability as one of the major challenges hindering the successful use of e-government services in developing countries [32]. For example, Eilu [36] investigated challenges encountered in the adoption of EFDs in Kenya and Tanzania and revealed that usability was one of the biggest challenges inhibiting the use of EFDs for remitting value-added taxes (VATs). Furthermore, studies conducted by Verkijika and Wet [33] assessed 279 e-government websites from 31 Sub-Saharan African countries and found that one of the major challenges with e-government services was poor usability. The average usability score for the websites was 36.2 percent [33]. Mtebe & Kondoro [34] assessed 22 government websites in Tanzania and found that 82% of the websites had severe usability challenges that hindered the citizens from using the websites. These studies, therefore, indicate usability of e-government services needs to be vitally considered during the design and development of e-government services. As discussed earlier, usability is a vital attribute in any software development process. According to Huang and Benyoucef [38], while several governments in developing countries have heavily invested in e-government, its full potential benefit can only be witnessed if existing and emerging usability barriers are identified and addressed. As such, Verkijika and Wet [33] recommend that developing countries should focus on developing usable e-government websites as a means to improve the growth of e-government in the region, given that it lags behind all other regions concerning e-government development.

## 5. Conclusions

There are many ways through which the usability challenges of IFMS can be improved. The IFMS can be improved through; conducting IFMS Trainings, regularly upgrading IFMS Modules, providing appropriate user rights and access levels to local government staff, motivating IFMS users with incentives, providing adequate ICT support and assistance to local government staff, implementing robust network infrastructure and providing backup solutions, upgrading the existing infrastructure to be compatible with the IFMS, embracing user centered design of the IFMS and proving more government support, integrating IFMS with other government systems like PBS. Nabafu and Maiga [35] concurs and identified similar factors critical to the successful implementation of local e-government projects in Uganda as a developing country. These factors include sufficient financial resources, building ICT infrastructure, and training. AL-Naimat et al [36] also identified sufficient funding, ICT infrastructure, staff training and incentives as some of the most critical success factors for implementing e-government. Eilu [35] further asserts that there is a need to make the newly introduced ICT system compatible with legacy systems, address usability problems, and improve government support, and constant training and sensitization among others

### 5.1 Recommendations on ways of improving the usability of IFMS in local government

The study further investigated the ways of improving the usability of the IFMS in Mbale local government. Open-ended questions were part of the SUS scale that was given out to respondents to fill in. The open ended questions were designed to elicit propositions from respondents on how to improve the usability of the IFMS use in Mbale LG. Content analysis was used to derive themes from the qualitative answers collected from the open-ended questions. A summary of the qualitative data is presented below.

- *Conduct IFMS Training for Local Government (LG) staff*

Most of the respondents pointed out that the government should conduct regular IFMS training for local government staff. Training is essential to unlocking client readiness and is the best way to ensure the sustainability of a system. Providing training sessions and workshops for the local government (LG) staff can help increase their understanding and usage of the system. Training programs can enhance the competencies of employees and increase their willingness to use the system. It is important to tailor the training sessions to the specific needs and requirements of the LG staff to maximize their effectiveness

- *Regular Upgrading of IFMS Modules*

One of the respondents pointed out that the government should always inform users of any upgrades made to the IFMS. Communicating updates and changes to the IFMS in a timely and transparent manner can help alleviate user resistance and improve user acceptance. Additionally, involving users in the design and development process can help ensure that upgrades are tailored to their needs and requirements. Involving users in the system development process leads to better user satisfaction and adoption rates.

- *Providing appropriate user rights and access levels to LG staff*

Some of the respondents noted that the government should widen the user rights of vote controllers. They further recommended more upgrades to link other government functions as this will help to reduce the bureaucracy involved with the current system. Providing appropriate user rights and access levels to LG staff can help increase their usage and satisfaction with the system. It is important to balance security concerns with user accessibility to ensure optimal system usage. User rights management is a key factor in the successful implementation and usage of enterprise IT systems

- *Motivation of IFMS users*

The study found that implementing incentive programs, such as rewards and recognition, can increase motivation and capacity among the LG staff to use the IFMS. Additionally, providing opportunities for career development and growth can further encourage staff engagement and motivation. One of the respondents wrote, "*Motivation is very important because a well-motivated person can easily perform the required activities because of a settled mind, therefore, the government should increase the salaries of the officers at the local government to ensure that they use the system to full capacity.*" The use of motivation in reward and recognition programs was positively related to the adoption and usage of IT systems.

- *Providing adequate ICT support and assistance to LG staff*

The study further found that providing adequate ICT support and assistance to LG staff can help address this challenge. This can include establishing a dedicated IT helpdesk or support team, providing technical assistance, and troubleshooting issues promptly. Most of the respondents recommended the setting up of a service help desk to help out with user challenges arising from the use of the IFMS. The availability of technical support is critical for the successful adoption and usage of IT systems in organizations.

- *Robust network infrastructure and providing backup solutions*

From the study, it was also found that implementing a robust network infrastructure and providing backup solutions can help ensure stable connectivity and minimize disruptions. Network infrastructure reliability is a crucial factor in the successful implementation and usage of IT systems in organizations.

- *Upgrading the existing infrastructure*

The study revealed that providing adequate and up-to-date ICT equipment to local government staff can help improve their productivity and efficiency. This can include

desktops, laptops, and mobile devices with sufficient processing power and storage capacity. The availability and quality of ICT equipment significantly impact user satisfaction and usage of IT systems.

- *Embrace user centered design of the IFMS*

Many respondents agreed that engaging the user of the IFMS in the initial design phases of the IFMS will reduce technophobia. This will also facilitate the design of user-friendly and intuitive interfaces. Additionally, involving users in the system design process can help ensure that the system is tailored to their needs and preferences. User interface design plays a critical role in the user acceptance and adoption of IT systems.

- *More Support from Government*

Respondents also pointed out that providing sufficient resources, such as funding, staffing, refresher training and infrastructure, to LGs can help improve their ability to use. One of the respondents wrote, "Government should restructure to have more than one IT staff in one local government to guide the staff as this will help to attend to the different departments that use the IFMS at the Local government because currently, they have two IT officials who cannot fully handle or responded to the challenges of the users of the IFMS at the local government." One respondent also wrote "More funds should be allocated for the maintenance of IFMS for example the government should allocate funds to Improve network usage to ensure a stable network and period of processing funds".

- *Integrate IFMS and PBS*

The study also revealed that there was a need to integrate the different management systems in local government. One respondent wrote "*Government should integrate IFMS and Program Budgeting System (PBS) to reduce on the bureaucracy. This will improve the system such that data for previous years can be accessed with relative ease.*"

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