

**Where New Technology Meets Socio-Economic Impasses: A Study of  
the Integrated Financial Management System as a Management Control  
in Local Governments in Uganda**

**by**

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### **Abstract**

The use of computerised accounting and financial management has increased both in the private and public sectors with the intended consequences of enhancing management controls through the production of timely and accurate information for decision-making and accountability. The purpose of this study was to investigate the adoption and implementation of the integrated financial management systems (IFMS) in local governments in Uganda. The theoretical insights of the sociology and duality of information technologies, the study explored the micro processes involved in the social interactions with the IFMS based on a case study of Kampala district. IFMS was adopted and implemented in Kampala district as a directive from the national government, which was under external pressure from the World Bank to improve the financial management systems in the government sector, including the local governments. The evidence from this case study revealed that the implementation of IFMS in Kampala district was influenced by socio-economic factors that included: power struggles; inappropriate and unsustainable designs of information technologies; insufficient information technology skills and knowledge; and negative users' attitudes. The study makes contribution to accounting literature on the adoption and implementation of computerised information technologies as management control mechanism, in the context of developing countries.

*Key words: local governments; management controls; sociology and duality of information technologies*

## **Introduction**

The use of computerised accounting and financial management systems in organisations has greatly increased over the years (Granlund and Mouritsen, 2003; Sassen, 2002; Wajcman, 2002a and b; Dillard, 2004; Heath *et al*, 2000). This is especially with large manufacturing companies (Granlund and Malmi, 2002; Hyvönen, 2003 on detailed account on ERPs). The rationale for the adoption of the computerised accounting and financial management systems is the promise of fostering effective management controls through integrated, timely and accurate information to enhance effective decision-making in the era of automated production (Granlund and Malmi, 2002) and to remain competitive (Manson *et al*, 2001; Davenport, 2000; Shields, 2001; Granlund and Mouritsen, 2003). However, with the wave of bridging the gap between the private and public sectors under the NPM “project”, there has been increasing advocacy for the adoption of automated financial management information systems in the public sector (Lapsley and Pallot, 2000; Kholeif *et al*, 2007; Anipa *et al*, 1999; Pradhan, 2002; Uwaifo and Kabadi, 2006).

Developing countries have also been brought to the bandwagon of the adoption of the automated financial management systems in their public sectors, as “*best practices*” (Kholeif *et al*, 2007; Uwaifo and Kabadi, 2006); and specifically in local governments (Fjelstad *et al*, 2004; Anipa *et al*, 1999; Sachs, 2000). The dominating role of international aid agencies has been instrumental in the adoption of automated financial management systems in local governments of developing countries (Dorotinsky, 2003; USAID, 2008; Diamond and Khemani, 2005; World Bank, 2003). Other than promising the provision of timely and accurate information to support decision-making, the automated financial systems in developing countries are construed as controls against corruption and rent-seeking practices (Diamond and Khemani, 2005; USAID, 2008;). For instance, the Second Economic and Financial Management Programme (EFMP II) aimed at improving the budgeting and financial management systems, and statistical monitoring in government, including local governments in Uganda (World Bank, 1999).

The purpose of this paper is to explore the implementation of IFMS in the routines of local government staff in Kampala district in Uganda. It is intended to contribute the gaps in accounting literature on the adoption and implementation of IT based financial management systems in the public sector, especially in the context of a developing country. Most of the available literature is based on developing countries (Lapsley and Pallot, 2000) or from studies sponsored by aid agencies (Fjelstad *et al*, 2004). The following section provides a review of prior studies in IT-based financial management systems.

### **Review of Prior Studies**

This section provides a review of the prior studies on IT-based accounting and financial management systems. This section is divided into three subsections. The first subsection unpacks the integrated financial management systems (IFMS). The second subsection considers the rationale for the adoption of IFMS, and the last looks at the literature of IFMS as a management control mechanism.

#### *Unpacking the Integrated Financial Management Systems (IFMS)*

There are a number of authors that have defined IFMS (Dorotinsky, 2003; Diamond and Khemani, 2005). For instance, Dorototinsky (2003) argued that: "An integrated financial management system (IFMS) consists of several subsystems, which plan, process and report public financial resources. The basic subsystems are normally include accounting, budgeting, cash management, debt management and related core treasury systems." Similarly, Diamond and Khemani (2005) observed that that IFMS refers to: ".....computerisation of public expenditure processes including, budget formulation, budget execute and accounting with the help of a fully integrated systems for financial management of the line ministries (LMs) and other spending agencies" (p.3).

The above views are shared by some aid agencies. For instance, USAID (2008) maintains that IFMS enable timely and efficient access to reliable

financial data for decision-making and strengthening financial control enhancing transparency and accountability. Specifically, USAID (2008) defines IFMS as: “An information system that tracks financial events and summarises financial information” (p.2). The increased use of integrated information systems pervades private and public sector organisations. In the private sector, various authors observed the increasing use and impact of information technologies on organisational activities (Granlund and Mouritsen, 2003; Howcroft, 2006; Manson *et al*, 2001; Davenport, 2000; Scapens *et al*, 1998; Shields, 2001; Lodh and Gaffikin, 2003; Hyvönen, 2003; Granlund and Malmi, 2002).

*Rationales for the increasing use of integrated information technologies*

Various rationales are identified for the increasing reliance of the IT-based integrated or enterprise-wide information systems in the private sector. These include the promise of integrated mode of management and control (Granlund and Mouritsen, 2003; Davenport, 1998); adding value to business processes (Davenport, 2000; Scapens *et al*, 1998); external pressures caused by globalisation and competition (Davenport, 2000; Shields, 2001; Granlund and Mouritsen, 2003). Furthermore, other studies have revealed the desire to improve accounting systems (Lodh and Gaffikin) as one of the drivers of the increased used of IT-based information systems. This is at the time when the traditional paper-based accounting systems were under intense criticisms for not being appropriate in the era of complex manufacturing systems (Hyvönen, 2003; Granlund and Malmi, 2002).

In the context of the public sector, the search for efficiency, especially under the “NPM” discourse, has espoused the adoption of IT-based accounting and financial management systems (Anipa *et al*, 1999; Lapsley and Pallot, 2000; Fjelstad, *et al*, 2004; Kholeif *et al*, 2007; USAID, 2008; Diamond and Khemani, 2005) in search for efficiency and effectiveness in the provision of public services. In particular, for developing countries, the changes in accounting and financial management systems promised mitigating the challenges of efficient, effective and transparency and accountability for the utilisation of public resources, which in many cases are provided by

international aid agencies to combat corruption in the public sector (USAID, 2008). For instance, Anipa *et al*, (1999) argued that the adoption of IFMIS in Malawian local governments enhanced the implementation of the new budgeting rules (MTEF), which were also enforced by aid agencies. This, they argued, was because MTEF required the analysis of loads of data, which could not be easily achieved without using IT-based accounting and financial management information systems (Anipa *et al*, 1999).<sup>1</sup>

In addition, Diamond and Khemani (2005) argued that budget implementation in LDCs is usually characterised by either manual systems or systems that are “inadequately maintained software applications”, which has serious repercussions on the public expenditure management. They further added that the manual information systems resulted into the lack of timely accurate financial data on budget planning monitoring, and expenditure control, reporting and execution of accountabilities. Thus, the adoption of IFMS promised to strengthen public expenditure management, especially in budget reforms and financial controls (ibid, 2005).

In the context of local governments, especially in developing countries, the adoption and implementation of the integrated financial management systems is intended to enhance timely and accurate information of decision-making purposes and to add value to public administration (Uwaifo and Kabadi, 2006; Sachs, 2000) in order to foster socio-economic development (Pradhan, 2002).

#### *IFMS as a Management Control Mechanism*

It has been argued by a number of scholars that the design and implementation of information technologies, especially to support accounting and financial management functions in organisations are usually premised on the determinist perspective (Skærbæk, 1998). This perspective assumes that technologies as rational; technically superior and they are harnessed “naturally and unproblematically” by its intended users to bring out desired outcomes (Sassen, 2002). However, the determinist approach is insufficient to explain how information technologies succeed in some contexts and fail in others.

A number of studies have been conducted to explore the impact of IT-based accounting and financial management information systems on organisational control, both in the private and public sectors. Most of these studies indicate that the intended consequences of adopting and implementing integrated information systems are far from being realised (Granlund and Mouritsen, 2003; Granlund and Malmi, 2002; Hyvönen, 2003; Skærbæk, 1998; Heath *et al*, 2000; Howcroft, 2006; Dorotinsky, 2003; Kholeif *et al*, 2007).

In the private sector, a number of studies have revealed that new technologies are usually loose-coupled in practice (Manson, *et al*, 2001; Granlund and Malmi, 2002; Howcroft, 2006; Tsamenyi *et al*, 2006). For instance, Manson *et al*, (2001) observed that, although the junior audit staff embraced new technologies as applied in the audit processes and were keen to explore new horizons, the senior audit partners were not eager to integrate IT to automate the audit processes. The senior audit partners had gone as far as restraining the junior audit staff from using IT beyond acceptable boundaries, which they (senior partners) set. This demonstrated a degree of resistance to the changes in information systems resulting from the embedded power redistribution that emerge from the introduction of new technologies (Howcroft, 2006; Sassen, 2002).

Howcroft (2006) investigated the barriers for improving spreadsheets-based financial planning process in a UK manufacturing and RD subsidiary of a European transnational company. His findings indicated resistance to changes in the financial planning processes. The resistance was due to the changes in power distribution within the finance organisation created by the new systems. He further argued that the extant power distribution might hinder and result into resistance to the adoption and implementation of new accounting and financial management systems in an organisation.

Tsamenyi *et al*, (2006) explored the changes in the accounting and financial information systems imposed by the Endesa head office on a large Spanish electricity company (Sevillana). Their findings indicated that the

implementation of the new systems met resistance from the employees who construed them as threatening their positions in the company. Similarly, researches conducted on the impact of new information systems on the organisational practices in the public sectors have interesting revelations (Kholeif *et al*, 2007; Heath *et al*, 2000; Anipa *et al*, 1999; Lapsley and Pallot, 2000; Dorotinsky, 2003; Fjelstad *et al*, 2004). For instance, Kholeif *et al*, (2007) investigated the failure to institutionalise ERPs that were imposed on an Egyptian state-owned company (AML) by aid agencies. Their findings indicated that the implementation of ERP system failed because it could not meet the basic accounting requirements of the control authorities.

Parry (2005) argued that an IFMS could be both a solution and a predicament in financial management. He observed that many governments might waste resources on “a solution that may be too complex for a country concerned and may not be sustainable or may even fail to work at all” (p.4). Similarly, Heath *et al*, (2000) acknowledged that many organisations were adopting new information technologies in their practices. However, they argued that in many cases the complex information technologies failed to meet their intended consequences, especially with regard to the needs of the users. They cited an example of the complex technologies employed in the South West Thames’s London Ambulance Service. The new technologies were supposed to replace the “traditional paper-based system”. However, the new technologies resulted into unintended consequences (chaos). On the other hand, Lapsley and Pallot (2000) revealed that the use of the Government Enterprise Management System (GEMS), a variant of ERPs specifically designed to offer integrated accounting and financial information in local governments, facilitated the production of timely and reliable performance reports in the New Zealand’s Kauri and Kowhai councils.

The studies commissioned by aid agencies on the implementation of IFMS in the developing countries they funded, have also revealed that contextual factors which seriously affect their intended consequences (Dorotinsky, 2003; The International Records Management Trust (IRMT, 2002). For instance, Dorotinsky (2003) observed that several IFMS projects funded by the World



Bank since 1980 in various developing countries had not realised the desired outcomes. For example, he revealed that only 21% of the projects were successful and the rest had not achieved the intended consequences due to lack of commitment, and resistance from the intended users (Howcroft, 2006; Tsamenyi *et al*, 2006).

IRMT (2002) revealed that the adoption and implementation of integrated financial management systems (IFMS) was done in Tanzania national and local governments before analysing the business processes. Thus, the functionality of IFMS did not match all the information needs of the targeted users. It was adopted out of pressure by the international development agencies, rather than out of internal need to reform the accounting system. Besides, the Trust observed the persistence of manual records alongside the IFMS (*ibid*, 2002), especially to meet the requirements for external audit purposes. This is because the National Audit Office did not have adequate access to IFMS, let alone having sufficient skills and knowledge to undertake computerized external audits. They also noted that the computerised financial management systems were implemented alongside the manual systems (see also Fjelstad *et al*, 2004).

Furthermore, Uwaifo and Kabadi (2006) argued that the implementation of information technologies in Nigerian local governments was affected by contextual factors, such as inadequate funds, shortage of skilled human resources, insufficient technology infrastructure and constant power outages (see also, Wame and Nave, 2000; Madon, 1997; Salanje, 1995).

The foregoing section has considered extant literature on the impact of new information technologies (integrated information systems) in both private and public sectors. The following section develops a theoretical framework to conceptualise the impact of the changes in information technologies on organisational practices.

### *Sociology and Duality of Information Technology*

The previous section provided some insights on the impact of the new information technologies on organisational life. In particular, it has indicated in most instances, the desired outcomes of the design and implementation of information technologies are usually not realised. This section develops a theoretical framework for understanding the impact of new technologies on organisational life.

The design and implementation of information technologies are premised on the determinist perspective that assumes that the functionality of the technical artefacts (Heath *et al*, 2000). Similarly, the conventional approach to understand the use of information technologies in organisations have been based on the determinist approach that is concerned with the rationality, technical imperatives and universality of technologies (Sassen, 2002; Heath, *et al*, 2000; Orlikowski and Barley, 2001). For instance, Heath *et al*, (2000) argues that the usual determinist approaches taken to conceptualise the information technologies lacks focusing on the social implications of the interactions of users with the technology. They posit that: "Underlying the analysis is the idea that human action is governed by rules, scripts, and plans, and that through manipulation of symbols and the development of representations [such as information technologies], individuals are able to execute intelligent actions and interactions"(p.302). [Emphasis added].

In other words, the designers of information technologies construe the technical artefacts as tools to structure and direct the conduct of users to desirable behaviour (Sassen, 2002). However, in order to conceptualise information technologies in contexts, we need to go further than considering their technical determinism and focus on their various "embeddedness" and consequences in different socio-economic contexts (Sassen, 2000; Heath *et al*, 2000; Orlikowski and Barley, 2001). For instance, Cooper (1985) argues that: "If research in information systems is to be socially useful and informing, then researchers in the subject will need to be more sensitive to the human and social context in which they work, including their own relationships and the State... what is needed is research that explores the social and human context and consequences of IS" (Cited in Skærbæk, 1998, p. 210).

A number of authors have castigated the determinist stance used in understanding information technologies (Granlund and Mouritsen, 2003; Skærbæk, 1998; Sassen, 2002; Wajcman, 2002a and b; Heath *et al*, 2000; Dillard, 2004; Orlikowski and Barley, 2001; Orlikowski and Robey, 1991). All these authors maintain one central thesis that in order to conceptualise the impact of information technologies on organisational life, we need to shift the focus from understanding technologies are rational, technical and unproblematic (Sassen, 2002; Heath *et al*, 2000). Instead, there is a need to problematise the information technologies by adopting theoretical lenses that integrate naturalistic, social and contingent controls of the technologies (Dillard, 2004). Thus, information systems can be fully understood by taking into account the context that influence “economic and organisational activity” (Orlikowski and Robey, 1991; Heath *et al*, 2000) leading to the sociology of information technology (Sassen, 2002; Wajcman, 2002a and b; Orlikowski and Barley, 2001).

#### *What is the Sociology of Information Technologies?*

Sociology of information technology is a branch of sociology that seeks to develop analytical tools to conceptualise the relationships between technology and society (Sassen, 2002; Wajcman, 2002b; Dillard, 2004). Similarly, Wajcman (2002b) posits that sociology of information technology specifies that technological artefacts are socially constructed in “design and content” (p.351). He further adds that sociology of information technology rejects the notion that technology is only an outcome to technical artefacts, but rather he maintains that, “technology is a socio-technical product, patterned by the conditions of its creation and use” (p.351).

The above quotation raises questions like, “why a technical reason was found to be compelling; when it could have been challenged; and what counts as technical superiority in specific circumstances” (p.351). In other words, the rationale of the sociology of information technology is to unpack the “black box” of technology and explore “how people, even particular groups, ascribe, dispute, exclude or cohere the sense and significance of objects and

artefacts” (Heath *et al*, 2000:305). How users of information technologies interpret and enact their embedded rules and resources depend on the context (Dillard, 2004; Sassen, 2002). Thus, the sociology of information technology seeks to address “contradictory or mutually exclusive, attributes” (Sassen, 2002:365).

Power relations are embedded in the design of information technologies (Sassen, 2002). Power distribution has significant role in the design and implementation of information systems (Howcroft, 2006; Ribeiro, 2003). A number of authors have revealed the effects of power distribution in facilitating and constraining the choices, designs and implementation of information technologies in organisations (Ribeiro, 2003; Howcroft, 2006; Tsamenyi *et al*, 2006; Kholeif *et al*, 2007). For instance, Ribeiro (2003) argues that organisational actors can mobilise power resources to manipulate the new practices to be consistent with the already rationalised and institutionalised practices, thus, reducing the effects of the changes (Oliver, 1991 on the strategic responses of changes in organisational practices).

Furthermore, organisational actors are not passive receptacles of new information systems, but have interests to pursue based on their roles and societal expectations (Howcroft, 2006; Shapiro and Matson, 2008; Lukka, 2007). Extant power distribution might hinder and result into resistance to the adoption and implementation of new accounting and financial management systems in an organisation (Howcroft, 2006; Tsamenyi *et al*, 2006). For instance, Howcroft (2006) revealed that the Finance directors of TMC resisted the introduction of SAP financial planning systems in favour of the existing spreadsheets-based ones. The resistance was because the changes would threaten their [Finance departments] stock of custodial knowledge of financial planning. The financial planners believed that the new planning systems would cause shifts power distribution away from them to the actors in the organisation, most notably the accountants. On the other hand, the accountants were interested in changing the spreadsheets-based financial planning systems to SAP systems because they would gain power in the

organisation from the stock of knowledge of the SAP systems, which seemingly the financial planners did not possess (Markus and Pfeffer, 1983).

Hence, resistance to changes in organisational practices, such as new information systems emerges as the changes create shifts in the power distribution. For instance, Markus and Pfeffer (1983) posit that: "Resistance is fundamentally a result of structural factors, such as power distributions and organisational culture, rather than processual factors, such as strategy and tactics of systems implementation ....the causes of resistance can be found in threats to existing power distribution" (p.216).

Some authors have acknowledged that active human agency in organisations is capable of resisting changes in organisational practices that seek to destabilise already rationalised and institutionalised practices (Burns and Scapens, 2000; Greenwood *et al*, 2002; Nor-Aziah and Scapens, 2007; Lounsbury, 2008). In order to resist new practices, organisational actors must be able to mobilise power resources at their disposal (Oliver, 1991; Ribeiro, 2003; Manson *et al*, 2001). For instance, Manson *et al*, (2001) revealed that senior audit partners used their power of seniority to restrain junior audit staff from using information technologies beyond certain acceptable limits in the audit processes.

However, other organisational actors can mobilise different power resources to impose and legitimise the design and implementation of new information systems (Lapsley and Pallot, 2000; Giddens, 1984; Stones, 2005). According to Lapsley and Pallot (2000), the success of implementing the Government Enterprise Management Systems (GEMS) in the New Zealand's Kauri and Kowhai councils was achieved through recruiting accountants from the private sector where such information systems were in operation. These accountants were able to influence the implementation of the GEMS by giving them new meanings based on their accumulated stock of knowledge (Giddens, 1984; Jack, 2005) or general dispositional internal structures (Stones, 2005).

Thus, as Wajcman (2002b) argued, “a technological system is never merely technical: its real-world functioning has technical, economic and organisational, practical and even cultural elements” (p.352). There are various alternative options for information technologies available to organisations. However, the choices that organisations make are influenced by socio-economic and political factors (Skærbæk, 1998; Howcroft, 2006). With regard to accounting and financial management systems, Dillard (2004) argued that their structure and implementation were affected by the nature of organisations in which they are applied (Howcroft, 2006; Heath *et al*, 2000; Orlikowski and Barley, 2001).

In the context of less developed countries, the choices of information technologies are usually made by providers of financial assistance, mainly international aid agencies, which exert pressures to aid recipient governments to adopt certain rationalised information technologies assumed to lead to better management and accountability of public resources (USAID, 2008; World Bank, 1999). Although the information technologies have embedded “rules and resources” to structure the behaviour of human agents, the latter can also modulate the structuring properties of the former (Giddens, 1984), leading to the duality of information technologies which is considered below.

### **Duality of Information Technology**

The concept of duality of information technology is derived from Giddens’ notion of duality of structure. According to Giddens (1984) duality of structure refers to the role of structure in influencing human actions and vice versa. Giddens asserts that the stability and change of social order emanates from the “duality of structure”. Giddens maintains that structures have inherent “rules” and “resources”. The rules specify what is construed as “correct and appropriate” behaviour (Dillard, 2004:410). For example, the integrated financial management systems (IFMS) are construed to be “best practices” of ensuring efficient and effective resource allocation and utilisation in the public sector, particularly in less-developed countries (Diamond and Khemani, 2005); and to mitigate corruption and rent-seeking activities (Dorotinsky, 2003; USAID, 2008). This thinking is based on the determinist approach that

seeks to promote efficiency using information technologies that are assumed to rational, technical, universal and unproblematic (Heath, *et al*, 2000; Orlikowski and Barley, 2001; Orlikowski and Robey, 1991; Dillard, 2004; Howcroft, 2006).

Giddens (1984) also refers to structure as “resources”. He categorises resources into: allocative and authoritative resources. Allocative resources are “material resources that are used to attain goals” (Dillard, 2004; 410; Giddens, 1984). In this respect, information technologies have inherent material resources or properties to constrain the actions of human agency. On the other hand, “authoritative resources are “non-material” (human) resources that are used to facilitate goal-directed behaviour” (Dillard, 2004:410). Thus, in the context of local government systems, especially in less-developed countries, there are various actors wielding different authoritative resources that can be deployed to facilitate or constrain the implementation of new information technologies, such as IFMS.

The “rules and resources” embedded in IFMS have inherent power that is used during the social interactions with the information technologies (Giddens, 1984; Heath, *et al*, 2000; Orlikowski and Barley, 2001; Orlikowski and Robey, 1991; Dillard, 2004). Power can be seen as both enabling and constraining in the implementation of new technologies (Lapsley and Pallot, 2000; Howcroft, 2006; Tsamenyi *et al*, 2006; Manson *et al*, 2001). For instance, Parker (2000:73) argues that, “systems are emergent outcomes of periods of social interaction between actors who use their powers to try to get their preferences” (Manson *et al*, 2001; Howcroft, 2006). Thus, social systems, such as IFMS, which are outcomes of the agents’ interactions, develop and at a certain point in time they become institutionalised (DiMaggio and Powell, 1983; Oliver, 1991; Greenwood *et al*, 2002). They would then possess their “causal powers”, which would reside outside the agency that created them (Parker, 2000; DiMaggio and Powell, 1983; Greenwood *et al*, 2002).

Furthermore, the structuring properties of social structures, such information technologies like IFMS, have significant control over the actions of human

agency (such as local government officials) (Giddens, 1984). However, Giddens further maintains that also human agency can significantly modulate the structuring properties of social structures based on their “stock of accumulated knowledge and purposive intentions...” (Giddens, 1984; Stones, 1996, 2005; Jack, 2005; Shapiro and Matson, 2008; Lukka, 2007). In this respect, information technologies, as social structures, are “both the medium and outcomes of the practices which constitute social systems” (Giddens, 1984; Orlikowski and Barley, 2001; Orlikowski and Robey, 1991; Dillard, 2004).

The structuring properties of social systems, like IFMS do not reside outside the actions of human agency, but they are [actions] implicated in their [systems] production and reproduction (Giddens, 1984). The information technologies are designed to control the conduct of human interactions, but their choices and implementation are influenced by human agency, based on accumulated stock of knowledge, self-interests and societal expectations (Giddens, 1984; Jack, 2005; Stones, 2005; Shapiro and Matson, 2008; Lukka, 2007). For instance, the designs of IFMS are socially-derived and legitimised as appropriate norms to enhance organisational performance and to control human behaviour but their implementation is influenced by how the human agents interpret and enact the “rules” embedded in the IFMS (Giddens, 1984; Stones, 2005). This leads to the duality of information technologies (Lawrence and Doolin, 1997; Stones, 2005; Dillard, 2004; Orlikowski and Barley, 2001; Orlikowski and Robey, 1991; Heath *et al*, 2000).

### ***Theoretical Framework***

The theoretical framework developed to understand the micro processes involved in the implementation of IFMS in Kampala district takes into account the sociology and the duality of the information technologies. Whereas the information technologies, such as IFMS, have structuring properties to regulate the conduct of the human agents in Kampala district, the latter could also modulate the “rules and resources” embedded in the IFMS leading to unintended consequences (Giddens, 1984). The changes in the information systems seek to redistribute power relations among human actors (Howcroft,



2006; Ribeiro, 2003). However, the different power resources, interests and skill levels could lead the active and reflexive human actors to decode and enact the “rules” of IFMS differently from what is intended (Lukka, 2007; Shapiro and Matson, 2008).

In addition, the framework takes cognisance of the sociology of information technologies which acknowledges organisational actors are not passive receptacles of new organisational practices, such as IFMS (Howcroft, 2006). Rather, the actors are bound to resist, through demonstrating lack of commitment, to new technologies that seek to redistribute power resources among actors (Manson *et al*, 2001). Figure 1 shows the theoretical model developed for understanding the micro processes involved in the implementation of IFMS in local governments in the context of a developing country.

#### **INSERT FIGURE HERE**

##### *Power Struggles*

The information technologies have inherent power resources which can be used to influence the conduct of the human actors (Giddens, 1984; Stones, 2005). The changes in the information technologies, such as IFMS, may redistribute the power relations of actors in an organisation (Howcroft, 2006). However, organisational actors are not passive receptacles of new information technologies (Manson *et al*, 2001; Giddens, 1984). By drawing from their power resources, organisational actors are likely to resist the new information technologies which seek to shift their power resources to other actors (Tsamenyi *et al*, 2006; Howcroft, 2006). Thus power struggles would ensue between different organisational actors with the adoption and implementation of new information technologies which seek to destabilise the existing power relations (Markus and Pfeffer, 1983; Kholeif *et al*, 2007; Manson *et al*, 2001) leading to resistance to the new information systems (Dorotinsky, 2003).

##### *Inappropriate Technologies*

Wajcman (2002b) maintains that information technologies are socially constructed both in “design and content”. How the users of information

technologies interpret and enact the embedded “rules” depend on context (Dillard, 2004; Sassen, 2002). The choices of information technologies adopted and implemented in developing countries are usually imposed by externalities, mainly supranational agencies (Kholeif *et al*, 2007; Fjelstad *et al*, 2004). The supranational agencies usually consider the information technologies, such as IFMS, as rational, technical and universal (Sassen, 2002; Heath *et al*, 2000; Orlikowski and Barley, 2001) and do not take into consideration the context in which they are applied (Dillard, 2004; Heath *et al*, 2000; Orlikowski and Barley, 2001). This usually results into importing inappropriate technologies that cannot meet the information requirements of their intended users (Kholeif *et al*, 2007; Fjelstad *et al*, 2004), which results into unintended consequences (IRMT, 2002). In addition, some of the technologies adopted may not be sustainable given the socio-economic context, especially in the developing countries (Fjelstad *et al*, 2004; IRMT, 2002; Uwaifo and Kabadi, 2006; Madon, 1997; Salanje, 1995).

#### *Insufficient Skills and Knowledge*

Although it is argued that the information technologies are universal, their successful realisation of their intended consequences partly depends on the levels of skills and knowledge of their users (IRMT, 2002; Tsamenyi *et al*, 2006; Philopidou *et al*, 2008; Lapsley and Pallot, 2000; Uwaifo and Kabadi, 2006; Madon, 1997; Salanje, 1995). Where the intended users of the information technologies lack sufficient technical skills and knowledge, their interactions with the technologies would produce unintended consequences (Howcroft, 2006; Tsamenyi *et al*, 2006), which may include resistance to the new systems (IRMT, 2002; Dorotinsky, 2003). This is particularly relevant where the senior officers of the organisations lack sufficient information technology skills and knowledge (Manson *et al*, 2001; Uwaifo and Kabadi, 2006). Their commitment to the new information systems would be minimal and mainly to secure legitimacy (Dorotinsky, 2003; Howcroft, 2006; Bogt, 2008; Lapsley, 2008).

#### *User Attitudes*

The success in the implementation of new information technologies depend, to a greater extent, on the attitudes of their intended users (Tsamenyi *et al*, 2006; Lapsley and Pallot, 2000; Philopidou *et al*, 2008). Where the intended users have a techno phobic attitude, especially when they view the new technologies as threats to their survival, in terms of jobs (Tsamenyi *et al*, 2006; Philopidou *et al*, 2008) and private gains (Steiner, 2006; Peters, 2002; Hopper *et al*, 2003), there is high likelihood for the new systems to be resisted (Dorotinsky, 2003; Howcroft, 2006). This is likely to result into lack of commitment in the implementation of the new information systems, such as IFMS (Dorotinsky, 2003; Howcroft, 2006) and preference given to manual systems (Uwaifo and Kabadi, 2006).

This study, therefore, investigates how power struggles; inappropriate technologies; insufficient skills and knowledge; and user attitudes; influenced the implementation of IFMS in Kampala district.

The following section provides the research methods and design for the study.

#### *Research methods and design*

The data for this study was collected using 3 main methods: documentary analysis, semi-structured interviews and non-participant observations. Official documents and records provided historical context and discourses for the adoption and implementation of IFMS in the government sector, including local governments in Uganda. In particular, the Second Economic and Financial Management (EFMP II) project document, 1999 provided the basis for the adoption of the IFMS in Uganda. EFMP II was financed by the World Bank, with particular emphasis to strengthen financial management in Uganda.

In addition, documents in respect to IFMS prepared by the MoFPED were accessed from [www.finance.go.ug/ifms](http://www.finance.go.ug/ifms), and provided the procedures for the phased implementation of IFMS in the national government ministries as well as local governments, such as Kampala district. Further, newspaper clippings gave usually information about the implementation of IFMS in local

governments, particularly, in Kampala district that could not be accessed using other means by the researcher. Especially, the government newspaper, *The New Vision* and the independent one, *The Monitor* carried detailed cases that involved manipulation of IFMS by the district officials for selfish interests.

Basing on the information gathered from documents and records, semi-structured interviews were carried out with various officials of the district to generate holistic insights into the enactment of the IFMS in their routines (Berg, 2004). The district officials interviewed included, the IFMS accountant (*a structure created by the MoFPED in the district to expedite the institutionalisation of IFMS*); 6 finance officers, responsible for financial management in the district and its 5 divisions; and one Chief Executive (Accounting Officer in accordance with the LGFAR, 2007). The interviews lasted between 1-2 hours. The interviews were asked general questions about their roles and IFMS in the district and were free to speak their minds (Lukka and Kasenen, 1995). Meanwhile, the researcher made extensive notes as the interviews were going on. The recorded interviews and notes were transcribed immediately. Follow up visits were made to clarify unclear issues arising from the recorded interviews.

Furthermore, the researcher attended one IFMS LGWG meeting held at Kampala district headquarters on 26<sup>th</sup> June 2007 as a non-participant observer. IFMS LGWG was established by the MoFPED and MoLG as a forum for exchanging notes and dissemination of “best practices” of IFMS in local governments in Uganda. The observations of the proceedings of the IFMS LGWG enabled the researcher to gain perceptions of the officials of MoFPED and MoLG who were promoting the implementation of the IFMS in the local governments in Uganda. It provided first hand experience of the routines of the district with regard to IFMS as it involved a fact-finding tour of various offices of the district to ascertain the extent to which IFMS was used. Secondly, the IFMS LGWG meeting provided an opportunity to discover events and behaviours of the district officials in their natural setting, while noting the language used, power resources and interests. Data from the study

was analysed to derive emerging themes. The following section provides the background to the case study.

### *Background to the Case Study*

Kampala district is made up of five divisions<sup>2</sup>, equivalent to sub counties, and operating as semi-autonomous local governments in accordance with the Local Government Act, 1997 and 2006. Kampala district hosts the capital city of Uganda. Each local government in Kampala district, including the district headquarters, has a dual-organisational structure: political and administrative structure. The political structure is composed on elected councillors and the administrative structure consists of appointed techno-bureaucrats. According to the LGA, 1997, 2006 and LGFAR, 1998 and 2007, the financial management functions are carried out by the techno-bureaucrats. Thus, operating IFMS in the district is the domain of the techno-bureaucrats, with the Chief Executive (Town Clerk for district headquarters and Principal Assistant Town Clerk for city divisions) as the accounting officers responsible for the financial management in the local government assisted by the finance officers. The role of the local politicians in financial management was restricted to only monitoring public expenditure to ensure value for money in accordance with LGFAR, 1998, 2007.

Prior to the adoption of the IFMS in 2003, each local government in Kampala district operated separate legacy financial management systems, mainly QuickBooks, Ledger works and spreadsheets. However, these financial management systems were considered inadequate to provide timely and accurate information to enhance effective utilisation and accountability of public resources in the district (OAG, 2004). Besides, the legacy financial management systems did not insulate the district against frauds as they were easily manipulated for selfish interests of some technocrats. For instance, in 2004 the OAG investigated massive frauds involving the receipting system in Kampala district in which colossal sums of money had been misappropriated by unscrupulous district officials in the Planning Office (OAG, 2004). This was because the legacy financial management systems could be easily manipulated.

The decision to adopt and implement the IFMS in Kampala district was a directive from the Accountant General in the Ministry of Finance, Planning and Economic Development (MoFPED). This followed the recommendation in 2002 from M/s Ernst and Young public accountants and consultants to adopt and implement IFMS in order to improve financial management in the government sector, including local governments (MoFPED, 2007). In 2003 the national government of Uganda, under the EMFP II funded by the World Bank/IDA, contracted M/S Hewlett Packard BV to commence the pilot implementation of IFMS in six ministries, 5 local governments (including Kampala district); Bank of Uganda (central bank of Uganda); and the Uganda Revenue Authority. In addition, M/S Hewlett Packard BV had to provide capacity building services to all the intended users of IFMS from July 2003 (MoFPED, 2003). In 2004 the IFMS pilot sites, including Kampala district, went live with the central servers located in the MoFPED.

### ***IFMS as a Management Control Mechanism in Kampala District***

Kampala district was one of the first districts in Uganda to implement IFMS in response to the directive from the Accountant General in the MoFPED. In particular, the district headquarters were among the first IFMS pilot sites in Uganda, established in 2003 and went live in 2004 (MoFPED, 2007). The technical staffs of the district, especially the finance department and Town Clerk's (Accounting Officer) office were trained by M/s Hewlett Packard, the IFMS contractors, on how to use IFMS in their daily routines. In addition, the MoFPED recruited and trained young graduates of accountancy to use IFMS and created positions of IFMS accountants, some of whom were posted to Kampala district. The role of IFMS accountants was to expedite the adoption and implementation of IFMS in government sector, including local governments, such as Kampala district. One IFMS accountant in Kampala district observed that:

“The profile of an IFMS accountant is an accountant with an IT background. This is a technical staff that provides support to various sections of Accounts and Finance departments.

However, the evidence from this case study revealed that the relatively young and inexperienced IFMS accountants could not easily influence the senior and more experienced older technocrats in Kampala district to embrace IFMS in their daily routines. For instance, it was noted the district had a backlog of transactions not yet entered in the IFMS as shown in Table 1.

**INSERT TABLE 1 HERE**

The more experienced technocrats could not easily accept the new information technologies which they believed were not their choice rather imposed on them by the Accountant General. For instance, an interviewee in the finance department argued that:

“IFMS was designed specifically for controlling expenditure of the national government. The Accountant General in the Ministry of Finance and Economic Planning imposed it on local governments.”

Whereas the young IFMS accountants tried to establish a support nucleus for the IFMS implementation in Kampala district, the power of the senior technocrats in the finance departments over the possession of financial management information was being passed over to other technocrats, some of whom were junior staff. Thus, in order to retain their power resources over financial information, the senior technocrats maintained their manual systems as their accurate sources of information for decision-making purposes and reporting. The implementation of the IFMS was mainly done for symbolic purposes. For instance, it was noted that the technocrats maintained QuickBooks applications which they believed provided better information for decision-making purposes.

The design of IFMS that was adopted and implemented in Kampala district, like in other IFMS pilot districts in Uganda was an adapted version of the

system that was meant to manage and control public expenditure in the national government. The revenue component of the national government was managed and controlled by a separate financial system operated by the Uganda Revenue Authority (URA), a semi-autonomous parastatal organisation responsible for revenue collection for the national government. However, local governments, such as those in Kampala district, combined both tasks of revenue and expenditure management. Thus, MoFPED and MoLG contracted IT and finance experts to modify and adapt IFMS to meet the information requirements of local governments. Notwithstanding, the processes of modifications and adaptation of IFMS to suit local governments' task were still a big challenge with regard to the provision of the necessary information for decision-making purposes in the district. For instance, one interviewee noted that:

“The system controls budget allocations and not actual financial resources received. There are wide discrepancies between the budget and actual financial resources received due to high uncertainties of public resources. IFMS only facilitate to ensure that the expenditure is provided for in the budget and amount remaining is adequate to support the expenditure.”

In addition, according to the participants of the IFMS Local Government Work Group (LGGWG) held at Kampala district headquarters on 26<sup>th</sup> June 2007, the modifications made in IFMS put all revenue remittances to the district from its five city divisions under one code (*Fieldwork, 2007*). The city divisions had the responsibility of collecting revenue in Kampala district. This was shared between the divisions and the district based on 50/50 (LGA, 1997, 2006). Thus, it was very difficult to produce reports that itemised revenue remittances from each division. This prompted officials in Kampala district to maintain manual records and legacy systems, such as *QuickBooks, Ledger Works* and *Spreadsheets*, alongside IFMS.



Furthermore, in the final report of the annual assessment of minimum conditions and performance measures for Kampala district carried out by the MoLG in 2006, it was revealed that Kampala district had failed to meet the deadline for the submission of the final accounts to national government because IFMS was not user friendly (MoLG, 2006).<sup>3</sup> The Finance department of Kampala district had resorted to the original software, *Ledger Works*, for the production of the draft final accounts. For instance, one Budget Officer of a city division said:

“QuickBooks provide better information for our routine operations, than IFMS. For instance, up to now the asset module on IFMS is not yet activated. Therefore, we cannot prepare final accounts using IFMS. We have to resort to legacy systems in order to prepare final accounts.”

Thus, in Kampala district, the legacy systems persisted alongside the IFMS. The legacy systems were used to produce the actual information required by the key actors in taking decisions and prepare reports.

On contrary, the IFMS Accountant of the district objected that IFMS could not produce the financial statements, instead he argued that the accountants were not yet used to the new systems. For instance, the IFMS Accountant in the district argued that:

“The process of generating the reports is different from what the accountants are used to in the former systems”.

IFMS was intended to generate and disseminate information across sectors and departments of the local government system. However, this motive was constrained by lack of adequate computing equipment and internet connectivity. In many cases, IFMS was operated only in finance department that had computers. Other departments did not have computers designated for IFMS. According to the warranty requirements, computer that that IFMS were not allowed to have other softwares installed. This meant that few computers would operate IFMS. For instance, during the fact-finding tour of

Kampala district by the IFMS LGWG on 26<sup>th</sup> June 2006, it was revealed that the Stores Department did not operate IFMS, yet the module for stores was active on IFMS (Fieldwork, 2007). Similarly, the external auditors of the Office of the Auditor General (OAG) based in Kampala district reported that they had only one IFMS point in their office. Thus, most of their external audit work was still manual and that is why they insisted on manual records from the finance department of the district, instead of carrying out online external auditing.

Being web-based, institutionalisation of IFMS in Kampala district encountered serious challenges of having to link to a remote site server at the Ministry of Finance, Planning and Economic Development (MoFPED). Although Kampala district and its five city divisions were located within the vicinity of the main IFMS server in MoFPED, connectivity between sites failed frequently, thus rendering the usage of IFMS at times impossible, especially during peak hours. An interviewee observed that:

“At times due to heavy traffic going through the central IFMS servers, posting of transactions is made very difficult, as the system tends to slow down. This frustrates the staff, who as a mitigating factor, resort to manual and legacy systems. This, however, creates additional work for staff to capture data on IFMS when connection is restored.”

In some cases, the administrative staff at the district failed to post the transactions completely to the system. This could partly account for the backlogs in posting or reconciling of transactions dating as far back as 3 years in Kampala district. Besides, the backlogs in posting financial transactions to IFMS were often caused by constant load shedding by the electricity company in Uganda.<sup>4</sup> Although one of the major intentions of adoption and implementing IFMS in the district was to institute control mechanisms against frauds, some of the officials managed to manipulate IFMS to perpetrate their selfish interests. For example, one interviewee observed that:

“However, there are loopholes in the system. Officers who are interested in rent seeking can by pass the system to perpetrate

graft. For instance, there was an instance where officers plucked a cheque leaf and used a typewriter for printing the cheque. They forged the signatures and it was cashed by the bank.”

In another instance, *The New Vision* newspaper of 7<sup>th</sup> February, 2007 reported that the Deputy Director of Finance of Kampala district had allegedly paid out eight unauthorised cheques worth over 286 million shillings from the Land Board account. This happened between October 2005 and May 2006 (*The New Vision*, 7<sup>th</sup> February, 2007). According *The New Vision*, there were no supporting documents for the transactions and no entries were made in the IFMS. Thus, by bypassing IFMS, the official of the district managed to perpetrate the alleged fraud that took time to be detected.

Similarly, *The New Vision* of 22<sup>nd</sup> March 2007 reported a case of the Principal Assistant Town Clerk (Chief Executive) of one of the city divisions in Kampala district who had been jailed for eight months for embezzling Shs. 39.6 million belonging to Kampala district. Likewise, the former Town Clerk of Kampala district and his Director of Finance had been interdicted over the alleged causing of financial loss of about Shs. 1.8 billion for Kampala district meant for PAYE (*The New Vision* of 6<sup>th</sup> September, 2006). Thus, what can be inferred from the above cases is that the introduction of IFMS did not succeed in eliminating fraud in the district. Rather, it might have shifted it from one level to another sophisticated one. The human agency in the district was able to manipulate the financial management system to serve their selfish interests.

In order to control against manipulation of IFMS for selfish interests, the government of Uganda on 2<sup>nd</sup> July 2007 introduced the electronic funds transfer system (EFTS), to all government departments, including local governments, like Kampala that were using IFMS. Under the EFTS, all expenditures of the district exceeding 20 million shillings, were supposed to be effected electronically through the MoFPED for verification and processing before remitting electronic instructions to Bank of Uganda (central bank) for

effecting the payment to the payee's commercial bank. After crediting the payee's account, the payee would then acknowledge the payment by issuing a receipt to payer.

However, even EFTS was manipulated by fraudsters in the MoFPED, Ministry of Works, Kampala district and Stanbic Bank and hefty sums of money whisked from the coffers of the national government in payment of fake company. For instance, *The Sunday Monitor* newspaper of 17<sup>th</sup> February 2008 reported that on October 23<sup>rd</sup> 2007, a fake contractor named M/s Marvel Contractors with supplier No.44736 was created on the Ministry of Works site in the IFMS. Already the Ministry had on its site a contractor by the name of M/s Marvel Contractors and Road Maintenance Ltd with supplier No.3289. The fake invoice for the transaction was electronically forwarded to the Treasury (MoFPED) using EFTS where it was validated and remitted to Bank of Uganda (central bank) for payment to Ms Marvel Contractor's bank account No. 0140044473701 in Stanbic Bank, Garden City Branch (*The Sunday Monitor* newspaper of 17<sup>th</sup> February 2008). Thus, a network of active and reflexive human agency was able to manipulate EFTS to serve their selfish interests.

Furthermore, the change management with regard to the implementation of IFMS in the district routines seemed not to have seriously addressed the human factor. This was evidenced by the failure for some of the district officials to change their mindsets to embrace IFMS. For instance, it was alleged that some of the district officials, especially the senior technocrats, had negative attitude towards the enactment of IFMS in their routines. The Commissioner of Local Authorities in the Ministry of Local Government observed, during the IFMS LGWG meeting at Kampala district headquarters that:

“IFMS was seen as a *“finance thing”*. Most senior staff in Kampala district had very little or no time at all for IFMS.” (Field work, 2007).

It was also observed that some of the senior staff of the district had limited or inadequate IT skills to utilise IFMS in their normal routines. Besides, they were reluctant to undergo training on how to use IFMS. For instance, during the meeting of the IFMS LGWG at Kampala district on 26<sup>th</sup> June 2007, only one Chief Executive out of six in the district attended (Fieldwork, 2007). The Commissioner of Local Authorities argued that because most senior technocrats were not comfortable with IFMS they ceded their responsibilities to their subordinates. For instance, he posited that:

“Passwords are passed on to officers who do not have designated rights and responsibilities to execute. This is not lawful and can be misused by subordinate staff into perpetrating undesired acts leading to financial loss.” (Fieldwork, 2007).

On the other hand, unlike the changes in accounting practices in local governments, the adoption of IFMS initially lacked an enabling and enforceable legal framework. For instance, changes in budgeting and budgetary controls were backed by legal frameworks, such as the Local Government Act, 1997; and Local Government Financial and Accounting Regulations, 1998. These legal frameworks enabled the national government to enforce the implementation of the changes in accounting. However, the introduction of IFMS had no legal framework. Rather, IFMS was considered as a “good practice”, but not easily enforceable. For instance, one Budget Officer reported to the IFMS LGWG that:

“Mr. Chairman, there is no Regulation to authorise us to leave our manual records in favour of IFMS. Besides, the auditors still insist on manual reports” (Fieldwork, 2007).

The existing Regulation required the maintenance of manual records of accounting. For instance, the LGFAR, 1998 specified that:

“No accounting system shall be introduced and no change made in the existing system unless the system or change has been approved by the Auditor-General and the Minister [responsible for local governments]” (emphasis added) (Section 130 of LGFAR, 1998).<sup>5</sup>

Similarly, a representative from the Office of the Auditor General based in Kampala district observed that:

“Our external auditing is still based on the LGFAR, 1998 that required working with manual records” (Fieldwork, 2007).

The implication of the above responses was that changes in accounting practice had to be backed up by a relevant legislation or else the administrative officers are unwilling to adopt practices that could later be challenged legally. As such, before the revision of the LGFAR, 1998, the implementation of IFMS in the district was taken as a “good practice”, rather than enforceable. However, in September 2007, the LGFAR were amended to take into account IFMS, especially in the districts where it was piloted, including Kampala district.

Thus, from the above evidence, the manual and legacy systems still prevailed in Kampala district, despite the implementation of IFMS. The actual decisions were usually taken based on manual or legacy systems, which are always up to date. However, data captured in the IFMS was not real time. Besides, some staffs, especially senior administrative officers absolved themselves from the use of IFMS in decision-making and authorisation of transactions. Instead, IFMS was viewed as a system for the Finance department only. The following section provides a discussion of the findings.

### ***Discussion***

The rationale for adopting and implementing IFMS in Kampala district was to control the behaviour of the technocrats in order to improve the financial management in the district (Lapsley and Pallot, 2000; Tsamenyi *et al*, 2006; Sachs, 2000). The existing financial management systems were construed as ineffective in ensuring transparency in the management of financial resources and eradication of frauds in the district (Diamond and Khemani, 2005; Skaerbaek, 1998). IFMS was believed to be rational, technical, universal and unproblematic (Heath *et al*, 2000; Orlikowski and Barley, 2001) and that it

could be applied in any situation without taking into consideration the context (Dillard, 2004; Sassen, 2000; Uwaifo and Kabadi, 2006).

However, the findings from this case study have revealed that the district officials in Kampala district were able to modulate the structuring properties of the “rules and resources” inherent in IFMS (Giddens, 1984). This case study revealed that district officials were not passive receptacles of IFMS (Howcroft, 2006). Rather, they demonstrated their ability to resist some of the “rules and resources” embedded in IFMS as explained below.

It has been revealed by this case study that there existed power struggles between the young and inexperienced IFMS accountants and the senior technocrats of the district (Nor-Aziah and Scapens, 2007). The introduction of IFMS shifted some power over the possession of financial and accounting information from the senior technocrats to subordinate technocrats, including the young and inexperienced IFMS accountants who had considerably better IT skills than the senior counterparts (ibid, 2007). However, this study revealed that the senior technocrats resisted the transfer of significant amount of power to subordinate technocrats (Manson *et al*, 2001). For instance, it was disclosed that IFMS operated mainly in finance department, which maintained the power of the senior finance officers and accountants over the possession of stock of financial and accounting information. Other technocrats from other departments had to rely on the information supplied to them by the finance department.

IFMS was deemed to be universal information technologies with the intended consequences of enhancing financial management in Kampala district (Sassen, 2002; Heath *et al*, 2000; Orlikowski and Barley, 2001). However, the design of the IFMS implemented in Kampala district was not appropriate to most of their intended purposes (Parry, 2005; Heath *et al*, 2000; Uwaifo and Kabadi, 2006). For instance, it was argued by the interviewees that IFMS was intended for managing expenditure in the national government. It was merely adapted to the needs of the local governments, although the adaptation did not meet the information requirements of the local governments (Kholeif *et al*,

2007). The local governments managed the revenue side of their budgets, which was a serious challenge with IFMS. For example, it was noted by various interviewees that IFMS could not itemise the revenue remittances from the divisions of Kampala district. Rather, the district officials had to maintain their legacy systems in order to meet their information requirements in respect of revenue remittances from the divisions (Granlund and Malmi, 2002; Hyvönen, 2003).

In addition, the sustainability of the information technologies remained a big issue with the introduction of IFMS in Kampala district (Parry, 2005). Apart from the lack of computing equipment to fully implement IFMS in the district (Uwaifo and Kabadi, 2006; Salanje, 1995), it was revealed that recurrent bandwidth problems and power blackouts made the new information system unsustainable in most cases, especially during peak times (Wame and Nave, 2000; Uwaifo and Kabadi, 2006). IFMS was a web-based information system that had to rely on good Internet bandwidth, which was not always available in Kampala district (Parry, 2005; Salanje, 1995). In many cases, the district officials had to resort to legacy systems to capture most of the transactions and in some instances they would forget to transfer the information to the IFMS. This raised the issue of information technologies that do not take into consideration the context in which they are applied (Dillard, 2004; Sassen, 2002).

The sustainability of the IFMS was constrained by the lack of adequate technical skills and knowledge of the information systems, especially by the senior technocrats and external audit staff (Manson *et al*, 2001; Nor-Aziah and Scapens, 2007; Uwaifo and Kabadi, 2006; Wame and Nave, 2000; Madon, 1997). Although there were capacity building programmes were provided to “*reskill*” the district officials to use IFMS in their routines, it was revealed that the training was mainly intended to create general awareness of the new information system, and thus was not adequate, especially with the much older senior technocrats who had lower levels of IT skills (Parry, 2005; Uwaifo and Kabadi, 2006; Madon, 1997). This made the senior technocrats uncomfortable to work with IFMS (Nor-Aziah and Scapens, 2007). Instead,



the senior staff maintained their old information systems they were familiar with to provide the information they needed for their decision-making processes and implemented IFMS for ceremonial purposes (Bogt, 2008; Lapsley, 2008). Unlike in the case of Tsamenyi *et al*, (2006), this case study revealed that the resistance to the implementation of the new information technologies was demonstrated by the senior technocrats (see also Manson *et al*, 2001) because they lacked sufficient IT skills (Madon, 1997; Salanje, 1995; Wame and Nave, 2000).

Other than the lack of adequate IT skills, the failure to implement IFMS in Kampala district was attributed to the attitudes of some of the technocrats towards the new information system (Nor-Aziah and Scapens, 2007). According to the technocrats, there was no internal demand for changing the information systems (The International Records Management Trust, 2002). Rather, the adoption and implementation of IFMS was imposed onto the district by the Accountant General in the Ministry of Finance, Planning and Economic Development (MoFPED), who and the national government of Uganda were under pressure from the World Bank/IDA to adopt the new information system in order to improve of the financial management and reporting practices in the district (Kholeif *et al*, 2007; Fjelstad *et al*, 2004). The technocrats maintained that IFMS did not provide for all their information requirements and thus, it was an “unnecessary bother” (Granlund and Malmi, 2002). Besides, it was revealed that IFMS was regarded as a “*finance thing*” rather than an organisation-wide information system. This is mainly because departments other than finance did not use IFMS to derive the information they needed for their decision-making purposes. Rather they had to rely on the information provided by the finance departments in the district.

Furthermore, unlike other reforms in accounting and financial management in local government in Uganda, the adoption and implementation of IFMS, at that time, was not backed by any appropriate legislation (Anessi-Pessina and Steccolini, 2005; Agbakoba and Ogbonna, 2004). Rather, it was construed as a “good practice”, which was not enforceable. For instance, it was revealed that the external auditors of Kampala district insisted on manual records from

the district staff for their operations. The district officials had to maintain the manual records alongside IFMS in order to satisfy the requirements of the external auditors. However, in November 2007, the Local Government Financial and Accounting Regulations (1998) were amended to regularise the adoption and implementation of IFMS (Uganda, 2007). Thus, it can be argued that relevant legislations are important, especially in the public sector, to enforce the adoption and implementation of the changes in organisational practices, such as IFMS.

The introduction of IFMS might have conflicted with the pursuit of private gains by some of the technocrats of Kampala district (Agbakoba and Ogbonna, 2004). The legacy information systems were easier to manipulate for private gains than IFMS as was revealed by this case study (Steiner, 2006; Tambulasi, 2007). Thus, a change in the information system that sought to minimise the perpetration of private gains would ultimately receive resistance from the rent-seeking technocrats (Hopper *et al*, 2003). However, as the evidence revealed, the active rent-seeking technocrats managed to modulate the structuring properties of IFMS in order to carry out frauds (Peters, 2002).

### **Summary and Conclusion**

The purpose of this case study was to explore the implementation of the integrated financial management system (IFMS) in Kampala district. IFMS was adopted and implemented in Kampala district as a directive from the Accountant General in the Ministry of Finance, Planning and Economic Development (MoFPED). The Accountant General and indeed the national government of Uganda were under external pressure from the World Bank/IDA to improve the financial management systems in the government sector, including the local governments, under Second Economic Management Financial Programme (EMFP II).

The evidence from this case study revealed that although IFMS was considered by the World Bank/IDA to be rational, technical, universal and unproblematic (Sassen, 2002; Heath *et al*, 2000), its implementation in Kampala district was constrained by socio-economic factors (Dillard, 2004;

Howcroft, 2006). These included power struggles between various technocrats; inappropriate technologies; inadequate information technology (IT) skills and knowledge, especially with the senior technocrats; and negative attitudes towards IFMS. In addition, drawing from the duality of information technologies, whereas IFMS had structuring properties to control the conduct of the district officials, its control mechanisms were modulated by the latter through the use of alternative power resources (Giddens, 1984; Stones, 2005).

In conclusion, rather than imposing information technologies on organisations, like in the case of IFMS in Kampala district, it would be more appropriate for the intended users to participate in their design and development. This would take into consideration the socio-economic context in which the new technologies would be applied, increasing the success chances.

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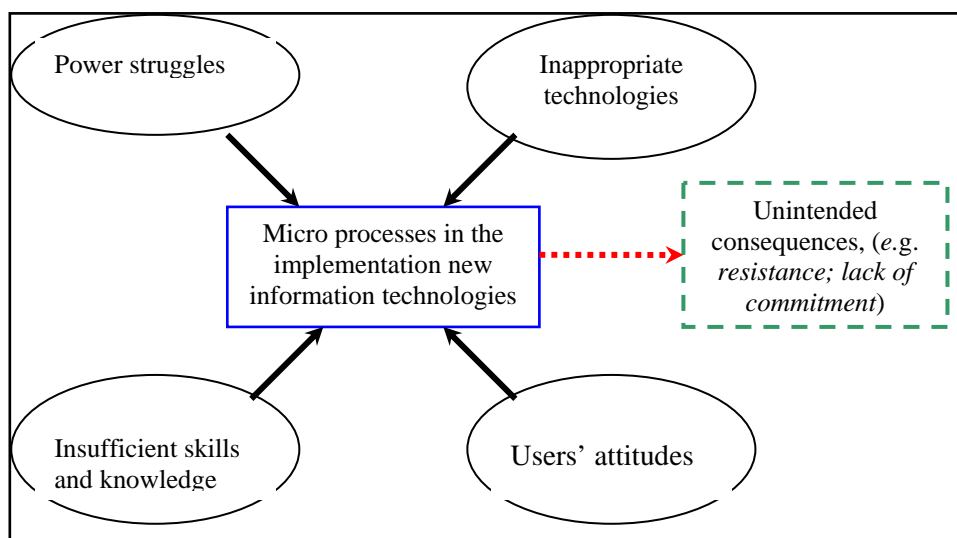


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## APPENDICES

Figure 1: Theoretical model for understanding the implementation of IFMS in local governments

Table 1: Pending Transactions on IFMS for Kampala District as on 26<sup>th</sup> June 2007

End of Year Issues	DISTRICT HQRS	NAKAWA	KAWEMPE	LUBAGA	MAKINDYE	CENTRAL
<b>Unaccounted Transactions Report</b>						
Unaccounted Invoice		56			77	167
Invoice on Hold	39	6	24	15	4	112
Invoice Not Validated	10	5	11	21		8
Payments Unaccounted		64			542	613
<b>AP Trial Balance</b>						
Unpaid Invoices	511	90	52	43	6	829
Unapplied prepayment Invoices	2					1070
<b>Unposted Items</b>						
Unposted Receipts	867	56	704	612	2067	2822
Receipts Awaiting Remittance						
<b>Transactions Available for Reconciliations</b>						
Available Receipts	212	3022	881	837	1208	291
Available Payments	2575	584	139	91	268	550
Available Journal Entry Lines		7	107		24	
Unreconciled Statement Lines	2138	4556	375	307	1983	613
	<b>4925</b>	<b>8169</b>	<b>1502</b>	<b>1235</b>	<b>3483</b>	<b>1454</b>
<b>GL- Fund Available</b>						
Negative values in Encumbrance/Fund Available	79	27	16	36	29	38
<b>Pending Requisitions</b>						
Incomplete/In Progress Requisitions	58	4		3	8	8
<b>Uninvoiced POs</b>						
Approved POs not match to Invoice	6	8	11		4	18

Source: MoFPED (2007) End of Financial Year Processes

## Notes

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<sup>1</sup> Anipa, *et al*, (1999) research was for DFID seminar on best practices in the public expenditure management.

<sup>2</sup> These include: Nakawa; Kawempe; Lubaga; Makindye; and Central Division.

<sup>3</sup> It was reported that the district submitted the final accounts on 4<sup>th</sup> December 2006 as opposed to the required deadline of 31<sup>st</sup> October 2006.

<sup>4</sup> Although, the district and its divisions had standby generators, the cost of running them became enormous especially when councils face dwindling local revenue collections. Much as the national government provided grants to cater for IFMS operating costs, the money, according to interviews was not only inadequate given the constant and prolonged load shedding in the district, but also was released irregularly by the MoFPED.

<sup>5</sup> For instance, Regulation 130 (1) of the LGFAR, 1998, specify that, “*The accounting methods, procedures, forms, formats of accounting records, and other requirements to be used by Administrations are laid down in the Schedule of these Regulations*”.