

EXAMINING THE MANAGEMENT OF RISK ISSUES IN PROCUREMENT: A CASE STUDY OF GHANA TECHNOLOGY UNIVERSITY COLLEGE

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Abstract: The purpose of this paper is to examine the management of risk issues in procurement. A mixed method approach and explanatory cross-sectional research design were employed. The sample size formed more than 50% of the population of staff at the Ghana Technology University; working directly with the procurement unit. Findings revealed that, procurement risks do not significantly affect the organizational performance of the institution. However, qualitative probing showed that, the procurement risks translate into poor service quality (slow working activities, ineffective teaching and learning). Moreover, interferences/disruptions and resources challenges were the greatest risk issues in procurement which can reduce procurement risks by 39% if managed properly. Also the results showed that, risk issues in procurement are high and require a relatively higher management approaches – such as elimination or simplification of some bureaucratic procedures, proactive work dynamics, early submission of proposals and budgets– to mitigate them. Furthermore, the selection and training of qualified personnel were key in mitigating risk issues in procurement. It was therefore recommended that, the procurement processes at Ghana Technology University be reviewed periodically so that, the bureaucratic processes that impede successful outcomes are either eliminated or simplified.

Keywords: Procurement, Risk, Management, Quality, Resources, Procedures, Bureaucratic, Interference.

I. INTRODUCTION

The relevance of procurement purchases both past and present –throughout the world– cannot be underestimated. [1] thus remarked that procurement services are vital in the “functioning of various departments in government institutions”. Not only is procurement service good for public institutions but also, private, small and medium scale enterprises [2]. [3] further explained that, goods and services procured include “quality items, stationary and standard, to more complex expenditure such as construction of buildings, roads and others”. In universities, procurement could include key services to all directly or indirectly linked to the university that is, goods and services to university staff, students, and guests. In recent years, supply chain risk management has increasingly becoming popular; evidenced by the number of academic articles published as well as practitioners, workshops, conferences and university courses delivered [4] [2]. In Africa a number of journals in relation to public procurement trends and developments have also been published [5] [6] [7]. Moreover, a number of studies and articles in Ghana have been published in the area of procurement and its associated risks [8] [9] [10]. Despite the numerous publications in this areas, a comprehensive review of the assessment of risk management in procurement is still limited. Companies shift of attention from procurement practices to supply chain management, gives a clear view of how procurement risk issues are being handled. Accordingly, procurement in most public sectors involves the acquirement of goods and services for the benefits of citizens and also serves as the means of transacting commercial businesses. In this regard, [7] defines public procurement as “government administrative activities that concerns the purchase of goods and services –needed by government– from the private sector”. [13] report shows

that, “public procurement alone represents about 24% of total imports and “apart from personal emoluments, public procurement represents 50-70% of the national budget and 14% of Gross Domestic Product”. These high procurement figures make the procurement process a very risky endeavor; worth managing indeed [14]. In support [11] further posits that, procurement in public sectors, carry the greatest risks. [12] in their study, therefore explains risk as a concept associated with production, processes, transportation as well as other market demands. Currently, businesses are becoming more critical in managing the effect of uncertainties as well as risks. Subsequently, statistics reveal that, “total annual corruption in Africa amounts to about \$148 billion which is about 25% of Gross Domestic Product” [15]. The report adds that, these corruption activities are mostly manifested in the execution of shoddy contracts and abuse of public funds; having serious adverse effects on the economy. In view of this, the public procurement Act (663) was passed primarily to eliminate corruption in the procurement process, regulate expenditure and to instill discipline in public finance [16]. For that matter, the public procurement authority was charged by sections 3(d), 3(e) and 3(h) of the Act to assess the performance of each entity; ensuring compliance with the provisions spelt in the Act. Despite this procurement Act, a number of scholars have identified risks and the need for further management of procurement related concerns in the procurement process. The provision of effective strategies and solutions to manage supply chain risks is not an easy task as it demands proper planning and control systems in place to curb the menace [16] [10]. In addition, the management of risk in an organization is essential for continuity of operations because every business entity face risk in its economic activities [5] [9] [17]. It is therefore important for organizations to establish key risks management in all supply chain activities; making provision for all likely uncertainties that may exist within the delivery value to the customers and supply chain managers. There must also be robust mitigation strategies in place to ensure efficiency and effectiveness. However, procurement processes the world over is frost with a lot of risks or challenges [12]. In Ghana, studies have revealed that a number of political, environmental, social, technological, legal and economic risks affect the procurement system [9] [18], where the tertiary institutions are no exception. Furthermore, scholars such as [13] and [9] who studied procurement systems in the universities remarked that, a number of challenges or risks befall these systems. The Ghana Technology University College (GTUC) campus file, 2017 edition states that, the procurement units “manage the procurement process and the supply chain base efficiently and effectively”, but in reality, this is contrary. Management of procurement is centralized at the Tesano campus where as the satellite campuses (Kumasi, Ho, Koforidua and Takoradi) have no procurement representatives. GTUC, reports some challenges in it procurement system and therefore suggested a robust risk management be operationalized. More emphatically, the set-up of a five-member procurement unit to manage these procurement risk, makes this research very significant –as issues of these risk can dwindle their chances of progress as an organization. It is thus undeniable that a study on procurement risks management in universities is very essential to enable the various departments within the university meet its demand to train graduates for nation building. It is upon this premise that the researcher seeks to examine management of procurement risks with a scenario in Ghana Technology University College.

II. LITERATURE

Theoretical Review

As cited by [19], a good research should be grounded in theory [20]. According to [21] the rational choice theory considers all human activities as the foundation, which can either be beneficial or costly in the decision making process. [22] argues that, social actions are regarded as rationally motivated and instrumental even when it appears to be irrational. Core to the rational choice theory is the assumption that, “complex social phenomenon can be explained in terms of the elementary actions of individuals of which they are composed. This is termed methodological individualism which holds that, the elementary unit of social life is the individual human action. Thus, to explain social institution and social change, there is the need to show how they arise; the actions and the interactions of individuals. In the rational choice theory, “individuals are seen as motivated by the wants or goals that express their preferences. The rational choice theory has proved useful in areas such as business, finance, economics, political theory and cognitive psychology. However, [23] in his article, “The failure of rational choice philosophy” argued that, the rational choice theory fails because it is not ethically neutral. McCumber also believes that, this theory encourages people to “maximize preferences by acquiring wealth and power but not all choices are economically driven” [24]. Besides, preferences can be maximized by focusing on values. Likewise, [25] revealed that, “the causal effects of human actions are much more complex as such, less predictable than previously thought”. Sometimes circumstances influence people in organizations to react spasmodically rather than acting rationally, so they take decisions before reflecting upon their actions. This theory is backed by some studies ([22]; [25]; [13]; and [9]) which verifies the following hypotheses in the current study:

H₁ – There is no significant negative correlation between procurement risks and organizational performance.

H₂ – There is no significant negative correlation between procurement risks and management of procurement risks.

H₃: There is no variance in management of procurement risks among the resources, systems, interference and capabilities aspect of procurement risks.

Empirical Review

[1] investigated innovativeness in public procurement by examined procurement practices throughout the 28 member states of the European Union, Switzerland and the USA –through non-parametric matching techniques. The researcher believes that, procurement in relation to environmental demands is bound to be successful. [1] found that, countries that adapt public procurement practices to their needs achieve successful outcomes. In some cases, it could be unduly strict and bureaucratic, while in other cases, it could be too loose to allow for variety of risks factors that undermines the procurement system. As one of the scholars who believes in the rational choice model when it comes to procurement related issues, [26] also investigated strategic outsourcing and optimal procurement. The study was to ascertain that, strategic outsourcing is one way to manage certain procurement related risks. Rosar thus deduced that, ensuring the success of strategic outsourcing is one sure way of optimal procurement. [27] further highlighted some sweet deals in public procurement that are risky enough to bring down the success of an entire company. According to them, the extent of corruption and repeated contracts in public procurement is so alarming that it can even pull down national coffers [27]. These scholars found that, repeated non-transparent procurements and connections based on the state ownership of suppliers is a serious canker in the procurement field so far as public enterprises are concerned. Additionally, [28] stated that, for procurement to be well managed or effective, there must be appropriate design initiatives. Factors that must be present for procurement to be well-managed include early supplier involvement, standardization, lead time reduction, environmental sourcing, supply base maintenance and core competence focused sourcing [28]. Furthermore, it was found in their survey that, lead time is positively related to on-time delivery. Again, sourcing inputs in the face of reduced lead times is viral for businesses involved in time-based competition. These initiatives drive environmental and economic performance improvement. [29] also investigated the management strategies to increase sustainability in buildings through public procurements. These researchers agree with [28] who remarked that certain initiatives must take place for public procurement to be effective, which include on-time delivery and standardization. However, [29] believes that, performance based specification is highly essential for social, environmental and economic benefits. The views of [28] and [29] were accepted by [30] who investigated optimal electric energy procurement problems under reliability constraints. These scholars believe that certain items should be reliable or available at all times for successful business operations. In this case, the organization would have to put up a system to ensure regular reliable supply. However, some procurement items such as energy may not be produced in a reliable way. Having investigated a number of large business organizations that rely of massive amounts of energy, [30] pointed out that, the regular need for energy could be a basis for non-value oriented procurement practices. More so, the bureaucratic nature of procurement regulations could delay the procurement of such regular need, which stifles development. To manage these risks effectively, [30] found that successful businesses in this regard did fore-planning and anticipation of disappointments which made them also have contingency plans or what may popularly be known in a Ghanaian setting as plan B.

On procurement issues across Africa, a number of studies into procurement related issues and management has been carried out. One such recent publication is that of [5] who investigated public procurement trends and developments in South Africa. Having ended the apartheid system in South Africa according to [5], there came a need to adopt a public procurement system to help the country meet its socio-economic objectives. After examining a number of procurement departments and units across the nation, Ambe found that, the “public procurement in South Africa is also leveraged towards generating employment, enhancing domestic manufacturing capacity, and supporting the nascent renewable energy industry. This therefore according to [5] does not make the procurement system a value-for-money related activity for as long as it would satisfy some of the above objectives. The effect of this on the public procurement system is that, it has led to the “lack of clearly defined strategic goals and misconceptions among procurement staff about the concept of supply chain management. To manage these risks effectively, [5] proposed an “urgent need for a shared vision among key stakeholders, ethical leadership and the development of sophisticated curricula by academic institutions”. Moreover, [31] did a review of public procurement in Africa and found that, the public procurement system is bedeviled by a canker of corruption which is the major source of scourge of governments in Africa. Further on that, the researchers found that the corruption that goes on in the public procurement system is even in several dimensions. It includes determinants such as

economic, political, organizational and social forces. Among these, the political forces are deeply rooted in the political conditions of the country and according to them, this factor makes remedial efforts difficult because it is really hard to fight the political powers in an African system that promotes strict allegiance to the authorities. Furthermore, [7] examined the realities and challenges of the public procurement and tendering process carried out in South Africa. It examined a number of public organizations and found high levels of corruption in the procurement systems of some of South Africa's national and provincial departments. The study reported serious levels of corruption that defines the procurement process. These scholars suggested risk management imperatives and procurement management to fight against the fraud, collusion, extortion and other corrupt activities that marks the corrupt processes in the public procurement system. [32] also investigated procurement reforms in Africa focusing on the strides in procurement, challenges and improvement opportunities. Although, most of the studies concerning procurement in Africa have been very negative pertaining to corruption and impediments to progress, [32] were of the view that there has been some initial improvement within the African public sector financial management. However, the complete and successful implementation of these reforms is fraught with problems such as inadequate education and training, legislative constraints, especially those associated with procurement technology, and a lack of political support for the procurement reform processes. Similar to [32] findings, [33] highlighted after studying a number of procurement practices in South Africa that, public procurement in South Africa and corruption are inseparable twins. To [33], this massive corruption is attributable to the political systems that operate in politically changing spheres. As a result, the political position of South Africa as well as the socio-cultural sensitivities of participating countries has led to a neglect of ethical and environmental considerations which has in effect slowed the pace and acceptance of procurement reforms.

In Ghana, a number of studies into procurement practices, risks and management has been carried out. [9] therefore examined procurement practices in Polytechnics which are now referred to in Ghana as Technical Universities. The purpose was to examine green procurement practices to help lift technical universities up to their mission. By studying five technical universities, [9] developed an analytical framework for the Ghanaian public sector which includes acquisition and material specification planning, environmental requirements, green purchasing, strategic supplier partnership, green information and communication technology, and employee training. These researchers found that, the strategic supplier partnership is the most influential major practice whereas review of material needs to include green procurement requirements was identified as the most important sub-practice. [9] thus recommended that procurement should focus on environmental and societal consequences to achieve sustainable development. In the educational sector, [10] assessed the implementation of the public procurement act with Takoradi Technical University as its case study. They found that, the Takoradi Technical University uses the Ghana Public Procurement Act (663) 2003 in its procurement of goods, works and services from suppliers through the established procurement unit of the institution. Nonetheless, these researchers found a number of risks or challenges such as excessive bureaucracy, cumbersome documentation processing, inadequate storage facilities and others as incumbent on the public procurement system. Likewise, [34] examined public procurement practices in Ghana and were alarmed at the rate of corruption stemming from procurement. They therefore investigated the causes of corruption in the public procurement system. Using 112 respondents, these researchers found that greed and weaknesses in institutional structures, failure to implement and enforce policies and laws and political influence in the award of contracts are the major causes of corruption in the public procurement system. Furthermore, [16] examined implementation challenges of the public procurement Act. They used some selected metropolitan, municipal and district assemblies in the Ashanti region of Ghana. [34] discovered that, a large portion of the procurement committee members do not understand key sections of the Public Procurement Act. They reported that, the metropolitan, municipal and district assemblies claim to follow the public procurement regulations, yet political interference, unqualified staff, and lack of monitoring as well as inadequate motivation for committee members were critical impediments to the implementation of successful public procurement guidelines. Similar to the findings of [34], [36] also studied the challenges of practice of sustainable procurement in the Ghanaian construction industry. Having studied the construction industry, Mensah and Ameyaw reported that, the practices associated with procurement seem to have neglected sustainability. It was observed among most respondents that they have value-for money at the expense of value-for quality which impedes sustainability in procurement. This has therefore resulted in shoddy work and construction of public roads that are built to last for some few months. More so, they reported that, officials selected to man the procurement process have not really studied to even comprehend the procurement Act (663). They rather rely on their experiences. In effect, the practitioners lack empirical understanding pertaining to the environmental, economic and social concerns of sustainable procurement.

III. METHODOLOGY

The study adopted to pragmatism philosophical stance. This philosophy holds that the research method has certain weaknesses and that there is possibility of not getting adequate answers to existing problems related to the full set of dynamic social events and problems facing society. In this situation pragmatism gives best option in solving such varied challenges in real life situations to get the right solutions in practical, useful and workable [37]. The mixed approach was employed because it was most suited to test the hypotheses (quantitative) and derive the depth (qualitative) in the procurement risk. The research design was explanatory which sought to explore, describe and explain procurement risk on organizational performance. Staff from five (5) campuses of GTUC in the procurement department and forty-five (45) heads were considered for the study. First, the sample size determination for use of multiple regression is determined by [38] as “ $N > 50 + 8m$ where m = number of independent variables.” For the purpose of this work, there are six independent variables. This means that $N > 50 + 8(6) = 98$. This implied that to achieve validity in using regression to analyze the data, the sample size should not be less than 98 participants. However, Tabachnick and Fidel also emphasized that, for relatively smaller populations than the above sample size calculated, regression analyses can be used when the population sampled is 50% of the entire population and above. Since the population of staff who dealt with the procurement unit was estimated to be 45 in number, 50% of this population then would be twenty-two and half (22.5) participants. However, the study used a sample of thirty (30) for questionnaires using random sampling strategy and four (4) senior personnel who were purposively selected with over 10 years’ experience. The study employed parametric technique using one-way ANOVA, Pearson Correlation to test the hypotheses and explain the relationship between the variables. Additionally, tables and Graphs were used to analyze and interpret quantitative data. Qualitative data was however analyzed using thematic analysis. Validity was ensured through construct validity and Cronbach Alpha was leveraged on to test reliability at between 79%-91% (see table 1) indicating a high consistency with the responses from the respondents. The study applied ethical principles through transparency, anonymity, privacy which were consistent with the ethical parameters for the mixed method used.

Table 1: Reliability Statistics (Cronbach’s Alpha)

Scale	α	No. of Items
1. Procurement Risks/Challenges Questionnaire	.79	21
2. Organizational Performance Questionnaire	.82	12
3. Management of Procurement Challenges/Risks	.91	10

Source: field data 2017/18 (n=30)

IV. FINDINGS

Test for Normality

According to [39] the critical contribution to which the distributions of data obtain from the sample becomes consistent with a normal distribution.in this regard, a test was done using Skewness and Kurtosis values for all the variables.

Table 2: Summary of the Means, Standard Deviation, Skewness and Kurtosis (N = 30)

Scale	Min	Max	Mean	SD	Skewness	Kurtosis
1. Procurement Risk/Challenges	50	81	66.83	8.06	-.37	-.54
2. Organizational Performance	28	52	36.20	5.72	.95	1.01
3. Management of Procurement	12	50	36.60	10.30	-.74	-.20

Table 2. Above shows results of the descriptive statistics for scales used (that is, the Procurement Risks or Challenges, Organizational Performance, and Management of Procurement Challenges/Risks). According [38] explains skewness and kurtosis scores that fall within the range of +2 to -2 and +3 to -3 respectively indicates the normal distribution thus satisfying the condition for the use of parametric tests.

Correlation Matrix

The variables which include the Procurement Risks or Challenges with four dimensions, Organizational Performance, and Management of Procurement Challenges/Risks were tested to observe the extent to which they correlated with each other. The Pearson Product Moment correlation was used in this regard and results are presented in table 3.

Table 3: Summary of Pearson Product Moment Correlation (Matrix) or Multicolinearity of Scales Used N = 30

Variables	1	a.	b.	c.	d.	2	3
1. Procurement Risk Quest.	-						
a. Resources	.71*	-					
b. Svstems	.40*	.19	-				
c. Interference/Disruptions	.53*	.07	-.05	-			
d. Capabilities	.54*	.12	-.16	.01	-		
2. Organizational Perf. Ouest.	.14	.04	.04	.17	.07	-	
3. Management of Proc. Risk	.53*	.42*	.17	.44*	.24	.34	-

*Significant at the .05 level of significance

Procurement Risks/Challenges – Mean = 65.37; SD = 7.41 Organizational Performance – Mean = 35.67; SD = 4.92 Management of Procurement Risks - Mean = 36.60; SD = 10.30. From table 3 above (Summary of Pearson Product Moment Correlation Matrix of Scales used - that is, Procurement Risks or Challenges with four dimensions, Organizational Performance, and Management of Procurement Challenges/Risks) it could be observed that the Procurement risk/challenge and all its the sub-themes namely resources, systems, interference/disruptions and capabilities do not correlate with organizational performance. However, a significant positive correlation was found among Procurement risk/challenges variable as well as its resources and interference/disruptions sub-themes and management of procurement risks.

Hypothesis - Relationship between Procurement Risks/Challenges and Organizational Performance

Hypotheses one stated that, “There is a significant negative correlation between procurement risks/challenges and organizational performance.” Statistically, the Pearson product moment correlation was used because there are two continuous variables – procurement risks and organizational performance – and this line of assumption seek to test the relationship between the two continuous variables. Results of analysis using Pearson product moment correlation is indicated earlier. From table 3 presented earlier, it could be observed that, the correlation coefficient between procurement risks and organizational performance is 0.14 which is not significant at the .05 level of significance since P (0.23) > .05 alpha level. This therefore suggests that in institution, procurement risks do not affect the organizational performance. For that matter, hypothesis one which stated that, “There is a significant negative correlation between procurement risks and organizational performance,” is rejected at the 0.05 level of significance.

Hypothesis-Relationship between Procurement Risk and Management of Procurement Risk

Hypotheses two stated that, “There is a significant positive correlation between Procurement risks and management of risk.” Statistically, the Pearson product moment correlation was used because there are two continuous variables – organizational performance and management of procurement risks – and this line of assumption seeks to test the relationship between the two continuous variables. Results of analysis using Pearson product moment correlation is indicated in table 3. From table 3 presented above, it can be observed that, the correlation coefficient between procurement risks/challenges with its management is 0.53 which is significant at the .05 level of significance since P (.00) < .05 alpha level. This therefore suggests that the procurement risks/challenges positively correlate with its management. In other words, as procurement risks in institution rises, the need for its management also rises and vice versa. It should be emphasized that with a possible minimum score of 21.00 for procurement risks/challenges, a mean of 65.37 with SD of 7.41 was obtained which indicates high procurement risks/challenges. Again, with a possible minimum score of 10.00 for management of procurement risks/challenges, a mean of 36.60 with SD of 10.30 was obtained which indicates high need

for management into procurement risks/challenges in the institution. For that matter, hypothesis one which stated that, “There would be a significant positive correlation between Procurement risks/challenges and its management,” is supported at the 0.05 level of significance.

Table 4: Summary of Regression Analysis for the Procurement Risks that demand Serious Management attention (N = 30)

	B	SE	β	t	p	Part
Resources	.94	.35	.42	2.68	.01*	.41
Systems	.47	.55	.13	.84	.48	.12
Interferences	1.42	.45	.52	3.15	.01*	.48
Capabilities	-.146	1.06	.23	1.38	.18	.21

* Significant at the .05 level of significance

$R = .640^a$; $R^2 = .410$; Adjusted $R^2 = .316$; $P = .01$

a. Predictors: (Constant) Capabilities, Systems, Resources, Interferences.

b. Dependent Variable: Management of Procurement Risks/Challenges

According to [40], it is essential to run a multicollinearity checks before falling on the results of a standard multiple regression to make inferences. Multicollinearity is the extent to which “the independent variables are highly correlated (that is, $r = .9$ and above). From table 3 (Correlation matrix) above, it can be observed that, the relationship between all the procurement risk variables is not more than the .90. Under this, tolerance and VIF (Variance Inflation Factor) are calculated. [40] explains tolerance to be how much of the variability expected to be dependent or independent depending on the model and is calculated using the formula $1 - R^2$ for each variable. If the value is very small (less than .10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. This assumption was not violated because from the data Tolerance = $1 - 0.410 = 0.59$. Moreover, the other value given is the VIF (Variance inflation factor), which is just the inverse of the Tolerance value (1 divided by Tolerance). VIF values “above 10 would be a concern here, indicating multicollinearity” [40]. This assumption was not violated because from the data $VIF = 1 \div 0.59 = 1.64$; which is not more than 10. From table 4, it can be observed that $R^2 = 0.410$ which means that factors making up Procurement risks such as capabilities, systems, resources and interferences account for $(0.410 \times 100) = 41\%$ of the variance in managing procurement risks. This relationship can be trusted because the model was significant $P(0.01) < 0.05$ level of significance. However, to find the extent to which each of the elements of Procurement risks account for variance in managing procurement risks, it is essential to refer to beta values in the table 4. From table 4, it can be observed that, Interferences/Disruptions is the best predictor of the need to manage procurement risks/challenges in the institution ($\beta = 0.52$; $t = 3.15$; $P < 0.05$). Again, the lack of resources emerged to be another reason why procurement risks in the institution need to be managed ($\beta = 0.42$; $t = 2.69$; $P < 0.05$). However, systems and capabilities alone were found not to predict the need to manage procurement risks/challenges in the institution, since above all else, their P values were not significant. This means that for procurement risks in the institution to be well managed, attempts should be made especially at getting the resources and eliminating all interferences/disruptions. In this case, to get the unique contribution of interferences and resources to the management of procurement risks/challenges in the institution, table 4 shows a part relationship of .48 and 0.41 respectively. According to [38], this is achieved by finding a square of the part relationship and multiplied by 100 to find its percentage value. This implies that Interferences/Disruptions accounts for $(0.48^2 = 0.23 \times 100) = 23\%$ of the need to manage procurement risks in the institution. Again, Resources accounts for $(0.41^2 = 0.16 \times 100) = 16\%$ of the need to manage procurement risks in the institution. In all, Interferences/Disruptions with its 23% variance is the best predictors as earlier hypothesized. For that matter, hypothesis three which stated that, “Lack of Resources would predict more variance in Management of Procurement risks/challenges in the institution than the systems, interference/disruptions and capabilities aspect of procurement risks/challenges” is supported at the .05 level of significance.

Thematic Analysis Management of Procurements

Table 5: Management of Procurements

Theme	Sub-Themes	Illustrative Response	Remarks
Capabilities	Staff Development	"Procurement staff need training" (Respondent 4) "All staff need should have some work harder to obtain knowledge on current development in procurement processes so that the same old things do not go on always but fresh ideas are introduced" (Respondent 1)	Staff training and advancement in Knowledge to meet current dynamics in the field have been identified to help mitigate some of the challenges of the procurement unit.
	Qualification	"We need qualified staff in the procurement unit" (Respondent 4) "All new staff employed should have read the Public Procurement Act" (Respondent 3)	It could be realized from participants' viewpoint that qualified staff are needed to keep the unit progressing and overcoming challenges
Systems	Early Submissions or Proactivity	"The procurement unit can push budgets early enough to avoid delays of receiving funds or making purchases." (Respondent 1) "All units are compelled to submit their budget early to prevent delay in the procurement processes and activities" (Respondent 3)	It could be realized from participants' Viewpoint that since delays in the procurement process is a great challenge to effective delivery management should be geared toward being proactive in areas such as early submissions.
	Speed in Work Processes	"The bureaucratic aspects of the procurement process that adds no value to our work activities should be eliminated or simplified to speed up work" (Respondent 4)	It was pointed that the bureaucracy in the Procurement process in the University slows the progress of work activities.

V. DISCUSSIONS

Findings of the study supports a number of literature reviewed whereas it does not support others with a unique discovery into some procurement issues that have not been reported by previous researchers. In the present study, it was found that, procurement risks/challenges do not significantly affect the organizational performance of the University, however, qualitative probe reveals that, the procurement risks/challenges translate into poor service quality in the institution including slow work activities and ineffective teaching and learning. In relation to the study by [1] who investigated innovativeness in public procurement, reported that the procurement procedures should neither be too strict nor too loose to allow for innovativeness and success. It could be said that, the procurement processes and outcomes in the institution have risks, however, they exist in ways that do not significantly affect organizational performance. Per the qualitative outcome of this study that revealed some effects on organizational performance, it would be appropriate to say procurement dynamics should be structured on specific needs of the organization and not formalities. That is why [26] view that strategic outsourcing is equally essential for optimal procurement. [27] remarked that procurement has been a sweet deal for megascopic rates of corruption. This report about the canker of corruption in public procurement has dominated the studies about procurement done in Africa ([31]; [7]; [33]). In the present study, procurement risks/challenges positively correlate with its management, such that, as procurement risks in institution rises, the need for its management also rises and vice versa. Statistics further revealed that the procurement risks in the University can be rated as high. [5] view that some procurement deals and processes are leveraged towards generating employment, enhancing domestic manufacturing capacity rather than value for money. Indeed, for the present study, staff of institution who have had dealings with the procurement unit for 7 years and above have a higher procurement risk/challenge perception than those who have worked with them for a shorter period of time. This means that no matter the strings or concerns in procurement risks, consulting staff who have had dealings with the procurement unit for longer periods such as 7 years or more should be considered. These groups of staff may have deeper perception into the procurement risks and their suggestions could be of greater benefit. Furthermore, this study presents interesting discoveries into studies on management of risks issues in procurement. It was found that, interferences/disruptions aspect of procurement risks in institution accounted for 23% of the need to manage procurement risks in the institution while problems associated with Resources accounted for 16% of the need to manage procurement risks. Combined, working to ameliorate the interferences/disruptions and resources challenges would reduce the procurement risks in the institution by 39%. Qualitative probing revealed that, the aspect of resources that are most challenging pertains to lack of resources and

sometimes delivery of poor quality and quantity of goods due to excessive focus on value-for-money. Qualitative analysis also revealed that the procurement systems in the institution are subject to much delay in getting results. Although there have been various attempts to reform the procurement process, [32] found that, factors such as “inadequate education and training, legislative constraints, especially those associated with procurement technology, and a lack of political support for the procurement reform process” impeded such move. To manage the risk issues in procurement therefore, this present study found that, enhancing the procurement systems through elimination or simplification of some bureaucratic procedures as well as proactive work dynamics such as early submission of proposals and budgets are needed. This present finding supports the views of [28] who believe that procurement risk issues can be well managed through appropriate design initiatives. In this same regard, [29] reported that, performance based specification is highly essential for social, environmental and economic benefits. The views of [28] and [29] are acceptable in this regard and were also accepted by [30], however, they add that the extreme bureaucracy associated with procurement should be looked into; and that, fore-planning and anticipation of disappointments along with contingency plans are needed for procurement success. This indeed was highlighted as a systems impediment in this present study. During the literature review, a peer into procurement concerns in Ghana revealed that, a number of risks or challenges such as excessive bureaucracy, cumbersome documentation processing, inadequate storage facilities and others are incumbent on the public procurement system [10]. Still blaming massive corruption in the procurement process, [34] found that greed and weaknesses in institutional structures, failure to implement and enforce policies and laws, and political influence in the award of contracts are the major causes of corruption in the public procurement system in Ghana. This means that the bureaucracy challenge identified may have to be reviewed strategically else eliminating it completely in certain regards may be a shot in the foot rather than success. That notwithstanding, reviewing the procurement process periodically can be a benchmark to eliminate currently needless processes especially when advancement in technology is in to take care of certain previous challenges. In the present study, it was found that, more would have to be done to enhance the capabilities of staff through the selection of qualified personnel and staff development through training programmes and self-development. Similarly, [16] as well as [36] found that even most procurement officials who managed the procurement systems appear not have knowledge or understanding of the Public Procurement Act (663) of Ghana. Although there have been various attempts to reform the procurement process. [32] found that, factors such as “inadequate education and training, legislative constraints, especially those associated with procurement technology, and a lack of political support for the procurement reform process” impeded such move. [21] rational choice theory suggests that all human actions should be calculated based on costs and benefits. Indeed, since procurement risks presents great costs to organizational outcomes, it essential that the goals of the organization drive the need to revamp procurement procedures as [22] who supports the rational choice model would agree.

VI. CONCLUSIONS

Conclusion and Recommendations

Indeed, the procurement processes of the institution is buffeted with risks such as systems impediment, capabilities of staff and particularly interferences from both within and outside the university. While it may be prudent to review the procurement procedures to make a structured one that yields local results rather than a beautification to suit international ideals, it is also prudent to rely on the experience of older beneficiaries of procurement related services. Indeed, bureaucracy appear to be an issue in any procurement process and outcomes, it is highly essential to note that, corruption cankers led to the use of bureaucratic systems. However, we could perhaps revisit this issue since technology is advancing to mitigate some of the challenges of procurement. While it cannot be said that, technology takes away all procurement risks, it cannot also be said that existing bureaucracies are the continual ways to end the canker of interferences for corrupt reasons that hampers the success of procurement processes. Worse of all, bureaucratic channels that end up producing less quality goods that are of no use still makes the procurement processes unbecoming. Risks are not always murderous so to speak. They could be used as challenges to a successful restructuring of an unsuccessful endeavour. By analysing the procurement processes therefore based on advances in knowledge, technology and the rational choice theory, better outcomes could be anticipated to make the procurement systems in institution successful while blocking all interferences who try to subdue the processes to their own advantage. The study recommends Procurement dynamics/processes should be structured based on specific needs of the organization such as specific items needed, ease/difficulty in getting the items, number of ready suppliers available, number of items needed and the like. By so saying, formalities or international standards that purport to be the almighty formula in resolving risk issues in procurement but does not yield practical value should be abrogated to enhance management of procurement risk

strategies. In working to resolve the risk issues in procurement in the institution, the views of staff who have had dealings with the procurement unit for longer periods such as 7 years or more should be consulted. These long serving staff of institution have deeper perception into the procurement risks; for that matter, their suggestions could be of greater benefit. The University should come up with a clear policy on interference/disruptions in procurement related activities such as political interference in the system, some authorities within the institution such as auditors trying to frustrate the procurement system, and some authorities within the university trying to bend the procurement system to their personal benefit, among others. Procurement processes in the institution should be reviewed periodically so that bureaucratic processes that impedes successful outcomes are either eliminated or simplified. It is essential to investigate how advancement in technology can be used effectively to mitigate specific procurement related challenges such as resources, interferences and capabilities that has been found to be a menace in the procurement processes in the institution.

Limitation of the study

This study reveals one problem that is often associated with studies of survey nature, which is social desirability effect as described by [41]. The small sample size used in this study due to the number of procurement staff at the institution was a challenge. The mixed method was employed to also triangulate to data collected and analysed. Future study can extend the sample size to address this gap even though in the researcher's opinion, this may not unduly alter the findings to a large extent. It was observed that, the procurement staff did not really highlight Interferences/disruptions in their work processes from authorities within and outside the university even as a challenge. Reason for this could be based on the premise that, a problem that benefits a person is not highlighted as one to be solved as suggested by [8]. Another reason for this could be as [16] pointed in their study of procurement issues in Ghanaian Metropolitan, Municipal and District Assemblies that, the fear of higher authorities makes officials of procurement departments keep silent on pressing matters that affects their activities to the detriment of the organization they work it. Besides, the use of face-to-face interview although helps elicit much desired information as desired for this study, it however, prevents participants from sharing certain deep-seated problems. Interesting, methodological triangulation ameliorates this weakness to a greater extent.

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