Research Paper

Challenges to the Implementation and Usage of Gifmis E-Procurement Tool in the Metropolitan, Municipal and District Assemblies (MMDAS) In Ghana: A Case of Sefwi Wiawso Municipal Assembly (SWMA).

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ABSTRACT
State institutions/agencies in Ghana had, for decades, been using manual procurement system, which came with it numerous deficiencies and problems that resulted in huge loses with respect to revenue generation in state institutions. This situation led to the implementation of GIFMIS electronic-procurement (e-procurement) system by government in state institutions of which the MMDAs are not left out. Currently, there is an existence of a knowledge gab in respect of the challenges policy makers were faced with in implementing GIFMIS in state owned institutions as well as the problems associated with the use of the software for policy makers/implementers to make good decisions about, which this study seeks to address. The investigation was carried out at the Sefwi Wiawso Municipal Assembly. Out of the 76 employees that work with the Assembly (the population of the study), fifty (50) employees of some selected departments were purposively targeted and selected for the study. The study employed the use of descriptive research design technique and quantitative research approach, whereby structured questionnaires and interviews were employed as research instruments. The questionnaires were self-administered to respondents and responses picked up some hours later. The data was analyzed using Statistical Package of Social Science (SPSS, Version 23.0) software. Descriptive statistics (frequency and percentage) was employed to analyze the objectives of the study. The findings were presented in tables for easy understanding and interpretation. The findings revealed that GIFMIS e-procurement implementation/adoption process in the Sefwi Wiawso Municipal Assembly (SWMA) was successful with lack of IT infrastructure and low speed of uploading and downloading associated with the software being the only challenges. Similarly, it was unraveled that, only two significant challenges confront users of the GIFMIS IT system. These include poor computer errors resulting from incompetency in IT on the part of users and poor networks arising from the inaccessibility of internet facilities.
Key Words: Procurement system, public procurement, IT infrastructure, demand management, electronic procurement.

I.   INTRODUCTION

Background to the Research

Generally, the systematic coordination of companies' operations among firms/institutions through their supply chains to integrate supply and demand management is termed supply chain management (SCM) (Stevenson 2007). Chiefly, customer happiness is decided by the effectiveness of every firm's supply chain operation. In recent times, the supply chain has progressively acquired grounds in management functions and been accorded prominence by many companies/institutions to fulfil their aims (Chegugu & Yusuf, 2017; Kaya & Azaltun, 2012). Mainly, SCM process comprises procurements of products and, or services for use (or for direct profit) by firms/persons at the lowest possible overall cost, in the appropriate quantity and quality, in the proper time, in the right place, and from the right source, often via a contract.

As a supply chain function, public procurement is the act of purchasing goods/commodities and contracting works and services by ministries, departments, or agencies of a state with resources from state budgets, local authority budgets, state foundation funds, domestic loans or foreign loans guaranteed by the state, foreign aid as well as revenue received from the economic activity of that state (*World Bank, 1995,* as cited in Ateto, Ondiekil & Okibo, 2013). Public procurement thus means procurement by a public procuring entity with the usage of public funds.

Electronic procurement (E-procurement), which is one of the supply chain management or procurement functions, has been and continues to be embraced by most institutions/firms (especially in the public sector) to manage and improve their finances. Garran's (2005) study as cited by Rotich & Okello 2015, reveals that political, social, and cultural factors facilitate the implementation of electronic procurement and unearths the fact that adoption of e-procurement requires resources, specific abilities, and smartly executed transformational management strategies coupled with educational programs. Rotich & Okello (2015) argued that public procurement, which is a business process within a political system, must be conducted with the economy, integrity, accountability, national interest, effectiveness, indiscrimination among potential suppliers, and respect for international obligations.

In their quest to improve public financial management in Ghana through prudent measures (of which public procurement practices remains an important aspect), successive governments have tried to put in place (started in the late 1990s) public financial management (PFM) reform programs, which included budget, payroll improvement, audit, procurement, financial, taxpayer management and fiscal decentralization reforms and now the introduction of GIFMIS e-procurement system, among others, all targeted at improving public financial management (Quashigah-Sowu, 2013). Realization of the numerous deficiencies and problems (which accounted for considerable losses in public funds) with previous attempts by government (as mentioned above) in public sector financial management, has led to the adoption and implementation of GIFMIS to help avert the deficiencies and issues inherent in the management of public finance which involves public procurement practices (Ametefe, 2019).

The previously instituted financial management reforms were lacking in strong budget formulation and preparation, proper accounting and monitoring system, quality, and timely data on government resources among others (Ametefe, 2019). Common problems or lags linked to previous public financial management reforms, which GIFMIS seeks to address, include insufficient budget checks, failure of interaction between multiple public financial management systems within ministries, divisions, and departments, unnecessary lags in transferring funds owing to laborious manual procedures, poor record maintenance on government monetary operations, absence of precise data for efficient fiscal budgeting, inefficient accounting and budgetary reporting system, and lack of clarity in budget. Additionally, lack of training for procurement personnel, lack of professionalism amongst themselves, and unavailability of a professional body to oversee and instill discipline among procurement officers, were other issues with previous reforms (Quashigah-Sowu, 2013). At the back of these flaws, Government of Ghana, in collaboration with the World Bank, the United Kingdom-DFID, the European Commission (EU), and the Danish International Development Agency (DANIDA), decided to adopt GIFMIS e-procurement platform/system in the country's institutions/agencies to assist in the obliteration of these flaws (Paintsil, 2013).

As a supply chain function, e-procurement has and continues to emerge as a reform in public procurement Corsi (2006). It is the application of e- techniques via the internet to perform supply chain activities. For instance, the processes of tendering, contract management, requirements recognition, payment etc., (Corsi, 2006; Rotich & Okello, 2015) or the usage of information technology in conducting procurement processes such as search, sourcing, negotiation, ordering, receipt, and post-purchase review (Asumba, 2010; Chegugu & Yusuf, 2017). Introduction and adoption of GIFMIS in Ghana were aimed at instituting internet-based PFM information systems on government's owned enterprises, Agencies, ministries, and departments at national, regional, and district levels (Quashigah-Sowu, 2013) to serve as an official system for recording budget, disbursements, reporting, and financial accounting, cash/asset management, auditing and internal control and to improving fiscal discipline and macroeconomic stability (Quashigah-Sowu, 2013) for the enrichment of efficiency, effectiveness, transparency, accountability, etc., in the processes of public procurement (Chegugu & Yusuf, 2017; Rotich & Okello, 2015). The use of GIFMIS has a high tendency to ensure efficient and transparent utilization of public finances to assist in the elimination of unneeded issues that arise while handling public accounts (Paintsil, 2013; Quashigah-Sowu, 2013).

The decentralization process of Ghana has led to the creation of Metropolitan, Municipal, and District Assemblies (MMDAs) as institutions/organizations that should be well- and professionally managed under articles 35 (6)(d) and 240 (2)(a) of the 1992 constitution (Stiftung, 2010). The country's MMDAs depend primarily on national budgetary allocations from the government and internally generated funds (IGF) for the development of their territorial jurisdictions; they are therefore concerned with how best to manage their business successfully within the administrative and political systems in which they operate. Clearly, from the

highlights above, the implementation of GIFMIS e-procurement in state institutions (of which MMDAs are left out) by government is crucial in ensuring effective and efficient management of their finances to embark on their key mandate of developmental projects delivery/provision for people within their administrative jurisdictions.

However, as a function of public sector financial management, e-procurement implementation and usage come with numerous challenges and issues (Rotich & Okello, 2015) that need to be curbed and overcome for successful future extensions and for the purpose of its adoption and use to be fully met.

It is against this background that this research was conducted to assess GIFMIS's associated challenges to implementation and usage. This study seeks to examine and evaluate the challenges confronted with the implementation and issues associated with GIFMIS usage in the MMDAs, one of the key state institutions in the country.

Statement of the Problem

Generally, public procurement forms a significant part of every government duty in ensuring effective and efficient management of state finances. However, its implementation/adoption and use come (are immensely associated) with several challenges (Ateto et al, 2013; Rotich & Okello, 2015) that has remained beyond the focus of many scholars (Callender, 2006; Rotich & Okello, 2015 & Vaidya, Sajeev). As a result, an expertise vacuum (a knowledge gab) has been created with respect to GIFMIS associated implementation and usage problems, depriving policymakers/policy-implementers of the opportunity to appreciating and solving the issues for future successful adoptions/extensions and the purpose for which it was adopted to come into reality; this also makes it difficult for end users (state institutions) to accept new procurement technologies, let alone decentralizing them.

Although, there are some information about GIFMIS, these usually cover areas such as, its implementation and benefits. Pathetically, no studies have looked at its implementation and usage problems and hence investigated such relationships in the MMDAs in Ghana, creating a knowledge gap that this study seeks to fill. This study intends to bridge this gap by investigating and evaluating the challenges to the implementation of GIFMIS and issues associated with its usage in state institutions (MMDAs).

PURPOSE AND OBJECTIVES OF THE STUDY

The study's primary purpose is to evaluate the challenges faced with in the implementation of GIFMIS and issues associated with its usage in state institutions (MMDAs).

Specifically, the study seeks to:
1.   Assess the challenges to the implementation/adoption of GIFMIS by the MMDAs.
2.   Evaluate the issues associated with the usage of GIFMIS software in the MMDAs.

THEORITICAL REVIEW
Institutional Theory

The use of institutional theory can best examine and explain the dynamism associated with social, economic, and political systems, as well as how institutional norms, structures, procedures, and social interaction patterns are connected to the broader social and cultural environments (Peters, 2000; Shrum, 2001) as well as aspects of public procurement as a conventional technique (Shrum, 2001). Institutions shape the rules of the game in society, which include official and informal institutions such as extended family, the business sector, and the government department/Agency (Shrum, 2001).

Scott (2013) identified regulatory, normative, and cultural cognitive institutions as three foundations of institutions. The regulatory pillar entails the application of rules, laws, and punishments as a means of enforcing compliance (Jeptoo & Karanja, 2017; Peters, 2000; Scott, 2013). The normative pillar focuses on norms (how issues should be handled) and values (what is desirable), with social duty serving as the foundation for compliance (Jeptoo & Karanja, 2017; Preuss, 2013; Scott, 2017). The cultural-cognitive pillar is concerned with shared understanding, such as shared ideas, symbols, and knowledge (Jeptoo & Karanja, 2017; Peters, 2000; Scott, 2013; Shrum, 2001). Several studies have recently taken the institutional approach to e-procurement (Chatterjee et al., 2002; Jeptoo & Karanja, 2017; Purvi et al., 2001). According to these studies, all organizations take on the shape they do because they get value-based ideas about how things should be arranged from their immediate culture (Jeptoo & Karanja, 2017). In accordance with Scott (2013), public procurement process, which is defined as a group of institutions with a positive interaction between purchasers and suppliers, has an impact or a bearing on a nation's economic development. These institutes, which include formal regulations controlling public procurement procedures, and informal contacts between contracting authorities and suppliers, have an impact on their mutual relations, shared agreements, and are involved in economic development activities, as well as the mechanisms put in place to maintain public procurement procedure norms, punishments, and violence in the face of state procurement laws. Government policies and efforts, and the

behavior and experiences of public sector personnel have a significant impact on the adoption of a technology like e-procurement (Jeptoo & Karanja, 2017; Peters, 2000). The success of public-sector procurement process is determined by the institutional framework that emerges from economic conditions; whiles suppliers are interested in the large profits that may be realized/accrued following procurement processes, contracting authorities are more interested in a cost-effective and efficient purchase processes (Jeptoo & Karanja, 2017).

Due to substantial issues with manual/traditional procurement methods, MMDAs adopted and implemented e-procurement (GIFMIS). Several studies have pointed to the benefits that are attainable by public institutions/organizations using e-procurement tools. However, several issues (inhibitors) with e-procurement such as resistance to change, lack of necessary skills and competencies, and reluctance to abandon long-standing business practices impede e-procurement performance throughout the supply chain and within firms/institutions. This theory is pertinent to this research since it attempts to explain the impacts of governance structure on the deployment of e-procurement.

Resource Base Theory

The resource-based theory (RBT), as developed by Birge Wenefeldt in 1984, stipulates that a firm's or an institution's competitive advantage centers on its resource base. A firm's resources include its human, financial, and material or physical resources and procedures or business processes (Ndunge, 2016). RBT, according to Matano, Musau & Nyaboga (2020), is employed in examining and knowing firms'/businesses' tangible (financial, human, material/physical, etc.) and intangible (capabilities, skills, competencies, etc.) assets that render them strategic advantage over others or competitors. Requisite internal capacity is a determinant factor in its ability to innovate and creatively deal with challenges in the market or industry (Ndunge, 2016). Primarily, what distinguishes an organization/firm from others is its capabilities or competencies developed from unique sets of effectively and efficiently employed resources. Firms' worthiness, uniqueness, and strategic positioning, tend to offer them competitive advantage over competitors when they can or thrive on developing their competencies from their resources as distinct goods or services (Barney, 1991; Matano et al., 2020). Again, Firms/organizations' abilities to establish and realize their goals against others, outline their capabilities as the development of the resources they control/master determine their growth and not just the opportunities they get; the ability of an organization to discover or create distinctive competencies/capabilities expresses its survival and success in business (Matano et al., 2020). As a matter of fact, the internal and external partnership capabilities of organizations cannot be acquired on a silver Plata; they can only be built/attained with time.

Information technology, such as e-procurement, may be assessed as a cost-effective and long-term positive change generated from strategic resources because the resources on which it is based are limited, precious, and cannot be duplicated or substituted (Matano et al., 2020; Ndunge, 2016). E-procurement relies on combination of vital innovative skills (creative brains) required to grasp expected gains in procurement; ability to adapt to unavoidable business changes is critical here. The advent of information communication technology and, for that matter, e-procurement has helped public institutions engage with their various suppliers locally and internationally, resulting in price reduction through competition in respect of suppliers as they are compelled to give fair prices to tenders.

E-procurement, in this study, is recognized as a process by which public institutions (like MMDAs) achieve effectiveness and efficiency in their procurement functions. This is attainable through maximization of the use of their available resources leading to the attainment of competitive advantage. A manifestation of competitive advantage, in this regard, comes into play in terms of customer satisfaction, cost efficiency, and improved lead times (Matano et al., 2020; Ndunge, 2016). RBT is relevant to this study.

Innovation Diffusion Theory

As established by Rogers (1962), Innovation Diffusion Theory (IDT) is one of the most dominant theories for information technologies (IT) adoption studies and knowledge acquisition on how IT innovations spread within and across social systems (communities). IDT is defined as the process in which an innovation is communicated through certain channels over time among the members of a social system (Rotich & Okello, 2015), and described as a process aimed at improving the economic development of corporations/institutions (Zhang X. et al., 2015). Innovation diffusion is an idea, practice, method, or technology that is unique or unfamiliar to members of a community/social system and is viewed as a concept that is perceived as a novel by society (Rogers, 1962). In societies, diffusion is the method or mechanism by which information about an innovation is passed from one person or unit to another over time (Zhang X. et al., 2015).

Every IT innovation's success is dependent on or determined by four primary factors: communication channels, innovation qualities, adopter characteristics, and the social system (Rogers & Singhal, 2003; Sahin, 2006; Zhang X. et al., 2015). Communication channels, which include both mass media and interpersonal contact, are concerned with how knowledge about the invention is accessed and how members of a society view its use. The attributes of innovation, which affect the rate of adoption and consist of five user-perceived

qualities, as defined by Rogers, can be imagined in terms of relative advantage, compatibility, complexity, trialability, and observability (Rotich & Okello, 2015; Zhang X. et al., 2015). The degree to which a user sees benefits or enhancements over existing technology, because of adoption of innovation, is referred to as relative advantage. The degree to which an invention is compatible with the current technical and socio-cultural context is compatibility. The better an innovation's chances for dissemination and adoption are, the more it can integrate or coexist with existing values, knowledge, and the desires of potential adopters (Moore & Benbasat,1991; Tornatzky & Klein,1982; Zhang X. et al., 2015). Also, the degree to which an invention is judged to be difficult to grasp, execute or utilize is measured by its complexity (Rogers & Singhal, 2003; Zhang X. et al., 2015). Less complicated innovations are more likely to be quickly adopted by end-users (Tornatzky & Klein,1982). Trialability refers to an innovation's ability to be put to test without a complete commitment to its adoption and with only a little expenditure. Individuals are more inclined to adopt an invention with better trialability (Moore & Benbasat,1991). Observability refers to how evident an innovation's benefits are to potential users (Rogers & Singhal, 2003). The public will only embrace an invention if the consequences are deemed helpful or advantageous (Moore & Benbasat, 1991).

Innovation diffusion theory divides users of new technologies into five categories based on their features. Individuals who wish to be the first to attempt an idea are known as innovators. People who represent opinion leaders are known as early adopters. Those in the Early Majority who demand proof that an idea works before adoption; Late Majority, sceptics that accept innovations after being used by the majority, and Laggards, those that oppose change and are the most difficult in the incorporation of processes of innovation (Rotich & Okello, 2015; Zhang X. et al., 2015). Those who make up 2.5 percent of the population of a society (Innovators), are the first to accept a new idea. According to Rogers, innovators can comprehend and use complicated technical information, which is necessary for bringing in innovation from outside the social order. Unlike inventors, early adopters are more embedded into the social structure. They are more likely to be well-informed about innovation, linked to new technology, and economically successful (Zhang X. et al. (2015). The first two groups of adopters account for 16 percent of the population in a social system. Early and later majority adopters make up 68 percent of the population in the social system, while laggards make up 16 percent of the population (Zhang X. et al., 2010). They are the most adamant opponents of innovation adoption, and because of their low resources and lack of awareness or knowledge of the innovation, they are most likely to become non-adopters (Zhang X. et al., 2015).

A social system, according to Rogers' theory (2003), is a collection of interrelated units engaged in cooperative problem solving to attain a common purpose (Rogers & Singhal, 2003; Zhang X. et al., 2015). It establishes the boundaries within which inventions are disseminated (Rogers & Singhal, 2003). According to Rogers & Singhal (2003), the structure of a social system determines people's attitudes toward innovation and, and for that matter, the pace at which innovations are adopted. In recent years, the diffusion of innovation theory has been widely applied to the study of people's acceptance of new healthcare information technology (Helitzer et al., 2003; Zhang X. et al., 2015). These studies have shown that Roger's innovation theory can be used to formulate ideas about technology adoption in e-health, and same could be stated in respect of e-procurement IT technology. The ideas of the theory are significant to this study since they aid in the development of the study and allow the researcher to comprehend the construct of the study. IDT was used to investigate how GIFMIS e-procurement innovation had been propagated or communicated among MMDA personnel and the amount to which it had been accepted by members of the departments/units employing the technology.

Technology Acceptance Theory

This research is based on Davis's Technology Acceptance Theory (TAM), which he created in 1986. The theory is one of the most popular theories for broadening people's understanding of computer technology adoption (Rotich & Okello, 2015) since the theory has been used as conceptual framework in several studies, either in its original form (Davis, 1989) or in the extended model (Rotich & Okello, 2015). TAM is a theoretical model that examines the impact of system features on user acceptance. Computer users would typically act appropriately and systematically utilize information to decide whether to embrace technology in their workplaces or not (Arbaugh, 2010). TAM model, Primarily, predicts users' acceptance of information technology and usage in corporations/institutions (Mwangi & Kagiri, 2016). In accordance with this theory, there cannot be improvements in organizational/institutional effectiveness and performance with the emerging technologies without users embracing, accepting, and adopting the change (Davis, 1986; Rotich & Okello, 2015).

Investment in computer-based tools that support planning, communication, and decision making, is necessary and critical for any information technology-based innovation adoption (Rotich & Okello, 2015). It may, however, be unsafe to adopt some of these systems, so specification based on firms/institutions' preference and rationality is critical. Comprehension of people's opposition to technological changes is also crucial; there must be a concerted effort to understand why people resist changes and find possible answers (solutions) to such

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concerns. Solutions include inculcating appropriate organizational culture into people, implementing change in an incremental manner and supporting it with good communication; that is people must be aware of their responsibilities and urged to carry them out (Kamel, 2014; Rotich & Okello, 2015).

Technology theory is based on and defined by two key assumptions/factors that influence peoples' willingness to make use of new technology: the system's perceived utility, such as better performance, output, success, in operations, and perception of the ease of use of the system, such as ease of learning, usage, control, and remembering (Charness, Walter & Boot, 2016; Rotich & Okello, 2015). For instance, it is unlikely for an older adult who perceives the use of technology as too difficult or a waste of time to adopt it, but more likely for another older adult who perceives it as providing needed satisfaction and ease, as wanting to learn and adopt the use of that technology (Charness, Walter & Boot, 2016). Technology acceptance theory explains how users' attitudes toward the system and perceived benefits influence their uptake and usage of new technologies (Rotich & Okello, 2015).

Challenges with E-Procurement Implementation and Usage

Despite the bountiful e-procurement benefits, its implementation is characterized with countless challenges and its execution comes with numerous deficiencies (Ateto, Ondiekil & Okibo, 2013; Rotich & Okello, 2015).

A number of studies have unearthed/unraveled some of the implementation challenges with e-procurement and these include internal end user's resistance to change, firms' inability to handle change management, lack of infrastructure, lack of training for employees, poor system design, inability of system provider to responding to queries, vendors/partners low levels of IT and/or unwillingness/unreadiness to use IT system, lack of support from the institutions' management, lack of technical expertise, lack of e-procurement knowledge/skilled personnel, cost implication of the system (lack of funding), lack of business relationships with partners, vendors/suppliers not proficient in ICT, data insecurity of transactions, perception of no business benefit realization. According to these studies, the following serve as barriers to the adoption of e-procurement:

Cultural Barriers

According to William, Susan & Hardy (2007) and Davila et al., 2003 as cited in Ateto, Ondiekil & Okibo, 2013), there are cultural barriers to the adoption of e-procurement within organizations, which include lack of leadership, lack of a widely acceptance and resistance to change. The success of e-procurement implementation largely depends on cultural transformations usually spearheaded and supported by management. It dawns on managements of organizations to effect cultural transformations prior to e-procurement system implementation for its impact to be fully realized. Adequate sensitization on the system is crucial in dealing with resistance to the change. Employees must be selected and backed with complete top management support in instilling a change amongst members of an organization (Eadie, 2007, as cited in Ateto, Ondiekil & Okibo, 2013).

Infrastructure Barrier

Lack of infrastructure is a contributory challenging factor to the e-procurement adoption. Firms/institutions require relevant technology to execute e-procurement. Technological integration system-to-system integration, and ICT/technical issues are common major challenges for many firms/institutions in e-procurement adoption. Lack of good internet infrastructure leads to low speed of systems, resulting low uploading and downloading from Systems (Croom & Brandon-Jones, 2005; Eadie et al, 2007, & Harrigan, 2008, as cited in Ateto, Ondiekil & Okibo, 2013; Nawi et al., 2016; William, Susan & Hardy (2007)).

Cost Implication Barrier

There exists a perception that e-procurement systems are excessively pricy to adopt and so many firms would rather want to stick to their old manual procurement systems. These include costs relating to transformation management, training of personnel, acquisition of resources and cost of engaging partners (suppliers/customers) in the process (Harrigan, 2008, as cited in Ateto, Ondiekil & Okibo, 2013; William, Susan & Hardy, 2007).

Uncertainty Barrier

The notion that e-procurement implementation is time and money consuming and the fact that its adoption doesn't come with certain belief that its full potential will be realized, makes it seem to businesses that there are no significant business benefits associated with e-procurement implementation and usage to be achieved every time (Heywood, 2002, as cited in Ateto, Ondiekil & Okibo, 2013).

Expertise Barrier

Lack of technical expertise is also a contributing factor to e-procurement implementation. Most organizations envisage embracing e-procurement system as engaging the required manpower to use the system when adopted,

and since they lack expertise to operate the system, it becomes worrisome venture to them (Ateto, Ondiekil & Okibo, 2013).

E-procurement knowledge and skills Barrier

E-Procurement execution has to do with new technologies and transformations in manual procurement techniques. As such, training of personnel in the use or performance of e-procurement is crucial in realizing the benefits of its adoption (Ateto, Ondiekil & Okibo, 2013; *World Bank, 2003* as cited in Jeptoo and Karanja, 2017).

Supply Chain/Business relationship Barrier

The success of e-procurement is hugely dependent on the integration of the supply chains of firms/organizations with those of their partners (suppliers, customers etc.). This depends on the kind of business relationship that exist between firms and their partners (Mozeik, 2003, as cited in Chepkemoi, 2012; *OGC, 2002,* as cited in Ateto, Ondiekil & Okibo, 2013; William, Susan & Hardy, 2007). Moreover, lack of business relationships with suppliers is also a major challenge to e-procurement adoption. This results in inability of organizations/institutions to on-board and support their partners and thereby depriving them of the needed business communications (Chepkemoi, 2012; Hawking et al., 2004, as cited in Ateto, Ondiekil & Okibo, 2013; Nawi et al., 2016).

Security of Transactions/ Technical Barrier

The recent hacking of information has resulted in making working on the internet very risky activity. Currently, most organizations entertain fear in using internet due to not only lack of confidentiality of the information disseminations through them, but also the fact data is not adequately protected from unauthorized access. Information through web can be distorted or reconvene. Also, performance of e-procurement on internet sometimes generates interoperability concerns due product uniqueness associated with software producing companies, resulting in issues of interfacing with other systems and incompatibilities of data migration between systems (Jennings, 2001, & Rankin, 2006, as cited in Ateto, Ondiekil & Okibo, 2013).

Legal Barrier

The obligations and responsibilities of partners in business transactions (irrespective of the type - public sector or private businesses) is anchored on the legal framework that governs the transactions, which is linked to the fulfilment of desired objectives of business partners (Addo, 2019). As unraveled in Kheng & Al-Hawandeh (2002) as cited in Addo (2019), the governing laws for business-to-business commerce and for that matter e-procurement are underdeveloped, resulting in concerns about the lawfulness and force of e-mail contracts, authenticity of electronic signatures, and legitimacy of the application of copyright laws to electronically imitated documents.

Challenges to the Use of E-Procurement

A few challenges have been outlined in Osei-Owusu (2013); these include computer errors, eye problem, back pains, body weakness and poor/bad network. Inevitably, the internet has become a need/necessity in our daily lives and, for sure, the time people spend on digital gadgets (computers, mobile phones etc.) has risen will continue to increase. This continual rise in use of digital gadgets has tremendous effects on users of all age groups in the world; poses risk of developing digital eye strain (DES). The cause of DES is related to length of duration spent in front of digital gadgets screens, the distance between the eyes to the gadgets, the length of exposure of gadgets to users in a day, the number of gadgets being concurrently used and the surrounding light intensity (*WebMD & American Optometry Association*). So, obviously, excessive use of e-procurement on digital devices will result in prolonged exposures to health risk.

II.   RESEARCH METHODOLOGY

Data Collection Procedures

This research employed descriptive survey design mainly used in preliminary and exploratory studies, which allowed the researcher to gather information and summarize, present, and interpret the data to clarify, determine, and report on the current state of a population under investigation (Mwangi & Kagiri, 2016; Orodho, 2003). This approach is helpful because it allows the researcher to gather data consistent with standard methods and based on highly organized research instrument(s) and well-defined study themes and related variables. The research used case study technique for data collection/gathering.

Descriptive survey or study design was adopted for the study because it permits data collection by questionnaires or structured interview (Babbie, Halley, & Zaino, 2007). It also aims to explain people's perceptions and behaviors based on data acquired at a certain point by providing a more exact depiction of occurrences. Again, it offers advantages of getting accurate and objective replies from a wide range of respondents as well as dealing with issues of accuracy and objectivity of data collection, when it comes to reporting current events (Nwadinigwe & Azuka-Obieke, 2012). The research was carried out at Sefwi Wiawso Municipal Assembly (SWMA). This Municipal Assembly was chosen due to the researcher's closeness to that

Assembly and access to the respondents, and the fact that there were some claims of associated fraud and corruption previous/prior to the Assembly's adoption of GIFMIS.

The study's population comprises all the seventy-six (76) workers of the Sefwi Wiawso Municipal Assembly. All the fifty (50) employees in the Procurement, Finance, Budget, Stores, Internal Audit (GIFMIS users) as well as Planning, Physical Planning and Registry departments (knowledgeable in GIFMIS) of the Assembly, both at management and nonmanagerial levels, including the Municipal Chief Executive (MCE) and Coordinating Director (CD), constituted the sample frame.

Purposive sampling technique was employed in the study to select respondents. Employees from the above-mentioned departments were purposively chosen because they either, work with or have knowledge of the use of GIFMIS. They were therefore well positioned to provide requisite answers to the research questions. This method (commonly applicable in situations where minimal numbers of areas/sites exist) was considered appropriate, realistic, and applicable to this research, since the number of employees (50) targeted for the study is comparatively small as the researcher targets only employees of the Assembly, where he believes they are abreast with the use or have knowledge of GIFMIS.

According to Adèr (2008) sample size of about 10% of a population can provide good reliability and therefore researchers usually sample from accessible respondents (people) to generalize them to the target populations (Bambale, 2014). This, coupled with the argument that a sample of at least thirty (30) must exist for generalization to be made statistically on a particular population (Cooper and Schindler, 2003), informed the decision of the researcher to select the fifty (50) employees from the selected departments of the Assembly (representing about 66% of the target population of 76) as sample size. Therefore, the choice of 66% of the respondents in this study (sample size of 50) was adequate for collecting reliable data for generalization.

The research used primary data collected using structured questionnaires and interviews in soliciting for and retrieving information from respondents for the assessment or evaluation of the outlined objectives. Kotler and Armstrong (2010) posited and defined primary data as collected information to handle specific situations. Likewise, in secondary data collection, one must ensure the data collected are relevant, accurate, current, and unbiased in primary data collection.

The researcher personally administered the questionnaires, considering the above factors, and gathered primary data from the respondents. Drop and pick later administration method was employed where the questionnaires were given out to the respondents and then collected later afterwards (2 hours later). A Questionnaire is a research instrument comprising a series of questions and prompts used in soliciting and gathering information from a respondent. Questionnaires are cost-effective ways of retrieving information and getting inputs from large groups of individuals in relatively short time frames.

The questionnaire consisted of two (2) sections, A and B. Section A consisted of six (6) items which covered demographic information and respondents' awareness of and challenge with using GIFMIS whiles section B constituted fifteen (15) items relating to the obstacles to the implementation/adoption of GIFMIS in the Assembly. The questionnaire comprised predominantly closed-ended questions with only two open-ended ones in section A. Close-ended questions were relevant since they were easy to ask and quick to answer; it encouraged respondents to give their inputs with ease and therefore facilitated the collection of the data needed/required for the research. Notwithstanding, the analysis of closed-ended questions is easy. However, closed-ended questionnaires have huge potential in introducing biases into research works.

Data Processing and Analysis

Proper management of questionnaires retrieved from respondents is required if a sound decision could be made based on the data. It is imperative to have raw data rightly managed for safe conversion into information for good decision making; management of data involves sorting to fish out unanswered questionnaires, checking for consistency or clarity in the responses, assignment of identification numbers and coding of questionnaires and tabulation to permit statistical analysis.

The research adopted quantitative approaches to data analysis. After being revised for wholeness, consistency, and accuracy, the collected data was quantitatively analyzed, utilizing descriptive statistics (frequency distributions & percentages). Tables were used to present the data. MS- Excel and SPSS Version 23 Statistical software were employed for the data analysis.

III. RESEARCH RESULTS ANALYSES, DISCUSSIONS AND FINDINGS
Research results

This Study sought to unravel the challenges confronting GIFMIS adoption as well as the problems faced by its users. The measurements in section B were captured on a five-point Likert Scale where; 1 = Strongly disagree (SD), 2 = Disagree (D), 3= Unsure/Not sure (U), 4 = Agree (A) and 5 = Strongly agree (SA). Tables 1 and 2 below, summarize these results.

The research purposively administered 50 questionnaires to 50 respondents, where 45 of them responded but one questionnaire rejected (representing 90% response rate). Thus, the study collected 44 responses for the investigation. The study used descriptive statistics involving frequency distributions and percentages to analyze the data.

Analysis of Demographic and Organizational Profile Information of Respondents

Before the principal analysis, information relating to gender, level of education, department, number of years of experience with GIFMIS, and the challenges to GIFMIS adoption by the MMDAs and usage by end-users were captured as in Table 1 and discussed as below.

As illustrated in Table 1, out of 44 respondents, 34 (77%) of the respondents were males, while 10 (23%) were females. This is only an indication that the sample has more males than females and cannot be used in drawing any conclusion. Table 1 also shows the highest educational qualifications of the respondents; nine (9) respondents representing 21% have postgraduate degrees, twenty-five (25) representing 57% are first degree holders, four (4) respondents representing 9% hold professional qualifications, four (4) respondents representing 9% own Diploma/Equivalent and two (2) representing 5% possess other certificate qualifications with many of the respondents being first degree holders. It shows that the respondents have adequate knowledge and capacity to partake in this scholarly study.

For the departments with which the respondents work, table 1 revealed that 26 (59%) are from departments that use GIFMIS (14%, 11%, 14%, 9%, and 11% from Procurement, Finance, Budget, Stores, and Internal Audit respectively) and 18 (41%) work with the Planning, Physical Planning and Registry departments that are knowledgeable in using the software system with, the Coordinating Director and Municipal Chief Executive inclusive.

The study also sought to determine whether the respondents' institution had adopted GIFMIS and whether the adoption processes were successful. It was revealed that respectively 98% and 93% of the respondents responded yes to the above questions.

In the researcher's quest to unravel the length of time the system was adopted and the success level as well as the problems end-users encounter whiles using the software, the study discovered that the system has been in use in the Assembly for within 1-5 years now. The adoption process, according to the responses, saw a massive success as indicated by 95% and 93% of the respondents respectively. In respect of the challenges encountered by users, 62% of the respondents supported the fact that poor/bad network and computer errors are the main issues with the use of the software. Conversely, 23% indicated there are no issues with the use of GIFMIS.

Table 1: Demographic and Organizational Profile Information of Respondents

VARIABLE	FREQUENCY (f)	PERCENTAGE (%)
Gender		
Male	34	77.3
Female	10	22.7
Highest Educational Qualification		
Postgraduate	9	20.5
1st Degree	25	56.8
Professional	4	9.1
Diploma/Equivalent	4	9.1
Others	2	4.5
Department		
Procurement	6	13.6
Finance	5	11.4
Budget	6	13.6
Stores	4	9.1
Internal Audit	5	11.4
Other (Planning, Physical Planning, Registry, CD, MCE)	18	40.91
Institution using GIFMIS?		
Yes	43	97.73
No	1	2.27
Number of years of GIFMIS usage		
1 - 5 years	42	95.46
6 - 10 years	1	2.27
Above 10	1	2.27
Was the GIFMIS adoption process successful?		
Yes	41	93.18
No	3	6.82
Problems encountered by users in using GIFMIS		
Computer Errors	14	31.8

Eye problem	1	2.3
Back pains	3	6.8
Body weakness	2	4.6
No problems	10	22.7
Others: Poor/bad network	14	31.8

Analysis Relating to Challenges to GIFMIS Implementation

The study also sought to assess the challenges to the adoption of GIFMIS in MMDAs. Table 2 presents the results as below. The only challenges, according to the respondents, encountered during the adoption process were lack of infrastructure, with 24 respondents, representing 55% (with 8 unsure responses), affirming it, and low speed of uploading and downloading associated with GIFMIS software, with 17 respondents, represent 39% (with 13 unsure responses).

Table 2: Challenges to the adoption of GIFMIS

STATEMENT	SD Freq(%)	D Freq(%)	U Freq(%)	A Freq(%)	SA Freq(%)
Internal end user's resistance to change	13 (29.5)	13 (29.5)	15 (34.1)	3 (6.8)	0 (0)
MMDAs' inability to handle change management	4 (9.1)	24 (54.5)	7 (15.9)	5 (11.4)	4 (9.1)
Lack of funding	5 (11.4)	14 (31.8)	13 (29.5)	9 (20.5)	3 (6.8)
Lack of training for employees on how to use the system	21 (47.7)	10 (22.7)	3 (6.8)	2 (4.5)	8 (18.2)
Adoption of GIFMIS is not favourable for the MMDAs	20 (45.5)	16 (36.4)	6 (13.6)	1 (2.3)	1 (2.3)
Inadequacy in responding to queries by the system provider	4 (9.1)	13 (29.5)	16 (36.4)	6 (13.6)	5 (11.4)
Vendors low levels of IT and/or unwillingness/unreadiness to use IT system	11 (25.0)	15 (34.1)	8 (18.2)	7 (15.9)	3 (6.8)
Payments using the GIFMIS is not favourable for the MMDAs and their suppliers	17 (38.6)	18 (40.9)	4 (9.1)	3 (6.8)	2 (4.5)
Lack of support from the MMDAs' management	6 (13.6)	21 (47.7)	5 (11.4)	9 (20.5)	3 (6.8)
Requirements on the usage of GIFMIS not clearly defined	7 (15.9)	16 (36.4)	11 (25.0)	8 (18.2)	2 (4.5)
With GIFMIS, data is not adequately protected from unauthorised access	8 (18.2)	16 (36.4)	16 (36.4)	3 (6.8)	1 (2.3)
System's speed of uploading and downloading is low	3 (6.8)	11 (25.0)	13 (29.5)	7 (15.9)	10 (22.7)
Lack of confidentiality of the information disseminations through GIFMIS	18 (40.9)	10 (22.7)	6 (13.6)	7 (15.9)	3 (6.8)
Lack of infrastructure	4 (9.1)	8 (18.2)	8 (18.2)	15 (34.1)	9 (20.5)
Poor system design	18 (40.9)	5 (11.4)	9 (20.5)	8 (18.2)	3 (6.8)

IV. Summary Of Findings, Conclusions, And Recommendations

Research Findings

The study established that the MMDA in Sefwi Wiawso has successfully adopted GIFMIS. It also revealed that GIFMIS adoption and implementation took place just recently, as it has been in use for less than five years.

The study discovered that, computer errors and poor networks were the major problems users of the software are faced with.

The research, undoubtedly, unraveled the fact that lack of infrastructure for GIFMIS adoption/implementation and low speed of uploading and downloading with GIFMIS were the main challenges that confronted its adoption/implementation process in the Assembly.

Conclusions

Based on the research findings, the following conclusions were drawn:

1. The government of Ghana introduced GIFMIS to offer the MMDAs and other state institutions/agencies means of enhance their procurement performance.

2. The Municipal Assembly at Sefwi Wiawso recently adopted GIFMIS e-procurement system as a means of enhancing its procurement activities and improving on its financial management. The adoption process was successful, with only two significant problems hindering the implementation and adoption process. These include a lack of IT infrastructure and low speed of uploading and downloading associated with GIFMIS software.

3. Only two significant challenges that confront users of the GIFMIS e-procurement system. These include poor computer errors resulting from incompetency in IT on the part of users and poor networks arising from the inaccessibility of internet facilities.

Recommendations
- Further research into the effect of GIFMIS e-procurement system on the supply chain management performance and the overall operational performance of MMDAs is recommended.
- Decentralization of GIFMIS by the MMDAs (into other departments) is also recommended.

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