

Does E-payment influence Procurement Performance? A case of Geothermal Development Company in Kenya.

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Abstract

This study sought to determine the influence of e-payment on procurement performance in Geothermal Development Company in Kenya. The theory adopted by the study was Business to Business model. A descriptive research design was adopted in this study. Target population included the total number of employees working in procurement and logistics departments in GDC Nakuru region. There are a total of 170 procurement as well as logistics employees in GDC. Multi-stage sampling method was used where 97 respondents were selected as the study respondents. Questionnaires were used to collect primary data. The instrument was tested for validity and reliability where Cronbach's alpha was used to test the reliability of the instrument. The alpha values for all the variables were above 0.8 well above the recommended threshold of 0.7. Thus the instruments were deemed reliable for data collection in the study. Data collected was analysed using Statistical Package for Social Sciences (SPSS). Findings were presented in form of descriptive statistics and inferential statistics and presented in tables accompanied with relevant discussion. This study concluded that e-payment has a significant relationship with procurement performance. The study recommends that it is important for the company to adopt e-payment as a means of boosting procurement performance in the long run. E-payment was shown to be strongly correlated with procurement performance. Further, e-payment was shown to significantly influence the variation in procurement performance unlike the other variables.

Key Terms: E-Payment, Procurement Performance, e-procurement, tendering processes, e-solutions.

How to cite this article in APA.

Gichuhi, R. W. (2021). Does E-payment influence Procurement Performance? A case of Geothermal Development Company in Kenya. *Editon Cons. J. Arts., Humanit. S. Stud.*, 3(1), 332-339.

<https://doi.org/10.51317/ecjahss.v3i1.285>

INTRODUCTION

Electronic procurement is very important when it comes to improving procurement performance and by extension organizational performance. Procurement is strategic in nature since it links the organization's suppliers to the strategic objectives of the organization. Procurement translates the strategic objectives of an organization into the sourcing needs that can enable the organization achieve the same. E-procurement has been promoted as one way of improving procurement efficiency and effectiveness (Musau, 2015). Through e-procurement, an organization is able to directly or indirectly buy the raw materials at a relatively lower price. It also enhances and strengthens transparency and the level of competitive positioning of the firm (Kenneth & Bricu, 2012).

In their discussion of competitive purchasing strategies required for the twenty first century, (Morosan & Jeong, 2008) stated that firms must maximize the use internet based technologies (including e-procurement) in every aspect of the business, linking across all members of the supply chain, increasing the speed of information transfer and reducing non-value adding tasks. Although e-procurement has many operational and financial attractions, these can only be realized, if the ground has already been well prepared through the cultivation of facilitators and the elimination of all impediments such as: security breaches; cultural mismatch; non participation by key suppliers and regulatory difficulties (Trkman & McCormack, 2010).

Major reforms in the procurement system in Kenya started with the establishment of the legal framework within which public procurement could be carried out. The first review of the procurement system was undertaken in 1999 and established a number of issues contributing to poor procurement performance among state corporations. These issues included: lack of uniform procurement system and standard procurement policy; lack of sanctions or

penalties against persons who breached the regulations in the supplies manual, there was lack of transparency and accountability in the procurement process thus contributing to huge losses of public funds (Mambo, 2015; Malela, 2010).

Geothermal energy was identified as one of the pillars and enablers of vision 2030 (Moinkett, 2015). Therefore, it is paramount that the organizations enhance efficiency in their performance for them to achieve their goals. However, the organization has been lagging behind in adopting e-solutions in their operations. It is until January 2019 that the organization advertised for a tender for supply and installation of an e-board management system (BMS) with a web interface (GDC Records 2019). As evidenced in their tender advertisements, most of their tender application and communications are done manually through hardcopies thus no ICT application and feedback processes. Through these manual processes, the public procurement oversight authority (PPOA) observed that procurement units preoccupy about 90 per cent of their time in processing procurement operations (Waswa & Wagoki, 2015). According to Nyongesa and Wagoki (2015), GDC has continuously spent large sums of money and time on its tendering processes and supplier evaluation exercises in the recent past. This has compromised the achievement of the organization's objectives especially with regard to the reduction of total procurement cost and lead-times in procurement processes. E-procurement has been espoused to ease procurement processes by strengthening search ability, ensuring there is faster and also transmission of accurate data, offer quick and more information and reduce transactional costs (Nyairo, 2016). Further Waswa and Wagoki (2015) studied the influence of framework contracting on procurement performance of geothermal development company in Kenya. Additionally, Munyao and Moronge (2018) examined the influence of e-procurement on the performance of procurement in public universities in Kenya. Whereas e-procurement adoption has

been shown to have an impact on procurement performance, state corporations have still been recording poor performance in procurement performance. Nonetheless, studies have not addressed how e-procurement implementation influences procurement performance especially in Geothermal Development Company. Hence, this study determined the influence of e-payment on procurement performance in Geothermal Development Company in Kenya

LITERATURE REVIEW

A study on role of sustainable procurement practices on supply chain performance of manufacturing sector in Kenya: a case study of East African Portland Cement Company, found out that the use of e-procurement systems has enabled prompt payment of suppliers, majority agreed that the use of e-procurement has enabled prompt payment (Nyile & Shale, 2016). Also e-ordering is termed to reduce ordering costs. This is because use of electronic systems in procurement reduces the costs of stationery and all other secretarial expenses like phone calls and supplier visits costs.

While investigating the effect of e-procurement practices on organizational performance Chegugu (2017) focussed on specific objectives; to find out the effects of e-invoicing and e-payment on organizational performance of hospitals within the county government of Uasin Gishu County. The study employed a descriptive survey of 5 hospitals and a sample size of 367 respondents. On e-invoicing, the study found that the adoption of e-invoice is able to indicate charges from purchasers to suppliers; and Concerning e-payment, the study found that e-payment makes it cheap to promptly pay suppliers on supply delivery due to fewer charges incurred upon sending money through e-banking systems..

Waganda (2018) carried out a study to examine the effect of Electronic Procurement (E- Procurement) on the

performance of the procurement function of UN Agencies in Kenya. The specific objective was to examine the influence of e-invoicing on performance of UN Agencies in Nairobi using exploratory research design seeking to unveil the effect that E-procurement has on organizational performance of UN Agencies in Kenya, more specifically in UNICEF, WFP, UNSOA and UNON. The study found that there exist a positive association of e-invoicing to performance of UN Agencies in Nairobi.

Using 262 procurement officers from 112 Kenyan State Corporations, Chepkurui and Chepkwony (2017) conducted a study to determine the effect of E-ordering and E-informing on supply chain performance. Multiple regression model findings showed that e-ordering and e-informing has a positive and significant effect on supply chain performance. The study concluded that e-ordering and e-informing which are elements of e-procurement dimensions increases supply chain performance. There is therefore need for firms to make use of e-ordering and e-informing in the procurement process.

In his study, Mutangili (2019) undertook to assess the effects of e-procurement on supply chain management performance in Kenya. The research adopted descriptive research design to collect the quantitative and qualitative data that describes the effects of supplier performance and e-procurement strategy. The study concluded that there are secure and low-cost procurement transactions and was interpreted to mean that E-invoicing has a great significance in the company's operation. The ability to reduce payment time, greater security of data, as well as numerous environmental benefits has made E-invoicing to be more applicable in the companies operating in the country.

The general objective of this study was While assessing the impact of electronic procurement on the performance of public institutions in Rwanda, Harelimana (2018) carried out

a study following the reports that emerged citing poor performance of Rwandan public institutions which was mostly been attributed to ineffective and inappropriate running of the public finance during procurement processes. In order to reach the achievement of the research objectives, a combination of questionnaires, interviews, documentary reviews and analysing reports were used to gather both primary and secondary data respectively from 42 respondents. Hence, e-procurement has improved the performance of the ministry since it reduced its expenses from 24.4 million in 2015 to 18.6 million in 2016. From Chi-square test, the researcher learnt that e-procurement in terms of electronic bidding, electronic supplier registration, electronic billing and electronic payment is significantly related to the performance.

Business to Business model was pioneered by Peter Drucker in 1994 while working on his project, 'The Theory of Business' (Axelsson et al., 2002). The theory backs the philosophy which states that no single business is an island in that for business to be business it must be defined by continuous interactions. The theory stresses that trading revolves around interactions with each other; where one party presents a request for goods or services and the other responds by offering to meet the end of the transaction. The interaction involves negotiation on the price, and then followed by the promise to deliver and the transaction is only closed upon the satisfaction of the request party (Axelsson et al., 2002). The business logic was true way back in the Stone Age and still holds true today in the era of electronic commerce. The changes with

regard to business transactions between trading partners has been initiated by the dependency of ICT platforms to effect business interactions and to close transactions. The place of ICT in today's business world can never be disputed. Similarly ICT has been central in the supply chain transactions. The concept of business-to-business in supply chain highlights the linkage of businesses in technologically powered network where organizations can rely on the platform to conduct procurement processes (Hakansson, 2012). The electronic platform makes it possible to easily identify potential suppliers by sorting out the offers through consideration of numerous parameters such as prices, quality and speed of delivery (Ahlstrom, 2010). Consequently the organization can then make express electronic orders which the supplier completes the interaction by delivering on the orders. This concept highlights the areas where business-to-business model is supported in the supply chain by linking together the transacting parties. The model is paramount in assessing performance since business to business linkages are focused on enhancing procurement performance. Therefore the model anchored procurement performance in this study.

RESULTS AND FINDINGS

E-Payment Descriptive Statistics

The study further sought respondents' views in regard to e-payment process in GDC in Nakuru, Kenya. The percentages, means and standard deviation values were computed in this regard. The findings from the analysis were as presented in Table 1.

Table 1: Descriptive Statistics on E-Payment

	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean	Std. Dev
There is electronic payment system in our company	2.7	10.7	5.3	70.7	10.7	2.25	.871
In our company invoices are received and sent electronically	1.3	10.7	4.0	70.7	13.3	2.15	.849
Our company makes payments through online e-payment platform	1.3	8.0	12.0	64.0	14.7	2.19	.817
Our company makes payments promptly to suppliers through e-payment	1.3	10.7	9.3	62.7	16.0	2.19	.833
E-payment in our company provides excellent transaction data backup	2.7	5.3	5.3	66.7	20.0	2.03	.805
E-payment in our company has reduced the cost of transactions	0	2.7	13.3	68.0	16.0	2.01	.647
E-payment provides a safer mean of making payment in our company	1.3	4.0	9.3	60.0	25.3	1.97	.805
Valid N (listwise)	75						

From the study respondents disagreed that there is electronic payment system in their company. 70.7 per cent of the respondents disagreed while 10.7 per cent of them strongly disagreed registering a mean of 2.25 and a standard deviation of 0.871. From the findings, it was established that 84.0 per cent of the respondents strongly and/or disagreed that their company invoices are received and sent electronically with a mean of 2.15 and a standard deviation of 0.839. Having a mean of 2.17 and a standard deviation of 0.849, 64.0 per cent of the respondents disagreed while 14.7 per cent of them strongly disagreed that their company makes payments through online e-payment platform. Respondents disagreed that (M=2.19, SD=0.817) their company makes payments promptly to suppliers through e-payment. 62.7 per cent and 16.0 per cent of the respondents disagreed and strongly disagreed respectively with the statement. These findings are in tandem with Nyile and Shale (2016) who in their study established that the use of e-payments of suppliers enables prompt payment.

The study showed that respondents disagreed that e-payment in their company provides excellent transaction data backup. 66.7 per cent and 20.0 per cent of the respondents disagreed and strongly disagreed respectively registering a mean of 2.03 and a standard deviation of 0.805. Further, the researcher observed that respondents disagreed that e-payment in their company has reduced the cost of transaction. 68.0 per cent of the respondents disagreed while 16.0 per cent of them strongly disagreed recording a mean of 2.01 and a standard deviation of 0.647. Additionally, respondents disagreed that e-payment provides a safer mean of making payment in their company. 60.0 per cent and 25.3 per cent of the respondents disagreed and strongly disagreed respectively with a mean of 1.97 and a standard deviation of 0.805. Findings by Chegugu (2017) were similar to the current study's findings since they established that the use of e-payment makes it cheap to promptly pay suppliers on

supply delivery due to fewer charges incurred upon sending money through e-banking systems.

The Relationship between E-Payment and Procurement Performance

Finally, the relationship between E-payment and procurement performance in Geothermal Development Company was established. The findings from the analysis were as presented in Table2

Table 2: Correlations between E-Payment on Procurement Performance

		E-Payment Process
Procurement Performance	Pearson Correlation	.782**
	Sig. (2-tailed)	.000
	N	75

** . Correlation is significant at the 0.01 level (2-tailed).

The table indicated the presence of a positive strong significant ($r=.782$, $p=.000$) relationship between e-payment and procurement performance in GDC. As such, e-payment process mad in GDC greatly impact on the procurement performance in GDC. Therefore, in order to enhance procurement performance in GDC, e-payment process must also be enhanced. In line with these study findings, Waganda (2018) also established that there exists a positive significant association of between e-payment and procurement performance.

From the study respondents disagreed that there is electronic payment system in their company. From the findings, it was established that respondents disagreed that their company invoices are received and sent electronically. They also disagreed that their company makes payments through online e-payment platform. Respondents disagreed that their company makes payments promptly to suppliers through e-payment. The study showed that respondents disagreed that e-payment

in their company provides excellent transaction data backup. Further, the researcher observed that respondents disagreed that e-payment in their company has reduced the cost of transaction. Additionally, respondents disagreed that e-payment provides a safer mean of making payment in their company.

Inferential statistics demonstrated that e-payment exhibits a strong positive significant relationship with procurement process in GDC. Regression analysis demonstrated that e-payment significantly accounts for the overall variation in procurement performance in Geothermal Development Company. Therefore a direct relationship exists between e-payment and procurement performance. Thus, excellent e-payment process enhances procurement performance in the company.

CONCLUSION AND RECOMMENDATION

Conclusion: Analysis demonstrated that e-payment has a significant relationship with procurement performance. It was noted that e-payment enables prompt payment of suppliers hence enabling efficient procurement processes. Further e-payment was shown to significantly account for variation in procurement performance. Hence the study concluded that e-payment has a significant influence on procurement performance in Geothermal Development Company in Kenya.

Recommendation: The study recommends that it is important for the company to adopt e-payment as a means of boosting procurement performance in the long run. E-payment was shown to be strongly correlated with procurement performance. Further, e-payment was shown to significantly influence the variation in procurement performance unlike the other variables. As such, e-payment has a huge role to play in enhancing procurement process in GDC.

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DOI: <https://doi.org/10.51317/ecjahss.v3i1.285>

Volume: 03 Issue: 01 | November -2021

Received: 18.09.2021; Accepted 25.09.2021; published: 10.11.2021 at www.editonpublishing.org

Gichuhi, R. W., *Editon Cons. J. Arts., Humanit. S. Stud., Double –Blind Peer Reviewed Journal*

ISSN: 2663-8525

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