Effectiveness of the Facility Financial Accounting and Reporting System in Managing Public Secondary School Funds in Nyamagana District, Tanzania

James Ling'hwa and Michaela Mhagama
St. Augustine University of Tanzania
Department of Education Foundations

Mail: jlinghwa2015@gmail.com & michaelamhagama@gmail.com

Abstract: This study evaluated the effectiveness of the facility financial accounting and reporting system (FFARS) in managing public secondary schools' funds. FFARS is an electronic system used in planning and budgeting as well as expenditure tracking. The study governed by three specific objectives: To evaluate the accessibility of FFARS infrastructure; To identify the challenges of FFARS in managing public secondary school funds; and finally proposing the strategies that public secondary schools could use to reduce the shortcomings of FFARS. Mixed research approach was applied with an exploratory case study design. Data were collected through questionnaires and interview schedules. The study involved 5 heads of schools, 4 ward education officers, 1 district education officer and 171 teachers. The study revealed that although the ICT infrastructure for FFARS was available to all public secondary schools, their accessibility was still unreliable. Also, it was discovered that there were shortage of ICT infrastructure and IT experts. Moreover, it was observed that sufficient distribution of ICT infrastructure for FFARS and raising awareness of technology users were seen to be important strategies to reduce the observed challenges of the system. The study therefore recommended the continued use of the system because it had made a significant contribution in managing the disbursed funds. The study recommends the continued training programmes for School Management Teams (SMT) and bursars to boost ICT literacy, deploying proper ICT infrastructure for the system and raising awareness of the system's usefulness.

Keywords: Effectiveness, Facility Financial Accounting and Reporting System, Secondary school, school funds

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1. Introduction

Schools, like any other organization, require resources to fulfil their planned objectives. These resources can be classified as physical, fiscal, and human (Sikia, 2015).

Globally, many countries, including France, have decentralised the management of financial resources to schools in a bid to enhance their management (Crouch & Winker, 2008). Despite the importance placed on financial resources in bringing about the needed change

and the delivery of services. It is noted that sometimes the resources are mismanaged and misappropriated by those in charge (Rosen & Gayer, 2010).

In contrast to many European countries, education in the United States is provided through a decentralized system (Corsi-Bunker, 2019). In this regard, a nation bears only a minor burden in terms of financing education. The grant - in - aid program connects the state and local governments in order to support education provision. The grant - in - aid used to provide legally authorized education services by the district. Corsi-Bunker reports that some grants are given to low-income students to help with extracurricular activities, while others are given to the district to help with student transportation

In recent years, government facilities, including public secondary schools, have received large sums of money from a variety of sources, including collections from their own sources, charitable donations from communities and donors, and grants from the central government that have been disbursed or sent directly to the facility bank accounts (Gamba, 2019). For example, capitation subsidies are provided to schools for the purchase of textbooks, teaching guides, chalks, pens, pencils, and administration items (MOEVT, 2008). Since January 1st, 2016, funds to cover school fees and food have been directly transferred to primary and secondary school bank accounts (Mahoney, 2016). In other words, the funds have far-reaching ramifications for educational quality.

Despite the efforts made by the Tanzanian government, there have been unreconciled challenges in financial management in government facilities, particularly in public schools. According to the reports of Ngowi (2015) and Sikia (2015), the payment procedures of capitation grants to schools involved many bureaucratic stages, resulting in delay in reimbursement grant disposal, mishandling of funds without complying to regulatory requirements, insufficient and inadequate knowledge of financial management among school heads, and poor tracking and financial reporting systems (Sikia, 2015). As such, the existence of a sound and proper system of accounting, financial management, and procurement (as required by law) at this level was of paramount importance to ensure proper accounting/accountability and the utilisation of financial resources at their disposal (Gamba, 2019). In response to the challenge, the government implemented a rather transparent and unified system of accounting and reporting under Local Government Authorities (LGA) to accurately capture expenditures spent at the facility level, namely the Facility Financial Accounting and Reporting System, which focuses on planning and budgeting as well as expenditure tracking (Gamba, 2019).

Public facilities are currently carrying out many of the duties utilising FFARS and are now expected to be competent to manage and carry out financial accounting and reporting. This is so that FFARS can provide heads of schools the tools they need to develop and integrate their current reporting and accounting operations into a cohesive whole. In Tanzania, particularly in the public secondary schools in the Nyamagana area, its efficacy in managing secondary school funding has not yet been evaluated since the system's inception. As a result, this study evaluated how well FFARS manages public secondary school money in Tanzania's Nyamagana District, Mwanza.

2. Literature Review

2.1 Availability and Accessibility of FFARS Infrastructures

A study was conducted by Abanumy, Al-Badi, and Mayhew (2005) to evaluate the usability of e-government websites in Saudi Arabia and Oman to investigate knowledge management (KM) practises in 20 Iranian e-government portals that are used to provide services to citizens, Behzadi et al. (2012) undertook an e-government portal study. The "knowledge access, creation, and transfer" (K-ACT) model was used in the study, and a checklist was developed. The study found that the knowledge mechanism could only receive a maximum score of 30 for knowledge generation. In Iran's e-government portals, the average Knowledge Management score was 26%.

In their 2014 study, Leist and Smith looked into accessibility problems with e-government platforms. The findings revealed considerable variations between levels of government, as well as between standard compliance and accessibility. It was discovered that many long-term users of the e-government platform had difficulty finding information. The study by Gamba (2019) revealed that despite the challenges including limited availability of financial disbursement system infrastructures such as computer, android devices, power supply and internet, the approach was still effective. It was revealed that the

approach was effective in transferring funds directly to primary education because it was time conscious, guaranteed and well trusted by its customers, ensured the same standards throughout the schools visited and was error free.

2.2 Challenges of FFARS in Managing Public Secondary School Funds

Administrators in local governments and academic institutions were subject to strict budgetary limitations. Managers were consequently less devoted to their business (Hemsing and Baker, 2013). Insufficient budget and allocation of resources to the secondary schools, FFARS would not be seen as an effective system for fund disbursement because the issues such as delays of disbursement and insufficient budget would still be available. Luvanga and Mhagama (2022) asserts that in order to overcome obstacles to the implementation of fee-free basic education among public secondary schools, the government should make sure that important stakeholders, particularly school heads, are well-equipped with the necessary skills in financial management. Financial management was examined by Miriti and Wangui (2014) in the context of the training requirements for Machakos County public secondary school heads of school. It was noticed that the majority of the surveyed schools still found financial management to be difficult. Programs for training in financial management were also ineffectual.

2.3 Strategies of Overcoming the Shortcomings of Managing Public Funds

Mwanza (2013) found that effective governance enhanced financial management. The financial administration of the CDF monies in Nairobi County was said to have been enhanced by the budget, internal controls, and financial reporting. Financial management is improved by budgeting, internal controls, and financial reporting; as a result, even when FFARS is in place, enough funding should be set aside to cover school expenses and development initiatives. Additionally, the system must be able to support effective internal controls and financial reporting. In their 2014 study, Junge, Bosire, and Kamau found that budgeting procedures, including allocation and control had a favourable effect on academic performance. The study added that budget allocation and annual budget

planning were crucial elements that boosted financial management in organisations serving the public interest. Effective financial management training programmes should be built depending on the needs of the participants, according to Miriti and Wangui (2014).In order to better oversee and manage school funds, the government's policy on auditing student records be changed.

3. Methodology

This study adopted a mixed-research approach to examine the effectiveness of the facility financial accounting and reporting system in managing public secondary school funds.The underlying principle of mixed methods research, according to Jogulu and Pansiri (2011), is that it combines paradigms, allowing inquiry from both the inductive and deductive perspectives within a single study. The exploratory case study research design was used in this study because the focus of the research was to thoroughly investigate how well FFARS managed secondary school funding. The exploratory case study design made it possible to deliver complete and excellent data Yin (2003) and that would be exploited to evaluate the effectiveness of FFARS. The study was conducted in Nyamagana district, Mwanza region because it was assumed that teachers dealing with financial accounting and reporting were unprofessional, and they faced several challenges in managing funds and technological changes. The sample size used under was 182 people. It consisted of 1 District Education Officer, 5 school heads, 5 ward education officials, and 171 teachers on the school management team (SMT). Qualitative data collected through semi-structured interviews was analysed using thematic analysis while quantitative data obtained through a questionnaire were analysed through descriptive statistics with the aid of SPSS version 23.

4. Results and Discussion

4.1 Accessibility of FFARS ICT Infrastructures

The first objective under this study assessed the accessibility of FFARS infrastructures among Nyamagana public secondary schools. A total of four questionnaire items were designed to assess this objective. The questionnaire items assessed under this section were: the power supply (electricity), internet connectivity and accessibility, the availability of devices powered by

Android systems, and ICT equipment (computers, laptops, internet cables). The findings on these questionnaire items are supported with interview responses for one District education officer, 4 Ward Education Officers and 5 heads of school.

4.1.1 Power Supply for FFARS

This questionnaire item was created to analyse the accessibility of electricity in Nyamagana Public Secondary School because the electricity was critical for running the equipment and facilities that allowed FFARS to function successfully. A total of four variables were constructed to validate electricity accessibility. The options were [i] never, [ii] somewhat, [iii] a little, [iv] much, and [v] a great deal. Figure 11 illustrates the data on electricity accessibility in Nyamagana public secondary schools where FFARS is being used.
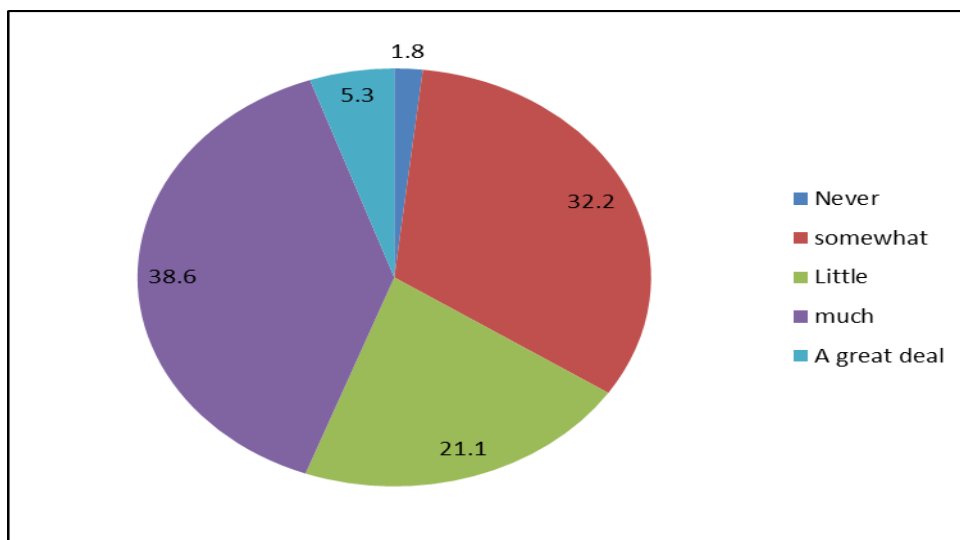

Figure 1: Responses on Power Supply in Public Secondary Schools
Source: Field Data, 2022

Figure 1 indicates that, 1.8 percent of teachers on school management teams said power was never available to facilitate FFARS implementation, 32.2 percent said it was somewhat available and accessible, 21.1 percent said it was little, 38.6 percent said it was readily available and accessible, and 5.3 percent said it was available a lot. According to the responses of the SMT majority, power was available to a higher level, although accessibility was not guaranteed all the time. The issue of power supply and accessibility in school is well explained, by the District Education officer, who said:

> Most of the schools, if not all, in Mwanza are in the city. Our schools are connected to the national grid, so teachers can easily use electronic devices in their schools, and this makes it easy to run the devices that

they use for implementing FFARS. Although the schools relate to electricity, the power supply and accessibility are sometimes not reliable (DEO, May 2022).

From this, we can deduce that the majority of schools in the Nyamagana district have access to electricity; however, the power supply is unreliable. The adoption of FFARS, according to TAM by Davis (1989), would necessitate this facilitating condition, which is an essential factor of usage. In terms of infrastructure, access to the internet is a critical requirement for the new technology (Sanmukhiya, 2019).

4.1.2 Internet Availability and Accessibility for FFARS

The availability and connectivity of the internet are critical when installing an e-government portal such as FFARS. The study intended to analyse internet availability in public secondary schools in Nyamagana district. The teachers on the school administration team were asked to rank the availability and accessibility of internet services in their schools using a closed questionnaire. Figure 2 depicts data gathered by school management team.
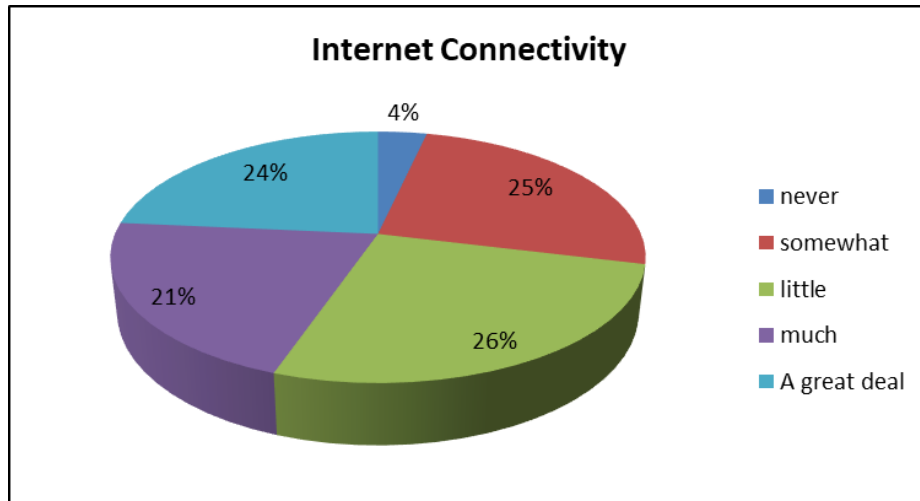

Figure 2: Responses on Internet Connectivity in Public secondary Schools
Source: Field Data, 2022

Figure 2 shows that, 4 percent of respondents reported that the internet was not available or accessible; 25 percent reported that it was somewhat available and accessible; 26 percent reported that it was readily available and accessible; 21 percent reported that it was much available, and 24 percent reported that it was available and accessible to facilitate FFARS implementation. Again, this data suggests that internet connectivity is available but unstable in public secondary schools.

The connectivity of internet was well explained by four heads of school who were interviewed. One of the heads of school said:

> Our schools have internet access. To run the devices with the FFARS, we use mobile internet from telecommunication companies such as Vodacom, Airtel, Zantel, TTCL, Tigo and Hallotel. Individual internet connections are so available and reliable for accessing information (Head of school A, May 2022).

Almost all the headmasters and ward education officers agreed that internet availability and connection were not a major issue. According to Davis (1986) Technology Acceptance Model, the internet connectivity and accessibility of new technology like FFARS makes it user-friendly. Easy access from any internet connection is a prerequisite for e-government service. Modern educational programmes are undoubtedly aiming to fully integrate ICT. The degrees to which digital technology have been incorporated into classrooms, colleges, and institutions serve as evidence of this (Ju et al., 2016). Therefore, consistent and dependable internet access in schools is essential to successfully completing the switch from conventional accounting and reporting systems to digitally mediated accounting and reporting systems. Additionally, insofar as it makes extremely large data sets

of information accessible to administrators, internet access in schools is the deciding factor of service quality.

4.1.3 Availability of Android Devices

Android is an operating system designed specifically for mobile devices with touch screens, like Smartphones and tablets. It is built upon a modified Linux kernel and other open-source software. At first, people assumed that popular Android devices seen in classrooms were Smartphones and tablets. The study sought to assess the availability and accessibility of Android devices in this regard. The respondents were asked to rate the availability of Android devices in schools for FFARS adoption. Figure 3 illustrates the availability of android devices in public secondary schools in Nyamagana district.
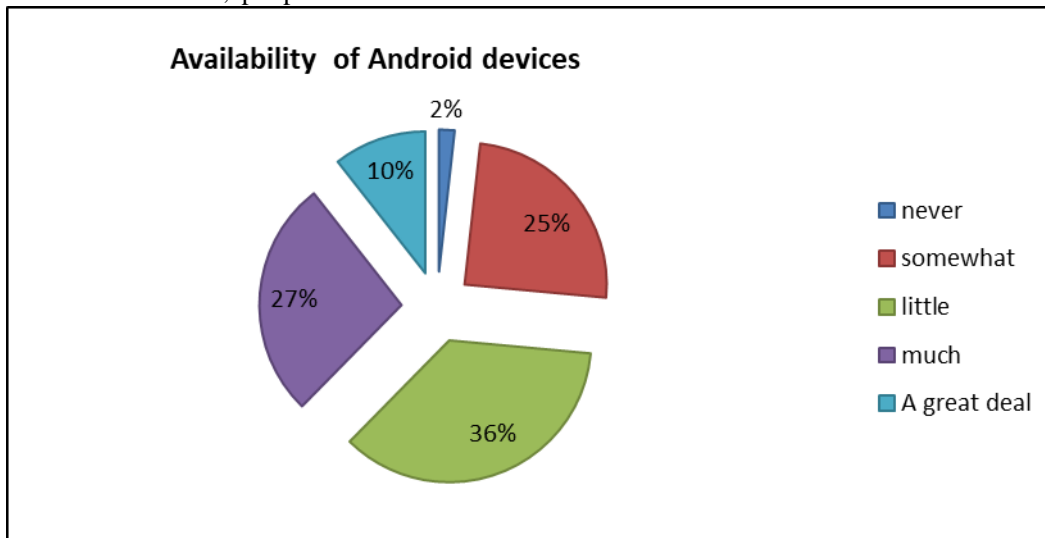

Figure 3: Responses on Android Devices Adequacy in Public Secondary Schools
Source: Field Data, 2022

Findings in Figure 3 shows that, 2 percent of the 170 responses from SMT in Nyamagana public secondary schools admitted that the android devices were not available and accessible, 25percent claimed that the devices were somewhat available and accessible, 36 percent said that the availability was little, 27percent said that they were much available, and 10percent said that the Android devices were plentiful (a great deal). We may conclude from this number that on average, Android devices are available and accessible in schools but not reliable.

During the interview, heads of schools, ward education officers, and district education officials all stated that the devices were available, which is reasonable considering that all schools are in urban areas where these gadgets are commonly accessible. According to one ward education officer:

Even though computers are provided, they are insufficient for all teachers in the school's administration. Teachers rely on a few devices provided by the school's administration. Overall, the limited devices accessible have forced school heads in my ward to use FFARS to manage school funds (WEO, May 2022).

The results from questionnaire and interview show that the devices required for FFARS are available but not adequate. In accordance with Davis (1986) TAM, android devices are very essential in making the technology like FFARS work effectively and efficiently.

4.1.4 Availability of ICT Equipment in schools

The purpose of this study was to analyse the availability of ICT facilities in schools. The presence of such facilities was believed to make FFARS deployment easier. In this regard, the study used a closed questionnaire to ask respondents to rank the availability of ICT equipment in their schools, such as laptop computers, flash drives, and internet cables. Figure 4 depicts the results of this item.
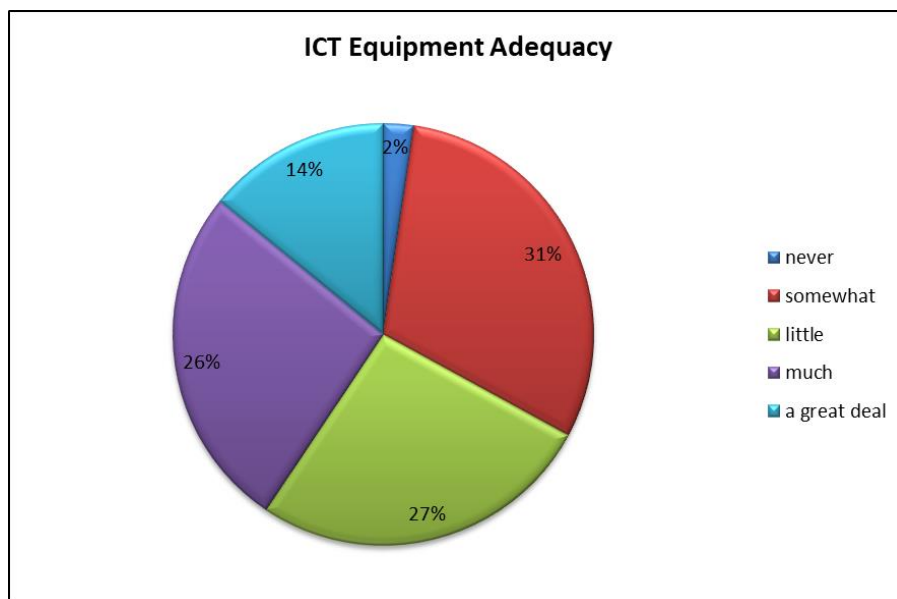

Figure 4: Responses on ICT Equipment Adequacy in Public Secondary Schools
Source: **Field Data, 2022**

According to the data, 2 percent of 170 SMT respondents indicated that ICT equipment were not available; 14 percent indicated that there were a lot of ICT facilities, 26percent said there were many/many facilities, 26 percent admitted there were few ICT facilities, and 30.50 percent said the ICT facilities were not available or accessible. This suggests that there are only a few ICT facilities in public schools. During the interview, one of the heads of schools stated:

> The ICT facilities are present, but they are insufficient for this institution. Look, we've just gotten a computer at my workplace. This computer is used by the school secretary to type school documents, and it is used by all teachers. Mwanza is fortunate for we have other options. When this computer is occupied, for example, I am occasionally obliged to use my Smartphone to access FFARS (Head of School, May 2022).

The interviews with school heads demonstrate another example of the shortage of ICT equipment in Nyamagana public secondary schools.

The results of this study's interview and questionnaire reflect Davis' (1986) model that any technology deployed must be beneficial and easily accessible to users. This is also corroborated by Leist and Smith (2014), who found that for e-government services to be successful, they must be helpful and easily accessible to customers. According to Gamba (2019), despite the constraints of FFARS in primary schools, such as restricted availability of financial disbursement system infrastructures such as computers, android devices, power supply, and internet, the system was nevertheless effective in managing school money.

Therefore, Gamba's study and the current one are testimonies of effectiveness of the system despite the inadequacy of some key infrastructures.

4.2 Challenges of FFARS in Managing Public Secondary School Funds

The introduction of FFARS in secondary schools is likely to have had some implementation flaws. This circumstance prompted this study to investigate the potential shortcomings that have hampered the deployment of the newly introduced accounting and reporting facility with secondary school funds. To identify the challenges of FFARS, a total of four statements of possible shortcomings were generated in a questionnaire, and respondents from the school management team were asked to indicate their agreement or disagreement with the statements on a continuum scale. Also, the District Education Officer, Ward Education Officer and heads of school were interviewed.

Table 1: Challenges of Implementing FFARS (n=167)

Key: *1=Strongly disagree 2=Disagree 3=Undecided 4=Agree 5=Strongly agree*

Statement	Responses									
	1		**2**		**3**		**4**		**5**	
	F	%	F	%	F	%	F	%	F	%
Shortage of FFARS infrastructure	4	2.3	4	2.3	14	8.3	134	80.2	11	6.5
Scarcity of IT experts	1	0.6	4	2.3	12	7.1	104	62.2	46	27.8
Users' attitudes towards the implementation of FFARS	1	0.6	2	1.2	16	9.5	106	63.4	42	25.1
FFARS Technical problems	2	1.2	13	7.8	32	19.1	60	35.9	60	35.9

Source: Field Data, 2022

4.2.1 Shortage of ICT Infrastructures for FFARS

A questionnaire was prepared to assess the adequacy of FFARS infrastructure, and respondents were asked to agree or disagree with the statement that a lack of FFARS infrastructure was impeding the system's ability to efficiently manage public secondary school funds. Findings in Table 1 shows that 2.3 percent of the 167 respondents strongly disagreed with the statement that a lack of FFARS infrastructure was impeding the system's ability to efficiently manage school funds. However, just 2.4 percent of respondents disagreed with the assertion; 8.3 percent were neutral; 80.2 percent agreed; and 6.5 percent strongly opposed. We may conclude from this study that most respondents agreed with the assertion that the lack of FFARS infrastructure was the key flaw of its deployment.

During the discussion with the DEO, it was revealed that at least one computer was installed with the FFARS application in each of the 30 secondary schools under his control. However, school leaders felt that the infrastructure necessary for the FFARS application was insufficient. They were reliant on a single computer, which was in the headmaster's office. One of the heads of school stated:

> When it comes to using FFARS, we have some issues. Internet connection and accessibility are two prevalent issues. We also have the issue of electricity. As you are aware, the internet and electricity are critical infrastructures for this system. As a result of the limited and unreliable infrastructure, we occasionally fail to use the system (Headmaster in school C, May 2022).

During the interview, one Ward Education Officer (WEO) stated that there was a challenge with internet connectivity for schools located outside of Mwanza's city

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centre. This demonstrates that some outlying public secondary schools lack dependable internet access.

ICT infrastructure, on the other hand, is not seen as a major impediment to FFARS success. The majority of respondents stated that there were already sufficient infrastructures in place, so implementing FFARS would not be a huge challenge. According to the FFARS manual, FFARS, like other systems, has its own set of configurations (2017). It is appropriate for both web-based and mobile applications. As a mobile application, it is compatible with Android 4.0.; to use the programme and serve data to the database, an internet connection is required. This shows that lack of internet access or energy may make it difficult to operate FFARS.

The introduction of FFARS has several advantages, but it also has some drawbacks. The fundamental shortcoming of e-government portals such as FFARS, according to Omahna (2019), is the lack of public Internet access for all users. In addition to the shortcomings described above, there are also further drawbacks for e-government services. Higher surveillance and monitoring, according to Gräbner-Omahna (2019), may be a drawback of e-government services: When the Tanzanian government introduced FFARS; users were forced to communicate with it online on a larger scale. As the government receives more information regarding school funding, it may lead to greater transparency. This has significantly increased negative sentiments regarding system use. This was testified by the DEO who claimed that the system has a threat to some school heads due to its transparency.

When FFARS is inaccessible to all users, it means it could not be available to everyone, especially those living in remote areas, with poor literacy rates, and with incomes below the poverty line. Although FFARS has been placed in all schools, its accessibility remains a difficulty for certain distant schools that have no access to internet and energy and low computer literacy. The lack of ICT infrastructure is one of the most major barriers to computerised accounting. Internetworking is required to enable appropriate information sharing and to open new channels of communication and service delivery. Many poor countries, including Tanzania, are impacted by the digital divide and are unable to build the ICT infrastructure required for e-Government implementation. The digital divide between rich and poor countries is enormous, with high-income economies having 416 computers per 1,000 people and limited economies having only 6 per 1,000 people (Omahna, 2019).

4.2.2 Scarcity of IT Experts as One of the Shortcomings of FFARS

Because FFARS is an ICT-based system, users must also have strong technological expertise in ICT. The ability of FFARS to manage school funds may be hampered by a lack of ICT skills. Computer literacy is also regarded as a significant aspect since it motivates people to learn about technology. Based on this fact, the study employed a structured questionnaire to ask respondents if they agreed or disagreed with the assertion that FFARS's ability to manage public secondary school funding in Nyamagana district was hampered by a lack of ICT professionals. Table 1 above presents the data.

This research found that 0.6 percent of 167 respondents highly disagreed with the statement, 2.3 percent disagreed, 7.1 percent were indifferent, 63.4 percent agreed, and 25.1 strongly disagreed. This study analysis reveals that there is a shortage of ICT experts who can efficiently manage FFARS applications.

In addition to the questionnaire, the study interviewed the District Education Officer, Ward Education Officer, and school heads of schools. During the interview, one ward executive officer bemoaned the lack of ICT skills among most teachers on school management teams:

> Some FFARS users are experiencing difficulties. Despite being taught how to utilise the system, some teachers have never received computer training. So simply teaching them how to utilise FFARS is sometimes a waste of time. Before they can efficiently implement the system, they must first learn the fundamentals of information technology (WEO, May 2022).

Most respondents believe that computer literacy is required to benefit from FFARS. According to the respondents, this is especially true of ICT literacy. ICT culture is regarded as a barrier to successful FFARS deployment. Most users have yet to integrate ICT into their daily lives. The majority of respondents believe that ICT and FFARS are in their early phases in Tanzanian schools and that it would take time for ICT to become ingrained in Tanzanian culture.

The finding in this section confirms the researchers' opinions that the biggest impediment to new technology deployment is a lack of ICT literacy, particularly in poor countries with low ICT literacy rates (Nkwe, 2012; Zeleti, 2010; Weerakkody et al., 2009). Researchers believe that another problem that developing countries confront when successfully implementing e-Government service such as FFARS is the digital gap. Users' unequal access to information owing to computer literacy challenges has been identified as a significant factor in the failure of the new IT technology adoption (Matavire, 2010; Dada, 2006). These studies have confirmed the finding that scarcity of computer literate people who can handle new technologies such as FFARS applications is the challenge. However, an ICT infrastructure is more than just telecommunications and computer hardware. People must also be e-ready and ICT literate in order to use and profit from e-government applications such as FFARS. Having the education, freedom, and desire to access information is important to the effectiveness of electronic accounting system. Users are more likely to accept and use the system services if they have a better degree of human development (Bhatnagar & Vyas, 2001).

4.2.3 Users' Attitudes towards the Implementation of FFARS

When a new technology, such as FFARS, is developed, people will always have opinions about it. From this perspective, the study sought to ascertain users' perceptions towards FFARS. In this attempt, a questionnaire was created, and respondents were asked to indicate whether they agreed or disagreed with the statement that the staff's attitude towards e-portal use was impeding its effective implementation.

According to the data in the table 1, 0.6 percent strongly disagreed with the statement that staff members' attitudes were impeding FFARS implementation; 1.2 percent of teachers disagreed with the statement; 9.5 percent were neutral; 63.4 percent agreed with the statement; and 25.1 strongly agreed with the statement. Based on table 1, we can conclude that a large proportion of teachers in the school administration agreed with the statement that attitudes regarding FFARS hampered implementation.

In addition to the questionnaire, the study interviewed the DEO Education Officer, Ward Education Officer, and school heads of school. During the conversation, school heads of school and Ward education officers appeared to be supportive of FFARS. The DEO, on the other hand, had this to say.

> When this system was implemented to public secondary schools in 2017, most school heads disliked it because of its transparency. Most Africans, you know, dislike being open and honest. As a result, the implementation of FFARS posed a threat to headmasters who had previously abused the school fund. I may audit any secondary school from this computer on my table as the DEO. I can see how much they spend on a daily or quarterly basis. The users of this system have no option other than to accept the technology (WEO, May 2022).

According to the results from the interviews, most users initially had negative attitudes concerning the advent of FFARS. According to the DEO, this critical negative attitude to FFARS is growing.

Resistance to change has also been identified as one of the most challenging issues when implementing e-government initiatives like FFARS. There are several reasons for rejection, including paperwork and concern about losing one's job. Others think that e-Government has the potential to upend an ingrained structure, upending entrenched bribery and corruption schemes, and eliminating the legacy of system. Inertia occasionally plays a part in opposition to e-government; not all opposition is intentional. The survey indicates that the public and government workers are reluctant to change, and many are unwilling to use e-Government as a substitute form of service delivery, especially when new e-services appear (Alam&Sundquist, 2007; Zeleti, 2010).

According to the report, a lack of stakeholder involvement at the project's outset is one of the main reasons for e-Government failure. These scholars contend that early stakeholder involvement in e-Government programmes is essential (Dzhusupova et al., 2011; Matavire, 2010). The participation of the stakeholders, including DEOs, WEOs, bursars, instructors, and school heads in public secondary schools, may be linked to the success of FFARS.

4.2.4 FFARS Technical Problems

Systems such as FFARS may occasionally encounter technical issues that limit their efficacy. As a result, it is critical for system researchers or developers to engage with users in order to uncover technological issues. The purpose of this study was to learn about the technological issues that FFARS users confront when managing school funds. There was a line in the questionnaire that requested instructors to agree or disagree that FFARS technological problems were among the hurdles to its success in managing public school funds.

According to table 1, 1.2 percent strongly disagreed with the statement that technical problems were among the challenges of managing school funds. 7.8 percent disagreed with the statement. 19.1 were neutral, 35.9 percent agreed with the statement, and 35.9 percent strongly agreed. As a result, the respondents who agreed confirm the premise that technological issues were among the other hurdles of FFARS.

During the interview, the DEO stated that there were some technical issues with FFARS. According to the DEO, at the council level, if money is initiated by SMT but not approved by the DEO, the system will still display that money was spent by the school. The DEO has no authority to change anything in the system. The system, however, will display that the money begun is still in the bank. This makes bank reconciliation and reporting difficult.

Another technical problem identified by ward education officers and school heads is error correction. It was not emphasised that FFARS users might occasionally make errors that could not be corrected in the system.

> Remember, we are not angels, and making errors is a natural part of life. We occasionally make mistakes that we are unable to remedy. The system does not allow us to make changes and continue. As a result, we must use utmost caution when entering data (WEO, May 2022).

The heads of school and the DEO argued that the system did allow users to make corrections. Perhaps the system creators had reasonable grounds for not providing such an option. Some costs are not available through FFARS. The system, for example, can account for board expenditures and TAHOSA expenses. According to one of the headmasters, the government funds cannot be used for TAHOSA meetings or board meetings. You cannot record spending on Board fees or THAHOSA meetings.

> It is extremely difficult to spend more money than is budgeted with FFARS. Because each facility has a restricted budget, money set out for books could not be used to purchase furniture (Head of School, May 2022).

The above interview with head of the school is the testimony that FFARS has some limitations to users.

4.3 Strategies to be adopted to reduce the Shortcomings of FFARS

This study intended to identify measures that may be implemented to address FFARS' deficiencies in managing public secondary school money. In this scenario, respondents were asked to react to two different techniques for mitigating the limitations of FFARS via structured questionnaires. The solutions included adequate distribution of system infrastructure and provision of regular ICT Training on FFARS.

4.3.1 Sufficient Distribution of FFARS Infrastructure

For a system like FFARS to work effectively, there should be a sufficient distribution of its infrastructure, such as computers and Android devices. This being the case, the study developed a questionnaire that required the respondents to agree or disagree with the statement that sufficient distribution of FFARS infrastructure could reduce the shortcomings of the system. Figure 5 presents the data.
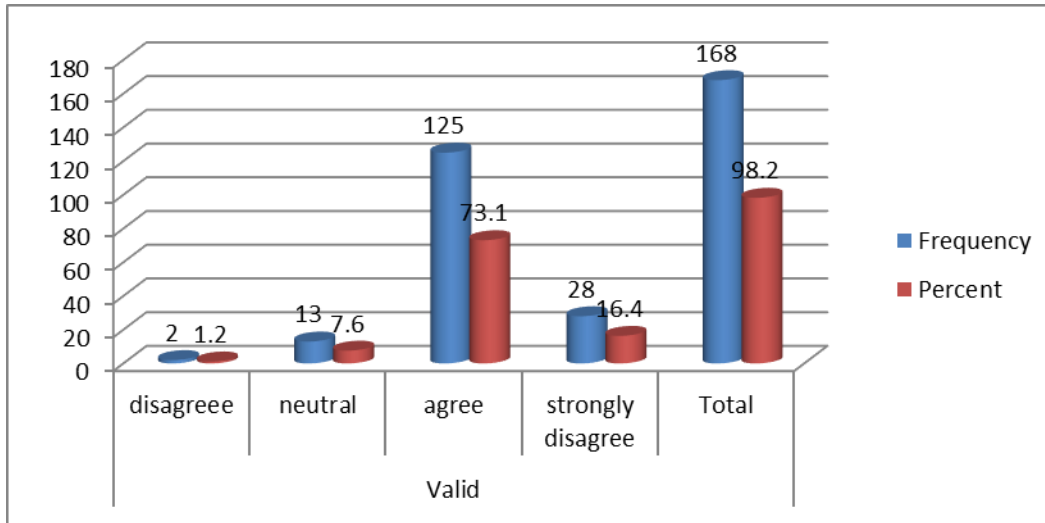
Figure 5: Proper distribution of ICT Infrastructures for FFARS
Source: Field Data, 2022

Out of 168 respondents, 1.2 percent disagreed with the statement that there was proper distribution of ICT infrastructure, 7.6 percent were neutral, 73.1 percent agreed with the statement, and 16.4 percent strongly agreed with the statement. According to this table, most respondents agreed with the assertion that adequate distribution of FFARS infrastructure might lessen FFARS' weaknesses in managing school funds.

One of the ward education officers suggested that the government give greater facilities for the operation of FFARS. He stated:

> The schools in my neighbourhood had computers, but not enough for all teachers in the school administration. One computer is unsafe in the event of a technical failure. As a result, the government should consider distributing Ipads and smart phones as alternatives to the computers we currently use (WEO, May 2022).

The quotation above demonstrates the need for additional FFARS infrastructure. For the successful implementation of new IT technologies initiatives, researchers concur that a proper IT infrastructure should come first. They note that this is one of the major issues in poor nations where people do not have sufficient access to the Internet, energy, or computers (Matavire, 2010). Studies have revealed that because new accounting and reporting systems are expensive and require ongoing funding, many developing countries such as Tanzania view financial support as a crucial issue in its development and implementation. The systems' sustainability and dependability, which are essential for its success, must consider the resources that are available (Al-Rashidi, 2010; Alshehri&Drew, 2010).

4.3.2 Provision of Regular ICT Training on FFARS

The study assumed that regular training about FFARS application would uplift users' ICT skills and in turn, this could reduce the shortcomings of this online portal. In this regard, the teachers were asked to state how far they agreed or disagreed with the statement that regular training on FFARS would decrease the shortcomings of FFARS. Figure 6 presents the data
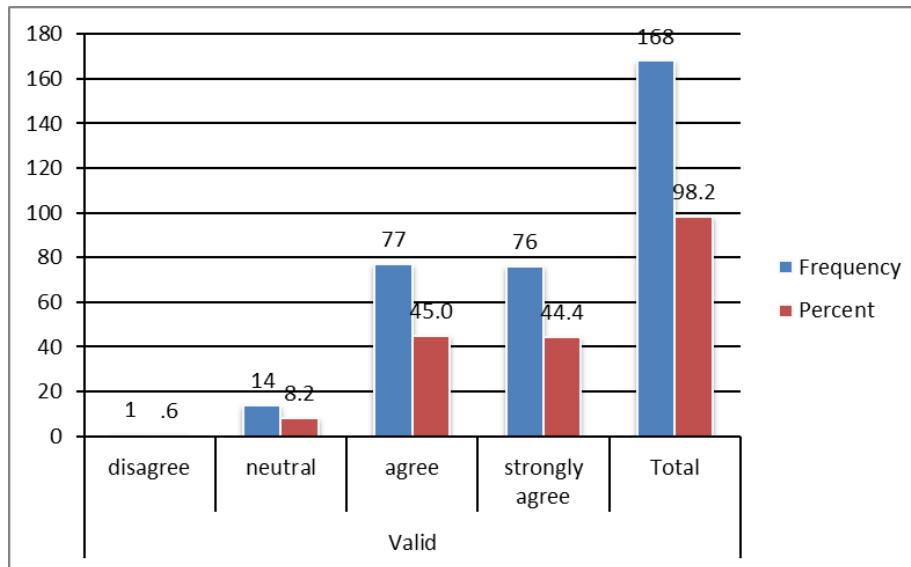
Figure 6: Regular ICT Literacy Training for FFARS
Source: Field Data, 2022

Out of 168 respondents, 0.6 percent strongly disagreed with the statement that there was a need for ICT literacy training, 8.2 percent were neutral, 45.0 percent agreed, and 44.4 percent strongly disagreed. The respondents who responded strongly disagreed with the statement that providing frequent training on FFARS may improve its users' ICT skills, hence lessening the system's flaws.

One ward education officer suggested that instructors on the school management team receive frequent training. The WEO explained:

> You see, we have new employees every day, and others retire. Newcomers must be trained on a regular basis, and existing employees must attend refresher courses as some components of the system change. Those who have received regular instruction are a wonderful example. They now have a high level of skills and are utilised to instruct others (DEO, May 2022).

So, regular training is very important for FFARS users if the system developers want to achieve the intended goal.

The other significant issue noted by our respondents is ICT literacy. With the start of training programs for FFARS users, the literacy level can be increased throughout the public secondary schools. Television, radio, and other forms of mass communication can be used to publicize such training (and possibly the system itself). At the proposed telecasters, training can be given to users via video conferences (Samsor, 2020),

According to Samsor (2020), ICT literacy is another critical element since it encourages people to become technologically savvy. He found that most respondents thought that having literacy was necessary in order to take use of e-Government service. According to the respondents under this study, ICT literacy training is a good demonstration of this.

5. Conclusion and Recommendations
5.1 Conclusions

In this paper, we have three major findings. First, it can be established that proper ICT infrastructures such as electricity, internet, computers, and other devices required for the successful implementation FFARS were largely available and accessible in almost all public secondary schools in Nyamagana district.

Second, we may deduce from the findings that any IT technology will have advantages and disadvantages.

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FFARS, like any other new technology, has a few flaws that have not hampered its use. According to the findings of this study, the ICT resources inadequacies and, the negative attitude towards the FFARS, have been decreased to some level. So, there are very few and negligible challenges of FFARS.

Third, the limitations of FFARS will be addressed by employing strategies such as expanding ICT infrastructure deployment and providing regular ICT training to users, promoting the use of FFARS through online training, technical support and through social media campaign.

5.2 Recommendations

i. The study recommends for the start of training programmes for teachers, bursars, and education stakeholders. The levels of ICT literacy also can be enhanced throughout the government and private sectors. Television, radio, and other forms of mass media can be used to promote such training. Training can be offered via video conferencing at the telecasters under consideration. According to this study, awareness is a major barrier to implementing FFARS in secondary schools.

ii. Improving FFARS awareness among government users is also a crucial step since it directly contributes to the adoption of e-services. A proper IT infrastructure should come first, and this is one of the major barriers in rural locations where people do not have appropriate access to the Internet, energy, or computers. The availability of these resources must be evaluated for the programme to be sustainable and reliable.

iii. Since this study based on public secondary schools in Nyamagana district, it is recommended that further studies be focused on involvement of other public schools in different regions. This research revealed that the *digital divide* is another challenge that may determine

the usefulness and ease of use of implementing the new IT systems successfully.

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