

Significance of Integrated Financial Management Information System (IFMI) on the Effectiveness of Congo's Government Procurement

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Abstract

Aim: To investigate the influence of IFMIS on public procurement performance in Kinshasa Province.

Methods: The study adopted a descriptive research design, where the target population comprised of 100 individuals in top management, departmental staff, and supervisors. A sample of 80 respondents was selected, representing 80% of the population. Statistical software for social sciences SPSS (version 16) was employed in data analysis. Qualitative data was analyzed using content analysis. Quantitative data was analyzed through the use of descriptive statistics which include: frequencies, percentages, means, standard deviations as well as multiple linear regression model.

Results: Study found that IFMIS has a significant positive relationship with public procurement performance, as demonstrated by the four study variables. Since significant relationships were established between IFMIS control systems, online tendering, automated planning, and automated supplier engagement on public procurement performance.

Conclusion: The study concluded that changing either IFMIS control systems, online tendering, automated planning and automated supplier engagement would significantly affect public procurement performance.

Recommendation: This study recommends Kinshasa Province governments to put policies flexible enough to handle technological changes in order to ensure that the systems control mechanisms are safeguarded.

Keywords: *IFMIS, Kinshasa Province, public procurement*

INTRODUCTION

A high level of inefficiency in the use of public funds, especially in public procurement has been a major challenge in developing countries, Congo included. There has been a lack of institutional framework resulting to non-transparent and unregulated public procurement procedures (Kamotho, 2014). Accounting and budget executions are mainly manual or supported by obsolete software applications whose maintenance is irregular. This has had a harmful effect on the functioning of Public Expenditure Management (PEM) resulting to lack of reliable, timely revenue as well as expenditure data for budget planning, monitoring, expenditure control and reporting, thus negatively impacting budget management (Diamond & Khemani, 2006).

According to Mbae (2014), significant developments within public procurement system in Congo have been seen, from unregulated systems in 1960s, moving to regulated system by Treasury Circulars in 1970s, 1980s and 1990s, to the introduction of the Public Procurement and Disposal Act (PPDA) of 2005 as well as Public Regulations of 2006, resulting to new standards for Public Procurement in Congo. Further she points out that public procurement constitutes the largest domestic market in developing countries, and if properly managed, a public procurement system has the ability to greatly influence economic development in these countries. In recent years, governments in developing countries have made significant efforts in computerization of most of their operations, in connection to Public Sector where Integrated Financial Management Information Systems (IFMISs), have become core components of financial reforms in these countries (Peterson, 2006).

Public procurement performance is concerned with the achievement of objectives as well as responsibilities that have been laid down, from the viewpoint of the party looking into such matter. It is the extent to which the results of the procurement process demonstrate improvement in lead time, capacity utilization, cost and labour productivity (Kavua & Ngugi, 2014). Procurement performance is characterized by two elements; purchasing efficiency and effectiveness, and purchasing performance. Purchasing performance focuses on how well public entities are moving towards pre-determined objectives, making decisions on future initiatives aimed at performance improvements. Therefore, the procurement process is a means to efficient, effective control of processes, and not simply an end. (Ouma & Kilonzo, 2014). According to Oketch (2014), the public sector in Congo is surrounded by numerous allegations of fraud, corruption and inefficiencies brought about by weak controls in the procurement process. Procurement and asset disposal in government entities have been riddled by bureaucracies as well as corruption, rendering the process inefficient and resulting to loss of colossal amounts of finances from government coffers (Otieno, 2015).

IFMIS can be described as automation of Public Expenditure Management process which entails; formulation of budgets, execution of budgets and accounting with the help of a fully integrated system for financial management for line ministries and other spending agencies. IFMIS helps in public financial management and control, accounting, auditing as well as reporting. A full system also secures integration and communication with other relevant information systems (Diamond & Khemani, 2006). IFMISs are introduced to automate and computerize various aspects of budget executions as well as accounting operations across government institutions (USAID, 2008). The system is supported by a reliable database or a series of interconnected databases, where data expressed in financial form flow to and fro (Njonde & Kimanzi, 2014). IFMIS has inbuilt control

systems designed to assist management in ensuring that there is accountability in the deployment and use of public resources, therefore enhancing effectiveness and efficiency of public expenditure programs. Tracking of financial events through automated financial management results to improved control over expenditure, accountability and transparency in the budget cycle (Hendriks, 2012).

Poor procurement performance results to increased inefficiency, and reduced costs of the procurement function, and also contribute to a decrease in profitability. This limits organizational growth and causes delays in delivery, low quality goods and services and increased defects. Inability to embrace e-procurement is the greatest contributor of poor procurement performance, especially where there is existence of traditional procurement procedures and procurement activities are poorly coordinated (Ndiiri, 2016). Kinyua (2015), indicates that the quality of goods, services, and infrastructure as well as the effectiveness of public services are dependent on a properly managed public procurement system. Traditional purchasing procedures have been criticised because of inefficiencies such as numerous clerical activities that lack value, excessive paperwork for new purchases, excessive order processing time, as well as excessive cost of transactional activities (Oketch, 2014).

Public procurement process has been marred with malpractices such as corruption, misallocation of resources, bureaucracy, and disrespect of the rule of law. This has resulted to inefficiency, lack of accountability and transparency in the procurement systems, causing delays, exaggerated prices and poor service delivery (Mutua, 2010). Significant efforts have been made to integrate procurement into a more strategic view of the efforts by the government. Electronic procurement has emerged as a major factor in the procurement process over the last decade. E-procurement streamlines the three important parts of the procurement process: sourcing, procurement and payment. It is more than just a system for making online purchases. Where the system has been properly implemented it connects companies and their business processes directly with suppliers, and at the same time managing these interactions. Eprocurement offers more efficient integration of the supply chains providing better organization and tracking of all transaction records (Kagai, 2013).

Chemoiywo (2014), studied public procurement procedures and supply chain performance in state corporations in Congo and found out that most parastatals comply with procurement procedures. This was indicated by the findings that officers have received training and they have also been sensitized on Public Procurement Act of 2005 and Regulations 2006. Mutui (2014), he found out that IFMIS implementation affects the overall procurement performance in government ministries in Congo to a great extent, top management support and capacity building to a moderate extent, while employee commitment is also to a moderate extent.

Metoh (2011), in his study on factors affecting implementation of E-procurement System in the public sector, found out that bureaucracy in government contributes to non-implementation of eprocurement in the public sector. Musau (2015), looked into environmental factors affecting procurement performance in province governments, his study found out that legal, political, and socioeconomic environments affect procurement performance. The reviewed researchers have studied Public Procurement Performance in Congo, but have not addressed Integrated Financial Management Information Systems and its influence on Public Procurement Performance in

province governments. It is against this background that this study sought to investigate the influence of IFMIS on Public Procurement Performance in Kinshasa Province Government.

LITERATURE REVIEW

Theoretical Review

Diffusion of Innovation Theory

Diffusion of innovation was first put across by Rogers (1962), and later revised in 2003. The adoption of a new innovation, even when it is advantageous is often met with a lot of difficulty. Most innovations take lengthy periods to be widely adopted from the time they first become available. According to Dillon and Morris (1996), lack of acceptance by users stands as a great hindrance to the success of a new Information System. In most cases users are reluctant to adopt information systems that would bring about successful results if they were to be employed. Acceptance by the user is viewed to be critical in establishing whether an information system project succeeds or fails. According to Rogers (1995), contrary to the expectations of many technologists who think that advantageous technologies will market themselves, most innovations diffuse at a very slow rate. A technological innovation presents both uncertainty to potential adopters, and an opportunity for a reduction in uncertainty to adopters, with the latter being able to focus on the innovation's ability to solve their perceived or felt problems.

Information Systems Success Model

The concept was adduced by DeLone and McLean (1992), basing it from an earlier research on communications by Shannon and Weaver. The earlier model advances six key pillars of Information Systems success i.e. System Quality, Information Quality, Use, User Satisfaction, Individual Impact as well as Organizational Impact. The D&M has largely been used to assess the success of Information Systems. System Quality and Information Quality affect Use and User Satisfaction. The amount of Use also affects User Satisfaction positively or negatively and vice versa. Use and User Satisfaction precede individual impact, which eventually should have an organizational impact. DeLone and McLean IS success model examines the six dimensions at three different levels, i.e. technical, semantic and influence levels. System Quality looks at success at the technical level, focussing on the desired attributes of an information system. Information Quality has its focus on information products at the semantic level; information success in communicating the intended meaning. Use and User Satisfaction are measured at the influence level to analyse the interaction of the products of information with its recipients. At the influence level, the influence of information products on managerial decisions and organisational performance is measured.

E-technology Perspective Theory

E-procurement as stated by Choi and Dooley (2001), is a first generation concept whose main aim is the buyers, and should progressively move into e-sourcing, and eventually e-collaboration. E-collaboration helps suppliers and customers to raise their coordination through the internet by managing inventory, demand as well as planning the production, facilitating a frictionless procurement paradigm (Shale, 2014).

According to Min and Galle (2002), e-procurement is a business-to-business procuring discipline that makes use of e-procurement in the identification of potential supply sources, for the buying

of goods and services, transferring payments, and interacting with suppliers. Companies have widely adopted the internet, aiming to improve performance in their internal processes as well as the external processes (Barratt & Rosdahl, 2002). According to Morris, Stahl, and Herbert (2003), e-procurement is the drive that allows organizations to amalgamate their supply chains from end-to-end, from supplier to the end user, with shared pricing, availability and performance data, allowing buyers and suppliers to obtain maximum and mutual beneficial as well as schedules prices.

Empirical Review

Chado (2015), studied the effect of integrated financial management information systems on the financial management of the public sector in Congo. Her study targeted 18 government ministries, adopting a census approach. She found out that internal control systems have a strong influence on financial management in the public sector. IFMIS is able to trace all the stages of a transaction process, therefore enhancing transparency. Use of IFMIS has also enhanced security of information, minimizing the risk of corruption and as a result improving the procurement system. The system also provides cross-referencing of personal identification numbers and this has significantly reduced fraud cases. She also found out that, since the implementation of IFMIS, confidence and credibility of ministries' budgets has been enhanced, improving effectiveness and efficiency of public expenditure programmes. Built-in features in IFMIS facilitate effective monitoring and evaluation activities of the public sector.

Omokonga (2014) investigated the effect of IFMIS on the performance of public sector organizations. Her sample included 94 respondents, representing 100% of the target population. She found out that the IFMIS software automated procedures and internal controls as a result promoting accountability, helping to streamline processes therefore reducing opportunity for corruption and tracking all the stages of the transaction process. On the relationship between IFMIS and financial control and governance, she established that IFMIS helped management in ensuring accountability in the deployment and use of public resources, therefore improving effectiveness and efficiency of public expenditure programs. IFMIS has greatly enhanced security of information, minimizing the risk of corruption therefore improving the reliability of the system.

Rotich, Muma, and Waruguru (2015) sought to establish the relationship between e-tendering and procurement performance among province governments in Congo. Their sample comprised of 120 employees in procurement, finance, accounts and IT departments at management and non-management levels. They found out that e-tendering practices have brought about faster submission of tender documents by prospective suppliers reducing excessive paper work in the procurement process by ensuring the storage of software data. This in effect has reduced the tender cycle by improving supplier choice and categorizing beforehand the particulars of tender performance, and lowering the expenditure associated with tendering process.

Biwott (2015) studied integrated financial management information systems implementation and impact on public procurement performance at national government of Congo. His study employed the census approach, covering all the 18 ministries under the National government. Respondents comprised of procurement managers located at ministry headquarters. His study found out that IFMIS has been incorporated by ministries in conducting their procurement practices enabling ministries to conduct e-procurement efficiently. Oketch (2014) looked into the implementation of government electronic procurement system in the province of Mombasa, Congo. 11 ministries in

the province government of Mombasa were studied, targeting head of procurement in each ministry or department. The study found out that there was very little supplier involvement in implementation of e-procurement system.

Kamal et al. (2014) explored the role of supplier relations for sustainable operations: an OR perspective. A purposive sampling technique was used to choose respondents, who included senior managers, managers, assistant managers as well as other employees in the procurement department. Fifty (50) respondents were used in this study. The researchers found out that various e-procurement technologies such as Electronic Data Interchange (EDI), E-marketplace, and E-Auction etc. have little impact on supplier relationships. Separate stakeholder-driven interventions, are beneficial and results to sustainable goals and objectives.

METHODOLOGY

The study also adopted a descriptive research design, where the target population comprised of 100 individuals in top management, departmental staff, and supervisors. A sample of 80 respondents was selected, representing 80% of the population. Statistical software for social sciences SPSS (version 16) was employed in data analysis. Qualitative data was analyzed using content analysis. Quantitative data was analyzed through the use of descriptive statistics which include: frequencies, percentages, means, standard deviations as well as multiple linear regression model.

DATA ANALYSIS, FINDINGS AND DISCUSSION

Demographic Characteristics

Out of 80 respondents that were targeted in the data collection process, 62 questionnaires were filled and returned representing a response rate of 78%. The results of the study indicated that 51.6% of staff in the procurement department were female, while male staff members were represented by 48.4%. Both types of gender were given consideration in the study, though there were more female staff members compared to the male gender. 38.7% who formed the majority of the staff members were in the age category of 31-40 years. This was followed by those aged between 21-30 years at 29%, those between 41- 50 years at 22.6%, and finally those over 50 years at 9.7%. 80.65% forming the majority among staff members had worked with the Government for a period of 2 to 5 years, while the remaining 19.35% had worked with the government for a period of 1 year or less. 56.45% of the staff members were university graduates, followed by 25.81% diploma holders, while 17.74% of the staff members had post-graduate qualifications. The finding indicated that a majority of the staff members working in the procurement department in the Government were mainly departmental staff members (66.13%), followed by supervisory staff members at 22.58%, other (support staff) at 8.06% and management staff at 3.2%.

Descriptive Analysis

IFMIS Control Systems

The respondents who were users of IFMIS were requested to give a rating on the extent to which they agreed on IFMIS control systems in Kinshasa provincial Government. A scale of 1-5 was provided where 1 represented very low extent, 2 low extent, 3 neutral, 4 moderate extent and 5 great extent. The findings of the study are presented in table 1.

Table 1: IFMIS control systems

IFMIS Control Systems	Percentage Responses					N	Mean	SD
	Very low extent	Low extent	Neutral	Moderate extent	Great extent			
Use of IFMIS has resulted to control of expenditure in the use of public resources	1.6	8.1	17.7	33.9	38.7	62	3.69	1.110
IFMIS helps restrict disclosure of sensitive information to unauthorized persons	4.8	9.7	22.6	37.1	25.8	62	3.66	1.318
IFMIS use to monitor procurement process increases risk of detection and also as deterrent to corruption	8.1	11.3	25.8	16.1	38.7	62	3.76	1.035
IFMIS use has helped to expedite reports and data transmission	0.0	12.9	29.0	27.4	30.6	62	3.71	1.179
IFMIS exposes corrupt officials in the procurement process	4.8	11.3	24.2	37.1	32.3	62	3.79	0.890
IFMIS control system have enhanced confidence with the procurement process	0.0	6.5	32.3		24.2		3.77	1.093

Mean scores of 3.5 – 5.0 on the Likert scale represented “Moderate extent” and “Great extent”. Scores of 2.5 – 3.4 represented “Neutral extent”, while scores of 1.0 – 2.4 represented “Very low extent” and “low extent”. A mean score for the five variables was computed. Respondents indicated that the use of IFMIS had resulted to control of expenditure in the use of public resources in public procurement to a moderate extent (mean score = 4.00), IFMIS helps restriction of disclosure of sensitive information to unauthorized persons to a moderate extent 53 (mean score = 3.69), use of IFMIS to monitor the procurement process has increased the risk of detection, therefore acting as a deterrent to corruption, to a moderate extent (mean score = 3.66), IFMIS use has helped to expedite reports and data transmission to a moderate extent (mean score = 3.76), IFMIS exposes corrupt officials in the procurement process to a moderate extent (Mean score = 3.71), and that IFMIS control systems have enhanced confidence in the procurement process to a moderate extent (3.79). The findings of this study indicate that Kinshasa Provincial Government should strengthen control systems to ensure that IFMIS is effective in the procurement process.

Automated Planning

This study sought to establish the extent of automated procurement planning in Kinshasa Province Government. A scale of 1-5 was employed, where 1 indicated strongly disagree and 5 indicated strongly agree. The results are summarized in table 2.

Table 2: Automated planning

IFMIS Control Systems	Percentage Responses					N	Mean	SD
	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree			
If yes what is the importance	0.0	6.5	9.7	37.1	46.8	62	4.24	0.881
Automated planning helps to reduce haphazard procurement making county governments more attractive to suppliers	0.00	9.7	16.1	40.3	33.9	62	3.98	1.000
Automated plans help in the identification and appointment of responsive suppliers	3.2	4.8	22.6	40.3	29.0	62	3.87	1.000
Existence of automated planning reduces dependency on suppliers	0.0	6.5	22.6	37.1	33.9	62	3.98	0.914
Automated planning reduces procurement delays	0.0	4.8	41.9	33.9	19.4	62	3.68	0.845
Automated planning reduces costs involved in the procurement process	0.0	8.1	27.4	24.2	40.3		3.97	1.008
Automated planning influences procurement by providing focused and efficient utilization of resources	1.6	1.6	19.4	43.5	33.9		4.06	0.866

A mean score of 3.5 - 5.0 represented “Agree” and “Strongly Agree”, 2.5 – 3.4 “Neutral”, 1.0 – 2.4 “Strongly Disagree” and “Disagree”. The finding indicated that respondents agreed that automated planning was important (mean score = 4.24), Respondents also agreed that automated planning helps to reduce haphazard procurement making province governments more attractive to suppliers (mean score = 3.98), the also agreed that automated plans helps in the identification and appointment of responsive suppliers (mean score 3.87).

Automated Supplier Engagement

The study sought to find out the extent of automated supplier engagement in Kinshasa Province Government. A scale of 1-5 was used where 1 represented very low extent and a score of 5 indicated great extent as summarized in table 3.

Table 3: Automated supplier engagement

Automated supplier engagement	Percentage Responses					N	Mean	SD
	Very low extent	Low extent	Neutral	Moderate extent	Great extent			
What is the importance of supplier engagement	0.0	3.2	8.1	53.2	35.5	62	4.21	0.727
Automated supplier engagement improves transparency by helping suppliers understand the means through which contracts are evaluated	0.0	1.6	25.8	45.2	27.4	62	3.98	0.779
Automated supplier engagement helps in managing relationships for both long-term and short-term contracts	0.0	1.6	25.8	37.1	35.5	62	4.06	0.827
Automated supplier management facilitates involvement of suppliers in performance review, training and capacity development	0.0	1.6	22.6	38.7	37.1	62	4.11	0.812
Automated supplier engagement helps to create and maintain contracts with suppliers therefore decreasing procurement costs	0.0	1.6	17.7	41.9	38.7	62	4.18	0.779
Automated supplier management makes the process of acquisition of goods and services efficient	0.0	3.2	24.2	32.3	40.3		4.10	0.882
Aggregate							4.11	0.801

A mean score of 1 – 2.4 represented “very low extent” and “low extent” 2.5 – 3.4 represented “neutral”, while 3.5 – 5 represented “moderate extent” and “great extent”. The findings from this study indicated that automated supplier engagement was important to a moderate extent (mean score = 4.21), automated supplier engagement improves transparency by helping suppliers

understand the means through which contracts are evaluated to a moderate extent (mean score = 3.98), automated supplier engagement helps in managing relationships for both long-term and short-term contracts to a moderate extent (mean score = 4.06), automated supplier management facilitates involvement of suppliers in performance review, training and capacity development to a moderate extent (mean score = 4.11), automated supplier engagement helps to create and maintain contacts with suppliers therefore decreasing procurement costs to a moderate extent (mean score = 4.18), automated supplier management makes the process of acquisition of goods and services efficient to a moderate extent (mean score = 4.10). The findings of this study represented by an aggregate mean ($\mu=4.11$) and ($\sigma=0.801$), indicated that automated supplier engagement had great impact in the Government of Kinshasa Province and guaranteed that the procurement process was transparent.

Diagnostic Tests

Test for Normality

The study tested for normality by using both Kolmogorov Smirnov and Shapiro Wilk tests. The results are shown in table 4.

Table 4: Test of normality

	Kolmogorov-Smirnov ^a			Shapiro-wilk		
	Statistic	df	Sig.	statistic	df	Sig.
Public procurement performance	0.127	62	0.013	0.965	63	0.070
IFMIS control system	0.118	62	0.032	0.974	62	0.217
Online tendering	0.122	62	0.22	0.969	62	0.117
Automated planning	0.157	62	0.001	0.961	62	0.54
Automated supplier engagement	1.19	62	0.30	0.960	62	0.041

The results in table 4 indicate that using Shapiro- Wilk test the p-value is above 0.05. Public procurement performance had a p-value 0.70, IFMIS control system was 0.217, online tendering 0.117, automated planning 0.45, automated supplier engagement 0.41. The results indicated that the p-value for the independent variables was above 0.05 and was therefore significant, indicating that the data was normally distributed.

Test for Multicollinearity

Variance inflation factors (VIF) was employed to investigate whether the independent variables were strongly correlated. VIF should not go beyond 10 for the variables as well. The results of Variance Inflation Factors are shown in table 5.

Table 5: Test for multicollinearity

Variables	Tolerance	VIF
IFMIS Control Systems	0.742	1.347
Online Tendering	0.695	1.439
Automated Planning	0.602	1.660
Automated supplier Engagement	0.832	1.202

Test for correlation between the independent variables in this study indicated severe Multicollinearity was not exhibited by the data. The results indicated that none of the independent variables had a VIF of 10, and the tolerance for all the variables were greater than 0.1, therefore this study concluded that there was no multi-collinearity among the variables.

Regression Analysis

To examine the relationship between dependent and independent variables of the study, regression analysis was employed. Multiple linear regression analysis was used to determine the relation between public procurement performance and the four independent variables; IFMIS control systems, online tendering, automated planning and automated supplier engagement. The results are indicated in table 6.

Table 6: Regression analysis

Model	R	R Squared	Adjusted R Square	Std. Error of the Estimate
1	0.738 ^a	0.545	0.513	0.21207

The coefficient of determination R^2 , was 0.545 explaining the variation in the influence of IFMIS on public procurement performance. This indicates that the independent variables contribute 54.5% to public procurement performance. Other factors that were not included in the study contributed 45.5% to public procurement performance. Further research therefore should be carried out to determine the other factors that influence public procurement performance.

Table 7: ANOVA results

Model		Sum of squares	df	Mean square	F	Sig
1	Regression	3.083	4	0.771	17.213	0.000 ^a
	Residual	2.552	57	0.45		
	Total	5.634	61			

a. Predictors: (Constant), Supplier, Planning, IFCS, Tendering

b. Dependent Variable: Performance

ANOVA results indicated that the regression model had a level of significance of 0.000, which helped to conclude that the model was significant. F value at 5% level of significance was 17.213.

This indicated that the entire model was significant i.e. there was a significant relationship between IFMIS and Public Procurement Performance.

Table 8: Coefficient results

	Unstandardized coefficient		Standardized coefficient		
	B	Std. Error	Beta	t	Sig.
Constant	0.856	0.402		2.128	0.038
IFMIS Control System	0.139	0.062	0.233	2.247	0.029
Online Tendering	0.162	0.079	0.218	2.036	0.046
Automated Planning	0.211	0.098	0.248	2.151	0.036
Automated Supplier Engagement	0.292	0.090	0.319	3260	0.002

Source: Research Data (2017)

Predictors: (Constant), Automated Supplier engagement, Automated Planning, IFMIS Control Systems, Online Tendering

Dependent Variable: Public Procurement Performance

The results of this study indicated that IFMIS control systems, online tendering, automated planning, and automated supplier engagement at 95 per cent level of confidence, had a positive relationship with public procurement performance. Independent coefficients were 0.139, 0.162, 0.211, and 0.292 respectively.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

The conclusions of the study were that IFMIS control systems positively relates with public procurement performance. This was indicated by both descriptive and regression analysis, whereby IFMIS control Systems impact public procurement performance to a moderate extent. IFMIS control systems also demonstrated a positive relationship with public procurement performance. Further it was put to bed that online tendering demonstrated a significant relationship with public procurement performance. Online tendering had a moderate impact on public procurement performance, as demonstrated by descriptive statistics. The regression analysis model indicated that online tendering is significantly related to public procurement performance.

Recommendations

Based on the variables of the study; IFMIS control systems, online tendering, automated planning and automated supplier engagement, the findings of this study are beneficial to a number of stakeholders if put to use. This study recommends that province governments should put policies flexible enough to handle technological changes. Policies to strengthen the IFMIS platform should be put in place to ensure the systems control mechanisms are safeguarded. The province governments should also come up with strong password policies to ensure that access to this system is only granted to authorized personnel. The study also recommends that province have the

responsibility of strengthening online platforms, so as to enhance effectiveness and efficiency in all activities of the counties.

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Conflict of Interest

The authors declare no conflict of interest.

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