

Determinants of Procurement Performance in Wolaita Sodo University: Customers' Perception

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Abstract

The main purpose of this research was to identify the factors that determine procurement performance in Wolaita Sodo University. The specific objectives were to find out the influence of procurement planning, staff competency, top management support and work environment on procurement performance. The main focus of the study was Wolaita Sodo University. The study was guided by four Variables (Procurement planning, top management support, Staff Competency and Work Environment. The study employed causal research design. The target population was all procurement staff, college deans, officers and department heads in Wolaita Sodo University. These respondents are selected because they have the proximity and knowledge regarding procurement performance of Wolaita Sodo University. A questionnaire was the main data collection instruments. The study employs both quantitative and qualitative analysis techniques. In order to find out the determinants of procurement performance a regression model was used for analysis of the objectives. According to the research finding the four variables was tested by using regression model and Pearson correlation coefficient. So the three variables had found significant in influencing procurement performance and there is also a positive relationship between procurement performance and the three independent variables in Wolaita Sodo University. These variables are staff competency, top management support and work environment.

Keywords: Determinants of Procurement performance, procurement planning, Staff competency, Management Support and Work Environment

INTRODUCTION

This study seeks to explore the determinants affecting Public Procurement Performance in Wolaita Sodo University. The study focuses in Wolaita Sodo University. It targeted all staff working in the Procurement department and other main offices in academic and administrative wing.

The study by Kibet Willy & Dr Agnes Njeru 2014 shows that the preparation of annual procurement plans, frequency of formulation of procurement plans and the evaluation of the same contributes to the corporations' procurement performance. Therefore good plans result to effectiveness and efficiency in attaining projected results. Mamiro (2010) agrees with these findings and concludes that one of the major setbacks in public procurement is poor planning and management of the procurement process which include needs that are not well identified and estimated, unrealistic budgets, inadequacy of the skills of staff responsible for procurement, and lack of adherence to procurement plans

According to the research by Nzau, A. & Njeru, A. (2014). Procurement planning, top management support and staff competency has significant effect on procurement performance.

A Research study by Kayua, K.B. and Ngugi, K(2014) there are factors that determine procurement performance in public procurement. The study shows that staff in competency has a significant effect on procurement performance

Research by Oliveria and Martins (2011) the performance of procurement in development nations is determined by different factors. The main factors that greatly determine procurement performance is management support. According to the research technology adoption, procurement policies, employee training and top management support affect procurement performance of an organization. .

From the finding of the study by Kirande, J.o & Rothich G. (2014) work environment affect the procurement performance of public universities. Work condition for the procurement officers boost their morale which in turn boosts their productivity

According to the above reviewed literatures on procurement performance. There is significant impact and relationship among the variables. The variables are. Procurement planning, staff Competency, Top management and work environment with procurement performance

Procurement Performance

Lardenoije, van Raaij and van Weele (2005) asserted that basing on financial performance and neglecting non-financial performance cannot improve the procurement operations because only partial performance is considered. Realization of procurement goals is influenced by internal and external forces. Interactions between various elements; professionalism, staffing levels and budget resources, procurement organizational structure, regulations, rules, and guidance, and internal control policies, all need attention and influence procurement

performance. Christopher (2005) distinguished features of a responsive organization. Major transformations are; from functions to process, profit to performance, products to customers, inventory to information, and transactions to relationships. Critical measures of procurement performance need to be continuously monitored. The idea of 'Key Performance Indicators' (KPI) framework suggests that whereas there are many measures of procurement performance to be deployed in an organization, only a small number of critical dimensions contribute more than proportionately to success or failure. A balanced scorecard can provide guidance on critical areas where action may be needed to ensure achievement of goals. Three key outcomes of success are: better, faster, and cheaper. The goals combine customer-based measures of performance in terms of total quality with internal measures of resource and asset utilization.

Benchmarking helps identify current best practice and then focuses on how processes could be re-engineered and managed to achieve excellence in critical procurement areas. Emphasis should be on search for strategies that provide superior value in the eyes of customers seeking greater responsiveness and reliability. Van Weele (2006) maintained that there is a link between procurement process, efficiency, effectiveness and performance.

Procurement performance starts from purchasing efficiency and effectiveness in the procurement function in order to change from being reactive to being proactive to attain set performance levels in an entity. Performance provides the basis for an organization to assess how well it is progressing towards its predetermined objectives, identifies areas of strengths and weaknesses and decides on future initiatives with the goal of how to initiate performance improvements. Procurement performance is not an end in itself but a means to control and monitor the procurement function. For any organization to change its focus and become more competitive, performance is a key driver to improving quality of services. Nzau, A. & Njeru, A. (2014).

Research Hypothesis

This section presents a general hypothesis related to major determinant factors of the study. To develop a research hypothesis, detailed review of related literature is very important. This study tested whether there is significant influence and relationship among the following four variables, (Procurement planning, Staff competency, Top management support and work environment on procurement performance.

Accordingly, the study tests the following four hypotheses to achieve the research objectives. This were;-

H₀₁ Procurement Planning has no significant influence on the procurement performance of Wolaita sodo University

H₁₁ Procurement Planning has significant influence on the procurement performance of Wolaita sodo University

H₀₂ Staff Competency has no significant influence on procurement performance of Wolaita sodo University

H₁₂ Staff Competency has significant influence on procurement performance of Wolaita sodo University

H₀₃:- Top management support has no significant influence on the procurement performance of Wolaita sodo University

H₁₃ Top management support has significant influence on the procurement performance of Wolaita sodo University

H₀₄:- Work environment has no significant influence on the procurement performance of Wolaita sodo University

H₁₄ Work environment has significant influence on the procurement performance of Wolaita sodo University

RESEARCH METHODOLOGY (QUESTIONNAIRE, SAMPLE AND DATA COLLECTION METHOD)

In this research I used causal research design Causal Research explores the effect of one thing on another and more specifically, the effect of one variable on another. On this research the researcher wants to find out the effect of independent variable that is procurement planning, staff competency, top management support and work environment on procurement performance. This method is preferred because it allows for in-depth study of the case. The target population for the study is the 9 procurement employees and 30 deans, officers and 37 department heads of the University. This target population is picked since they were deemed to have knowledge on the study area. The following table summarizes the subjects of this study.

Purposive Sampling was used when research design necessitate researchers taking a decision about the individual participants who would be most likely to contribute appropriate data, both in terms of relevance and depth. . On this research the target population was picked since they were deemed to have knowledge on the study area. In the process of carrying out the study, both primary and secondary data source was used. The data collected through questionnaires, interviews would be analyzed. The Likert Five Point rating scale of 5, 4, 3, 2, and 1, and were used to analyze responses.

FINDINGS AND DATA ANALYSIS

Pearson's Product Moment Correlation Coefficient

In this study Pearson's Product Moment Correlation Coefficient was used to determine whether there is

significant relationship between Staff competency, Top management support and work environment with procurement performance. The following section presents the results of Pearson's Product Moment Correlation on the relationship between independent variables and dependent variable. The table below indicates that the correlation coefficients for the relationships between procurement performance and its independent variables are linear and positive ranging from substantial to medium level coefficients.

Table 4.6 the relationship b/n Procurement performance & determinant variables

| Affecting factors | Correlations, values and sample size | probability | Procurement Performance (value of Correlations, probabilities and sample size) |
|--------------------------------|--------------------------------------|-------------|---|
| Procurement performance | Pearson Correlation | | .858 |
| | P. value | | .000 |
| | N | | 68 |
| Staff competency | Pearson Correlation | | .399** |
| | P. value | | .000 |
| | N | | 68 |
| Top management support | Pearson Correlation | | .404** |
| | P. value | | .000 |
| | N | | 68 |
| Work environment | Pearson Correlation | | .427** |
| | P. value | | .000 |
| | N | | 68 |

The above table 4.6 provides a matrix of the correlation coefficients for the four variables. Each variable is perfectly correlated with itself and so correlation = 1 along the diagonal of the table.

Procurement performance is positively correlated to Staff competency with a Pearson correlation coefficient of $r = .339$ and the significance value is less than $.001$. Hence, the researcher can gain confidence that there is a positive relationship between procurement performance and staff competency. Procurement performance is positively correlated to top management support with a Pearson correlation coefficient of $r = .404$ and the significance value is less than $.000$. Therefore, the researcher can say that there is a positive relationship between procurement performance and top management support. Procurement performance is positively correlated to working environment with a Pearson correlation coefficient of $r = .427$ and the significance value is less than $.000$. Therefore, the researcher can say that there is a relationship between procurement performance and work environment. This shows that there was positive correlation between procurement performance and staff competency, top management support, and work environment.

Interpreting procurement performance affecting factors by using correlation coefficient squared (R^2)

The correlation coefficient squared (known as the coefficient of determination, R^2) is a measure of the amount of variability in one variable that is shared by the other.

Table correlation coefficient squared of dependent and independent variables

| No | Factors | Correlation | correlation coefficient squared (R^2) | Share of each factor |
|----|-------------------------|-------------|---|----------------------|
| 1 | Procurement performance | .858 | $(.858)^2 = 0.736164$ | 73.61% |
| 2 | Staff competency | .399 | $(.399)^2 = 0.159201$ | 15.92% |
| 3 | Top management support | .404 | $(.404)^2 = 0.163216$ | 16.32% |
| 4 | Work environment | .427 | $(.427)^2 = 0.182329$ | 18.23% |

Source :- (Field Data 2015)

Really the Procurement performances are varies from organization to organization because of any number of factors (different ability, different levels of working and so on). R^2 to shows that how much of this variability is shared by each factor. Staff competency shares 15.92 % of procurement performance affecting factors and it is correlated. ,top management support shares 16.92% of procurement performance affecting factors , work environment shares 18.23 % of procurement performance affecting factors respectively.

Table Regression Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|------|----------|-------------------|----------------------------|---------------|
| 1 | .664 | 0.441 | 0.415 | 0.74484 | 2.047 |

a. Predictors: (Constant), X4, X2, X3

b. Dependent Variable: Y

In table above According to the procurement users in wolaita Sodo University the three independent variables that were studied, explain only 44.1% of the factors affecting procurement performance from the

perception of users of procurement service in Wolaita Sodo University as represented by the R2. This therefore means that other factors not studied in this research contribute 55.9% of the factors affecting procurement performance in Wolaita Sodo University. One reason that makes other factors not studied large is that, one variable is excluded during factor analysis. Therefore, further research should be conducted to investigate the other factors 55.9% % that influence the factors affecting procurement performance in Wolaita Sodo University. According to users perception, x2 staff competencey,x3 top management support x4 work environment has significant influence in the procurement performance of wolaita sodo university. The other x1 procurement planning has not considered during factor analysis because of its validity.

Multiple regression model

In table above the regression model below has established that taking three independent variables into account notably; Staff competency, top management support, and work environment constant at Zero influences procurement performance (0.24). The results presented also shows that taking all other independent variables at zero, a unit increase in Staff competency leads to a 0.37 increase in procurement performance; a unit increase in top management support leads to 0.333 increase in procurement performance; and a unit increase in work environment leads to 0.286 increases in procurement performance. Inferences can therefore be made that Staff competency followed by top management support, and work environment determines procurement performance. a. Predictors: (Constant), Staff Competency, Top management support, and Work environment b. Dependent Variable: Procurement Performance.

From the regression findings, the substitution of the equation ($Y = \beta_0 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4$) becomes:
 $Y = 0.24 + 0.37x_2 + 0.333x_3 + 0.286x_4$

Where Y is the dependent variable (Procurement Performance) X2 is Staff competency, X3 is top management support, and X4 is work environment. According to the equation, taking all factors Staff competency, top management support, and work environment constant at zero, Procurement Performance will be 0.24.

From the results, Staff competency as a component of procurement Performance contributes most to the Performance of procurement, which has the greatest t value of 3.8, while work environment contributes the least, which has the smallest t value of 2.301.

Table multiple regression model Coefficients

| Model | | Unstandardized Coefficients | Std. Error | Standardized Coefficients | t | Sig. | Collinearity Statistics | VIF |
|-------|----------------------------|-----------------------------|------------|---------------------------|-------|-------|-------------------------|-------|
| | | B | | Beta | | | Tolerance | |
| 1 | (Constant) | 0.24 | 0.363 | | 0.662 | 0.511 | | |
| | X2(Staff Competency) | 0.37 | 0.097 | 0.372 | 3.8 | 0 | 0.91 | 1.099 |
| | X3(Top management support) | 0.333 | 0.117 | 0.295 | 2.84 | 0.006 | 0.812 | 1.231 |
| | X4(work environment) | 0.286 | 0.124 | 0.24 | 2.301 | 0.025 | 0.803 | 1.246 |

a. Dependent Variable: Y

Hypothesis testing

Table Test of hypothesis

| Determinants of procurement | Sig | P- Values | Decision |
|-----------------------------|--------------------------------|-----------------|-----------------------------------|
| Procurement planning | reduced during factor analysis | | H ₀₁ is accepted |
| Staff competency | .000 ** | P=.000, p<.05, | H₁₂ is accepted |
| Management support | .0006 ** | P=0.006, p<.05, | H₁₃ is accepted |
| Work environment | .0025 | P=0.025, p<.05, | H₁₄ is accepted |

** Significance (p< .05)

Hypothesis-1 Procurement planning has reduced during factor analysis because of its validity so hypothesis 1 is not accepted for further analysis and it is not also measured its significance level.

Hypothesis-2 Staff competency has a significant impact on the procurement performance of Wolaita sodo university. Staff competency is accepted because P=.000, p<.05,

Hypothesis-3:- Top management support has a significant influence on the procurement performance of Wolaita sodo university So top management support is accepted because P=0.006, p<.05,

Hypothesis-4:- Work environment has a significant impact on the Procurement performance of Wolaita sodo university is accepted because P=0.025, p<.05 which means Work environment has significant impact on Procurement performance in Wolaita Sodo university

To summarize the hypothesis testing, among four determinant variables that affect procurement performance. Three factors are statistically significant influence on Procurement performance of wolaita Sodo university,namely staff competency, top management support and work environment. but the other one factor

that is procurement planning is reduced during factor analysis.

Conclusion

- ✦ The findings in this study revealed that there is a significant positive relationship between procurement performance in Wolaita sodo University and the following determinants: Staff Competency, Top management support and work environment. This study is in line with the study by Kirande, J.o & Rothich G. (2014) ,oliveria and Martins (2011) and kayua, K.B. and Ngugi, K(2014).
- ✦ In the regression model we had established that taking three independent variables into account notably; Staff competency, top management support, and work environment constant at Zero influences procurement performance (0.24). The results presented also shows that taking all other independent variables at zero, a unit increase in Staff competency leads to a 0.37 increase in procurement performance; a unit increase in top management support leads to 0.333 increases in procurement performance; and a unit increase in work environment leads to 0.286 increases in procurement performance. Conclusions can therefore be made that Staff competency followed by top management support, and work environment determines procurement performance in wolaita Sodo University.
- ✦ The research shows that the three determinant factors account 44.1% influence on procurement performance. This shows that factors not studied on this research influences procurement performance 55.9%.
- ✦ Having motivated and well qualified staff are crucial for enhanced public procurement performance. From the findings it was deduced that the procurement staff in the universities had inadequate work experience in undertaking purchasing and supply functions. Procurement staff in the university had inadequate professional qualifications in purchasing and supply/procurement/supply chain management and had not been adequately trained and capacitated on the procurement procedures of the public procurement act and regulations.
- ✦ Majority of the respondents disagreed that their organizations continuously promoted training for procurement staff to improve their skills and that Procurement employees are creative in their Institution In addition, most of the respondents revealed that work environment influence procurement efficiency to a large extent.

5.3 Recommendation

- ✦ Procurement is a skilled profession that requires well trained people. The appropriate authorities need to ensure that procurement function is managed by qualified staff to ensure performance.
- ✦ The procurement staff in the university needs to have adequate professional qualifications in purchasing and supply chain management and be adequately trained and capacitated on the procurement procedures of the public procurement act and regulations. Workshop, seminars and short term training should be given to fill the skill gap of procurement staff. Strict follow up and supervision of top management also necessary to facilitate procurement work in the university.
- ✦ The research shows that the three determinant factors account 44.1% influence on procurement performance. This shows that factors not studied on this research influences procurement performance 55.9%. So further research study is needed in the future to identify these unstudied variables.

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