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The Role of Planning and Staff Competency on Procurement Performance in Public Institutions in Ghana: A Case Study of Bui Power Authority

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Abstract:

The study was conducted to examine the role of procurement planning and staff competency on procurement performance in public institutions in Ghana. The research was conducted at the Bui Power Authority which is a public institution established by an Act of the Parliament of Ghana, BPA Act, 2007 (Act 740). The research adopted the mixed method approach and a purposive sampling to sample twenty-three (23) executives, heads and officers to respond to questionnaires to the case study organisation. Data collected were analyzed using the Statistical Package for Service Solutions (SPSS). Findings suggests that procurement planning and staff competency positively affect the performance of procurement. Both independent variables were found to be statistically significant. It was found that wastages and damages of procured items were minimal and that procurements did not exceed the allocated budget due to proper planning. However, inventory management and delay in procured items were areas that Bui Power Authority performed poorly in. Planning played a role in procurement performance and Bui Power Authority not only had a procurement plan but the procurement plan was developed with user departments and based on approved budgets. Procurement staff had the required competencies: skills and training to perform the procurement functions and having these skilled ensured the promotion of procurement performance. The independent variables were found to have strong relationship on the dependent variable. However, Staff competency was found to have a stronger impact on procurement performance than procurement planning. In addressing the concerns of the findings, some recommendations are outlined: continuous improvement on the capacity of procurement officials, proper planning techniques, and future research should include other variables such as allocation and contract management to evaluate how they affect procurement performance in the public sector.

Keywords: Procurement, procurement performance, procurement planning, staff competency

1. Introduction

All around the world, public purchases are considered an extremely essential component in the delivery of goods and services to government institutions. It is imperative on the government to ensure that goods and services are provided efficiently to the public (Uyarra and Flanagan, 2009). Public sector comprises of public institutions and government departments, such as communication systems, roads, health services and transport services, who supply goods and services to the public. To ensure efficient delivery of goods and services, public institutions must be guided by public procurement requirement (Roodhooft and Abbeele, 2006). Public procurement is described as the process by which public sector organizations, ministries, and local authorities acquire goods and services (Roodhooft and Abbeele, 2006). The public procurement performance in most countries is controlled by public procurement laws and regulatory frameworks. During procurement, goods and services must be acquired in the right time and measure from the specific supplier and price in accordance with the principles of purchasing. Public procurement is the use of public funds by a procuring entity to acquire goods, services and works (World Bank, 1995). According to Makori (2011), 'due to the multiplicity of functions they have to achieve, public procurement systems are inherently complex and dynamic'. Public procurement has been found to be essential in-service delivery.

Public sector procurement in Ghana faces numerous challenges including skill development; recruiting the right people for the job as well as the retention of such procurement professionals and poor procurement planning. The problem of poor procurement performance in the public sector may be attributed to incompetent staff, outmoded procurement procedures that are now tedious, refusal to adapt e-procurement, sub-standard coordination of procurement activities and the absence of quality assurance policies (Shiele and McCue, 2006). The general objective of the study is to examine the role of planning and staff competency on procurement performance in public institutions using Bui Power Authority as a case study.

1.1. Public Procurement in Ghana

Public procurement in Ghana is regulated by the Public Procurement Act, 2003 (Act 663) and the Public Procurement (Amendment) Act, 2016 (Act 914). In order to ensure value for money and sanity in public procurement, the government of Ghana in 1996 launched the Public Financial Management Reform Programme also known as PUFMARF with the aim of improving public financial management in Ghana. Results from findings of lack of a holistic procurement policy, vague definitions of assigned roles and responsibilities for procurement entities and the absence of a comprehensive legal regime led to the creation of the Public Procurement Oversight Group in 1999 that was tasked with creating a holistic reform programme for public procurement which steered the draft and the passage of the Public Procurement Act in 2003 respectively (Ameyaw, Mensah, & Osei-Tutu, 2012).

In Ghana, Public Procurement Act, 2003 (Act 663) as amended in the Public Procurement (Amendment) Act, 2016 (Act 914) establishes various institution organs to handle procurement. Some of these organs include:

- Public Procurement Board, who shall be a body corporate with perpetual succession and common seal and may sue and be sued in its corporate name pursuant to section 1 (2) of the Public Procurement Act, 2003 (Act 663). Again, the Public Procurement Board, pursuant to section 3 of the Public Procurement Act, 2003 (Act 663) as amended in the Public Procurement (Amendment) Act, 2016 (Act 914) shall make proposals for the formulation of policies on procurement; ensure policy implementation and human resource development for public procurement; develop rules, instructions, other regulatory documentation on public procurement and formats for public procurement documentation;
- The Contract Administrator pursuant to Section 14 of the Public Procurement Act, 2003 (Act 663) as amended in the Public Procurement (Amendment) Act, 2016 (Act 914) shall manage the obligations and duties of the procurement entity specified in the contract; and ensure that the supplier or contractor performs the contract in accordance with its terms and conditions;
- Procurement entity pursuant to Section 15 of the Public Procurement Act, 2003 (Act 663) as amended in Section 16 of the Public Procurement (Amendment) Act, 2016 (Act 914) is responsible for procurement;
- Head of Procurement entity pursuant to Section 17 of the Public Procurement (Amendment) Act, 2016 (Act 914) and an officer to whom responsibility is delegated are responsible and accountable for action taken and for instructions as regards the implementation of the Act;
- Entity Tender Committee pursuant to Section 17 of the Public Procurement Act, 2003 (Act 663) as amended in Section 20 of the Public Procurement (Amendment) Act, 2016 (Act 914) shall ensure that each stage of procurement activity procedures prescribed in the Act have been followed;
- Other Committees in pursuant to the Public Procurement Act, 2003 (Act 663) as amended in the Public Procurement (Amendment) Act, 2016 (Act 914) established include the Procurement Unit, Tender Evaluation Panel, Tender Review Committees to ensure the procurement performance.

All these organs are established to contribute immensely to procurement performance in accordance with the established laws.

The Public Procurement Authority in Ghana oversees and ensures that all goods and services purchased by public institutions follow a harmonized procedure and are done in a way that ensures a cautious, profitable and efficient use of public resources. It is also to make sure that transactions are corruption free, fair, transparent, and impartial, while promoting competition among local industries.

1.2. Case Study Organisation

The Bui Power Authority is a public institution established by an Act of the Parliament of Ghana, BPA Act, 2007 (Act 740). Bui Power Authority (BPA) is mandated to plan, execute and manage the Bui Hydroelectric Project (BHP) (Bui Power Authority, 2015-2017). The main purpose of the Bui Hydroelectric Project (BHP) was to generate hydropower. The project was completed in 2013 and has since been in operation.

The operational activities being undertaken by Bui Power Authority include:

- Overseeing Asset Upkeep
- Producing and Selling Power.
- Managing Acquisition Area.
- Resettlement and Support of Project Affected Persons (PAP)
- Developing Power Facilities and
- Overseeing Work Camp Matters.

2. Literature Review

The performance of a firm depends not only on how efficiently it cooperates with its direct partners but also on how well these partners cooperate with their own business partners. The network theory, resource-based theory and the human capital theory are reviewed in this section since they help to explain procurement functions in organizations.

2.1. The concept of Balanced Score Card for Performance

The balanced scorecard methodology is explained by Kaplan and Norton (1992) as a comprehensive approach that examines an organization's overall performance in four ways, with the basis that assessing performance through financial returns only tells how well the organization performed before the assessment, in order that future performance can be anticipated and the required actions taken so as to create the preferred future.

The methodology studies performance in four parts: cost analysis with regard to procurement is the most commonly used performance indicator and includes assessing measures like costs of operating and return on investment (ROI); customer analysis examines customer satisfaction or need assessment and retention; internal analysis looks at production and invention and measures performance as maximizing profit from current products and following indicators for productivity later; and, learning and growth analysis examines how effective management is considering employee satisfaction and retention measures as well as the performance of information systems.

The balanced scorecard methodology breaks down broad goals sequentially into vision, based on which strategies are developed, tactical activities, and finally metrics. In the balanced scorecard methodology, an institution, as part of its mission statement includes a goal of maintaining employee satisfaction.

2.2. Network Theory

This is a descriptive theory that was developed in the 1970s and is primarily used and applied in the area of supply chain management to chart resources, actors and activities in a supply chain. It mainly defines interactions in which businesses, contractors, customers or buyers are engaged. Its focus is on developing a long-term relationship based on trust between members in the supply chain such as buyers and suppliers. This theory significantly contributes to understanding the underlying forces that are present in inter-organizational relations. It lays a lot of emphasis on trust between parties and encourages a build-up of trust in the form of lasting helpful relations and adapting effective routines and systems through exchange processes (Munyawera et al, 2018). This theory plays an integral role in this research since it helps explain the need for direct communication, as well as improvement in the relationship among employees and other members in the supply chain which can lead to improving performance in procurement and the ability to meet the requirements of customers or consumers.

2.3. Resource-Based Theory

Developed in 1984 by BirgeWenefeldt, this theory is a way of evaluating and detecting the strategic advantages of a firm grounded on an examination of its unique combination of skills, intangibles, assets and the capabilities of the firm. The underlying principles of the resource-based theory is on the idea that firms differ fundamentally because every firm employs a different medley of resources (both tangible and intangible), assets and the ability to effectively utilize these assets. Each organization tries to improve the capabilities of their resources and when thoroughly developed, becomes the foundation for its competitive advantage(Pearce and Robinson, 2007).

2.4. Measurement of Procurement Performance

Procurement performance according to Lukerto (2016) is normally the concentration on the internal and external audits requirements that is ensured in the context of effectiveness. Procurement performance is ensured when efficient procurement systems and laws are adopted. According to Perdu (2015), measuring procurement performance may contain certain key performance indicators. These are based on cost reduction, cost avoidance, value-added, procurement ratios, and stakeholder satisfaction.

In general, procurement performance in public sector organisations should focus on internal practices on effective, timely and efficient manner which can be measured in terms of timely delivery, quality products and delivery in right quantity at reasonable cost.

2.5. Procurement Planning

This is defined as the purchasing function through which organizations are able to obtain both products and services from suppliers (Amemba et al 2013). Procurement planning is often looked at as a vital function that engenders continuous procurement activities (Basheka, 2009). Procurement planning tries to provide answers to questions on what to procure, where to procure from, and the ways and means of procuring, time duration, when resources would be available for procuring and the individuals involved in the entire procurement process (Edler and Georghiou 2007). Basheka (2009) debates that procurement planning is one of the main functions of procurement which has the potential of contributing immensely to the success of local government operations and improved service delivery. A procurement plan can be described as good if it provides a detailed description of how pertinent suppliers are appointed contractually. At the beginning of any procurement plan, the items that would be procured must be defined, and then the stages for obtaining these items must be developed in detail. Lastly, the duration for delivery must be planned and arranged (Basheka 2009). Firms require standard procurement procedures which holistically covers all aspects of the procurement cycle, including supplier selection, contract negotiations, order placement and payment (Ouma and Jennifer, 2014).

Furthermore, Quentin (2003) stipulates that procurement planning is vital due to these reasons: it aids in deciding what to buy, when and from where to buy; it permits planners to identify if expectations are realistic; mainly those of the requesting entities, which generally expect their requirements met on short notice and over a shorter period than the application of the corresponding procurement method allows; it is a chance for all identified stakeholders to meet to discuss certain procurement requirements and laid down processes offer the required guidance to employees and demonstrates how the procurement function ought to work in order to achieve the stated objectives (Mamiro, 2010). Poor planning in the form of being unable to effectively identify the needs of employers or users in the organization breeds unethical practices such as misuse of resources and corruption in procurement departments.

2.6. Staff Competency in Procurement

Professionalism in procurement processes occurs when individuals with the right education and procurement ideas and do not engage in unlawful acts such as tender discrimination and choice of suppliers which could be detrimental to compliance (Adjei 2006; Gelderman et al, 2006). In other cases, in procurement, selecting a contractor that is both dependable and proficient for firms that desire to attain project success is a major concern in procurement in general (Fong and Choi, 2000, Lam et al., 2001, Eriksson and Laan, 2007; Malmberg, 2007, Kumaraswamy and Anvuur, 2008). Banda (2009) argues that the majority of organizations engaged in procurement lack the requisite staff with the right competencies that are fundamentally required to ensure good procurement management. There is, therefore, room for authorities to prioritize the development of the required competencies that promote best practices in procurement management. Furthermore, for huge projects, the cost incurred in engaging the services of advisers is significantly high and, in most cases, surpassed budgets by a significant margin. Hence, there is the need to reduce these costs and guarantee that workable budgets are adhered to through the development of staff competencies. In some cases in procurement, the source of failure in the effective monitoring and enforcement of quality standards stems from basic problems arising from the inability of the staff to monitor and set parameters during procurement processes such as proper determination of product specifications, clear definitions of requirements, an effective budget and failure to implement contractual terms and conditions is due to inadequate supervision from within the private sector as well as weak enforcement of regulations. Sultana (2012) studied the impact of training and performance, and suggested that some employees in procurement do not possess any qualification or certification in procurement and only a few have received the right sensitization. Most of them, therefore, have very little awareness of procurement functions. A study conducted by Barsemoi, Mwangagi and Asienyo (2014) on the factors affecting the procurement performance in the private sector in Kenya suggested that most of the employees that carried out procurement functions in government agencies had not been properly sensitized on procurement regulations. For sustained economic growth and improved performance, employers that are able to optimize the contribution from their employees can attain their aims and goals more effectively. Advancement in technology and changes in organizations has made it possible for employers to come to the realization that investing in training and development positively affects the level of skill and ability of employees which enhances the firm's success. Training provides an avenue for employees to perfect and improve their skills, knowledge, confidence, behaviours, and self-worth which enhances their ability to improve organizational performance.

Munyawera et al (2018)'s work on the role of procurement planning practices on the performance of state corporations in Rwanda found procurement planning and performance to be statistically significant. Results of their study also indicated that staff competence in the form of professionalism in cost estimates and quality specifications during procurement planning also enhances the performance of state corporations.

2.7. Conceptual Framework

According to Korhari (2004), the conceptual framework shows the diagrammatical presentation of the relationship existing between the independent and dependent variables. From the literature review, the researcher conceptualizes below:

Figure 1: Conceptual Framework Model

3. Methodology

The study adopted a descriptive research design, allowing the researcher reach many subjects within limited time (Kothari, 2005). A case study research strategies (Saunders et al 2009) was adopted to provide a deeper understanding of the processes and context of the research. For the purposes of gathering data from the case study institution, the mixed method approach was adopted. The purposive sampling was employed to sample executive and middle level managers of thirteen (13), unit heads of four (4) and procurement staff or administrative officers of six (6) pertinent to the procurement process, function and decision making of procurement function in Bui Power Authority from an entire population of sixty (60) employees. The researcher relied solely on the primary data collection through the use of questionnaire. Data collected were analyzed using both inferential and descriptive analysis in the Statistical Package for Service Solutions (SPSS).

4. Findings and Discussion

4.1. Procurement Performance

This study sought to examine the procurement performance of Bui Power Authority. The Table 1 below shows the results of the administered questionnaires.

Statement	Number	Mean	SD
Procured items are delivered on time	23	2.57	0.79
Inventory is managed effectively	23	2.70	0.93
Complaints on procured goods, services or works are few	23	2.65	1.07
Wastages and damages of procured items are minimal	23	3.26	0.96
Procurements do not exceed the approved allocated budget	23	3.13	0.97
Mean	23	2.86	0.94

Table 1: Procurement Performance of Bui Power Authority

*Source: Field Data (2018)

From the aggregate findings in Table 1, on a scale of 1 to 5 the overall mean score for procurement performance was 2.86 (Standard Deviation of 0.94). This shows that approximately 57.2% of the sampled respondents felt optimistic or had a positive outlook on the procurement performance of Bui Power Authority. Procurement performance had a standard deviation of 0.94 and showing that the fraction of employees that agreed with the statements ranged between 38.4% and 76% and those that did not agree with the statements ranged from 24.0% to 61.60%.

Most respondents felt that wastages and damages of procured items were minimal and that procurements in Bui Power did not exceed the approved allocated budget. These statements recorded the highest scores of 3.26 ± 0.96 (standard deviation) and 3.13 ± 0.97 respectively accounting for an agreement rate of 52.17% and 30.43% of the sampled respondents.

Areas that performed poorly in Bui Power were documented to be timeliness (2.57 ± 0.79), inventory (2.70 ± 0.93) management and few complaints made on goods or services that were procured indicating (2.62 ± 1.07) that these areas require a lot more attention to improve upon their procurement performance. These findings indicate that procurement performance at Bui Power Authority can be improved. Similar findings were documented by Fiattor (2014) in the health sector in Ho and Schiele, and McCue (2006) in the public sector.

Masudin et al (2018) postulates that in procurement purchased items may not be used immediately or sent to the departments that need the items. Circumstances may arise that would enable the procurement team to be accountable for monitoring and maintaining the inventory of procured items. Inventory management is undoubtedly one of the tasks of procurement management that completes the entire circle of the supply chain. There's more logistics and work that is required when inventory management is included, but it can afford the procurement team more control over their actions. An effectively managed inventory has the advantage of ensuring control over the demands of the firm's customers and translates into customer satisfaction and improved financial performance. Effectively managing procured items enables the firm to reduce cost (Burt et al, 2003).

4.2. Procurement Planning on Procurement Performance

Another aim of this study was to evaluate the role of procurement planning on procurement performance. Results from administered questionnaires can be found in the Table 2.

Statement	Number	Mean	SD
The organization has a procurement plan	23	4.17	0.58
The procurement plan is strictly followed	23	2.74	1.01
The procurement plan is developed together with user departments	23	3.70	1.18
The procurement plan is based on approved budget	23	3.96	0.82
Items are procured at the time specified by user departments	23	2.70	0.93
Mean	23	3.45	0.90

Table 2: Role of Planning on Procurement Performance

*Source: Field Data (2018)

From Table 2, with respect to the role of planning on procurement performance, on the average 69% (SD= 18%) of sampled respondents agreed that planning played a role in procurement performance.

In terms of the procurement plan, it can be noted that the organization had a procurement plan in place that was based on approved budget to guide its procurement process evidenced by the mean value of 4.17 and 3.96 representing a strong agreement of 83.4% and 79.2% of the sampled respondents. According to Kiage (2013) a procurement plan is needed to document and describe all the purchases from external suppliers that would be required to support the needs of a specific department and has the desired advantage of alerting departments of possible procurement opportunities through a tactical procurement outlook statement, aided by specifics of planned procurements. Unfortunately, most of the

respondents did not agree that this plan was strictly followed by the organization with a mean value of 2.74 representing approximately 47.89% of sampled respondents. In addition, there was a general agreement that most of the items procured are not procured at the time specified by user departments. Some scholars have also indicated that procurement in the public sector can be riddled with delays. It was also observed that majority of sampled respondents agreed that the procurement plan was developed with user departments of the company. This enhances accountability, efficiency and effectiveness of the procurement function and improves procurement planning. According to Marimo (2010) one of the main impediments in public procurement is poor management and planning of the procurement process which comprises of unidentified needs and impractical budgets. Hence a good workaround this problem would be to involve user departments in the procurement process.

4.3. Staff Competency on Procurement Performance

The Table 3 provide information on the views and perceptions of the role of staff competence on procurement performance.

Statement	Number	Mean	SD
Procurement staff have been adequately trained to perform their duties	23	3.04	0.93
Procurement staff are deployed based on skills	23	3.13	0.81
procurement staff have knowledge on procurement rules and regulations	23	3.87	0.69
Procurement staff have the adequate skills and qualifications	23	3.65	0.83
Training of staff has improved staff knowledge, skills and experience	23	3.61	0.78
Mean	23	3.46	0.81

Table 3: Role of Staff Competency on Procurement Performance

**Source: Field Data (2018)*

The study also sought to examine the competency of procurement staff and its effect on procurement performance. From the findings, 69.2% of the respondents indicated that procurement competencies significantly enhance procurement performance with only 30.43% of the sampled respondents agreeing to the statements that procurement staff have been adequately trained to perform their duties and were deployed based on their skills. Whereas 26% of the sampled respondents disagreed to these statements 47.80% neither agreed nor disagreed to these statements (47.80%). Due to the higher fraction of employees that chose to agree relative to those that did not agree, results of this study do not conform to those conducted by Chepleting and Makokha (2017) which suggests that staff in the public sector do not have the requisite skills and training needed to perform procurement functions. This therefore provides the researcher with the notion that staff competence in the public sector is dependent on the type and nature of the public firm. In other words, some public entities are better equipped and prepared to handle procurement functions better than others. It also leads to the notion that Bui Power Authority recognizes the importance of procurement in meeting its aim of objectives of providing access to electricity at affordable tariffs to all Ghanaians evidenced by high acceptance rates pertaining to knowledge about the procurement rules and regulations, right skills and qualifications possessed by procurement staff 78.26% and 56.52% of the sampled respondents agreed with these statements. According to Yuvenal (2013) procurement staff that are competent and professional are able to ensure minimal wastage of the organizations resources and are able to provide solutions to problems that could arise in procurement while staff that are incompetent could contribute to poor performance.

Even though this study did not ask the respondents to indicate the required skills procurement officers should possess Hudson (2008) suggests that it is paramount for procurement officers to possess a medley of skills ranging from technical, management, interpersonal skills and individual skills. The ability to make decisions and communication (interpersonal) are top skills and abilities that are required by purchasing officials since they mostly interact with customers and external suppliers. Competencies in procurement are a reflection of certain behaviours, traits, knowledge and values and as such public procurement officials in today's competitive work environment should possess versatile competencies (Jokinen, 2005).

4.4. Correlation and Regression Analysis

In order to establish the joint effect of procurement planning and staff competence on procurement performance correlation and regression analysis were used. This reports and discusses the results obtained from the correlation and multiple regression analysis described in the methodology of this study. These enable the research to determine the extent to which the independent variables used have an impact on the dependent variables.

5. Correlation Analysis

In order to evaluate the degree of strength between the variables spearman's coefficient of correlated was utilized. The correlation analysis is presented in Table 4.

	Procurement Performance	Procurement Planning	Staff Competency
Procurement performance Sig (2-tailed)	1 0.000	0.486** 0.000	0.686** 0.000
Procurement Planning Sig (2-tailed)	0.486** 0.000	1 0.000	0.744** 0.000
Staff competence Sig (2--tailed)	0.686** 0.000	0.744** 0.000	1

Table 4: Correlation Coefficient

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

From the Table 4, from inspection, it can be observed that procurement planning and procurement performance were positively correlated with a figure of 0.486 with the relationship significant at 99% confidence interval. This thereby suggests that as procurement planning increases the performance of Bui Power Authority should also increase. This finding was also reported by Odero and Ayub (2017)

Regarding staff competence and procurement performance a strong and positive relationship existed between the two parameters ($r=0.686$; $p<0.01$). Results therefore are in line with prior studies conducted by Hamza et al (2016) and Odero and Ayub (2017) where they found a positive and significant relationship between these parameters but with correlations of 70% and 60% respectively.

6. Regression Analysis

Multiple regression analysis was conducted so as to determine the influence of staff competence and procurement planning on the procurement performance at Bui Power Authority. Multiple regression is a statistical technique that enables researchers to predict a score of one variable on the basis of their scores on several other variables. Hence, the main purpose of this analysis is to learn more about the relationship existing between several independent variables and a dependent variable. Results of the multiple regression analysis used to determine the coefficient of determination that clarifies the degree to which alterations in the dependent variable can be explained by changes in the independent variables used. From table 4.6 the two independent variables of staff competence and procurement planning account for 56.70% of the procurement performance at Bui Power Authority.

Model	R	R²	Adjusted R²	Std. Error
1	0.785	0.5745	0.5670	0.6398

Table 5: Model Summary

From Table 5, the R^2 recorded a value of 0.5745 with the adjusted R^2 being 0.5670. The data used in analyzing the relationship between procurement performance and the independent variables due to the recorded adjusted R^2 value of 0.5670.

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.243	2	3.561	12.075	0.000
	Residual	6.358	40	0.160		
	Total	20.601	42			

Table 6: Analysis of Variance

Variance analysis (ANOVA) provided information on whether there was any difference between procurement performance and the independent variables. The recorded significance value of 0.000 in the study was less than 0.05 and as such the regression model was significant (statistically) in determining the extent to which the independent variables influence Bui Power Authority's procurement performance. Since the F calculated from Table 6 was 12.075 and was larger than the F critical (2.50) the entire model was significant.

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t.	Sig.
(Constant)	0.263	0.650		0.378	0.707
Procurement Planning	0.136	0.205	0.034	0.416	0.002
Staff Competence	0.820	0.106	0.665	5.288	0.000

Table 7: Regression Results

The regression took the form of $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$; where Y represents the dependent variable and X_1, X_2 represent the independent variables of procurement planning and staff competence. $\beta_0, \beta_1, \beta_2$ are the slopes with ϵ signifying the error term. According to the Table 7 above the regression model took the values of:
 $Y = 0.263 + 0.136X_1 + 0.820X_2$.

This means that if we were to assume that all the independent variables had a value of zero, the procurement performance at Bui Power Authority would be 0.263 and a unit increase in procurement planning would result in a 0.136 increment in procurement performance. Improving staff competence by a unit would translate into a 0.820 rise in the procurement performance of Bui Power Authority.

7. Conclusion

The performance of procurement at Bui Power Authority was high especially in the areas of wastages, budget controls and compliance. However, inventory management, delays in the procurement of items and complaints made on procured goods or services were areas that Bui Power Authority performed poorly in.

It was established that procurement planning had a positive and significant ($P\ 0.002 < 0.01$) impact on the performance of procurement at Bui Power Authority. Bui Power Authority had a procurement plan that was based on approved budgets and developed in conjunction with the required department. According to respondents however, the plan was not strictly followed at all times.

Again, the results obtained indicated a positive and significant impact of staff competency ($P\ 0.000 < 0.01$) on procurement performance at Bui Power Authority. A majority of the respondents agreed that procurement staff had been adequately trained and were deployed based on skills. This means that Bui Power Authority has competent staff and must continue to train the staff in order to enhance their skills

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