

The effect of staff competency on procurement efficiency in Ethiopian public universities

Belaynew Asrie Mola ^a, Bedilu Yismaw Alemu ^b

^{a,b} Lecturer, College of Business and Economics, Bahir Dar University, Bahir Dar, Ethiopia

Abstract

The study pursued to assess effect of staff competency on procurement efficiency among Ethiopian public universities. It was undertaken with a specific objective directed at examining the effect of staff competencies such as skills and knowledge, experience and training on procurement efficiency. The study followed a descriptive research approach. The Survey study using questionnaire was used to collect data from 42 procurement staffs; in selected Ethiopian public universities. To test the hypothesis multiple linear regression model was used. Accordingly, the data analysed from questionnaires revealed that Employee Competency had a strong impact on the procurement efficiency in Ethiopian public universities that were studied.

Keywords: staff competency, procurement efficiency

Introduction

Procurement is one of the important functions of government organizations. Since government is the main provider of essential services such as health, education, defense and infrastructure, large portion of the government expenditure, which has a huge impact on the economy, passes through this function. The estimated outlay for procurement accounts for 15% of GDP worldwide and up to 80% of the government budget of developing countries assigned for this function (Ssengooba, 2012). This is done through procurement function, making it to be very important, and the sheer magnitude of procurement outlay has a great impact to the economy and needs to be well managed. Thus strong procurement management in the public sector is a tool for achieving political, economic and social goals of the country.

The role of the procurement function in organizations has received and continues to receive increasing attention. It plays a key role for the attainment of organizational objectives by providing right quality of inputs for users at the right time and cost (Njeru, 2014). According to Wanyonyi, (2015), procurement is the nerve center of performance in every institution, whether public or private, and thus, needs a serious attention and tight system to be adopted and followed. In many developing countries, huge amounts of

domestic and foreign resources spend on public procurement. However, in a developed or developing country, employees who work on public procurement have and will face always many challenges including lack of employee's competency such as skills and knowledge, experience and training in the area of procurement profession. Public Procurement suffers from poor performance characterized by slow with a lot of bureaucracy, over spending, poor planning, poor monitoring, need for more transparency and accountability, eradication of wastage and corruption, addressing collusion in the tender evaluation and award, inadequate training of the procurement officers especially on the technical fields (Mutiga, 2005).

Ethiopia is making a large investment in infrastructure as one of the key contributions to the country's development plan. About 62% of the annual budget is expended on procurement for infrastructure development in transport, energy, water, agriculture, education, health, and other sectors. This comprises about 15% of the GDP of the country (Quinot & Arrowsmith, 2013). Having the objective to achieve better transparency, efficiency, fairness and impartiality in public procurement and to enable the utilization of the large sum of public money spent on procurement in a manner that ensures greater economy and efficiency, the Federal Democratic Republic of Ethiopian (FDRE) government established a public procurement proclamation, directives and different regulations.

According to corruption perception index (2014) Ethiopia is ranked 110th out of 175 with the least corrupt countries at the top. Billions of birr's were lost was through the procurement function. These are some of the issues surrounding the inefficiencies in procurement function in the government entities. This problem is not exceptional in public universities. The preliminary investigation in some public universities revealed that, there are various instances of items purchased don't match with items requested (wrong quality); purchases are excessively delayed (wrong timing); the purchasing process takes too long resulting in additional cost due to inflation.

Conceptual framework

Employee Competencies

The competency movement was originally initiated by McClelland (1973) as an alternative to the trait and intelligence approaches in measuring and predicting human performance. Shippmann, J. S et al (2000) defined competency as adequate knowledge to successfully complete job tasks. Competencies are developed within the organization through formal educational courses and training programs but also in the daily work (Kim, 1993). Education, training and professional development should be skill, process oriented and continuous. Qualifications enhance staff ability to perform, enabling them to make better decisions, work as a team, and adapt to change, while increasing efficiency, quality, productivity and job satisfaction. Saunders (1997) believed that successful functioning of organizational structures and effective operation of planning control systems is dependent on the quality and ability of staff employed. Competent staff are effective, efficient and provide solutions to the procurement problems while incompetent staff would be ineffective and inefficient thus contributing to poor performance for the company (Kiage, 2013).

Appiah, (2010) also observes that the current educational systems, do not necessarily impart specific knowledge for specific job positions in organizations. As a result of this the labor force comprises of few people with the right skills, knowledge and competencies needed for positions in the job market. There is therefore the need for extensive external training for human resources to be able to improve and also contribute to the productivity of organizations.

Compton (2007) suggests that effective execution of organization procurement procedures greatly depends on the level of employees' training since lack of professional trained staff on procurement functions limits the ability of the organizations to embrace procurement best practices through

benchmarking. Charles (2007) contends that lack of professional training is a key impediment to maintenance of high level of professionalism in the execution of procurement procedures in many public sector organizations. Hall (2009) argues that the efficiency and the effectiveness of procurement procedures are hindered by absence of effective continuous employees training programmes that help in equipping the employees with competitive procurement management skills.

Procurement efficiency

Procurement performance involves two main aspects: effectiveness and efficiency. Procurement efficiency is the relationship between planned and actual resources required to realize the established goals and objectives and related activities. The extent to which procurement function is able to obtain best value for spent organizational money to purchase products and services is the best indicator of procurement performance. Procurement performance strives to enable improvements in the procurement process in the organization so as to improve on quality delivery of firm products and services at least possible time and cost. Realization of procurement efficiency is influenced by the interactions between various elements; professionalism, staffing levels. In evaluating the staff competencies, the study sought to analyze the, education level, experience, and knowledge and leadership skills of the procurement team especially those involved in the administration of procurement contracts. Besides, the training and capacity development opportunities were considered. The study analyzed professionalism in the procurement function by analyzing the considerations to professional training and development of staff.

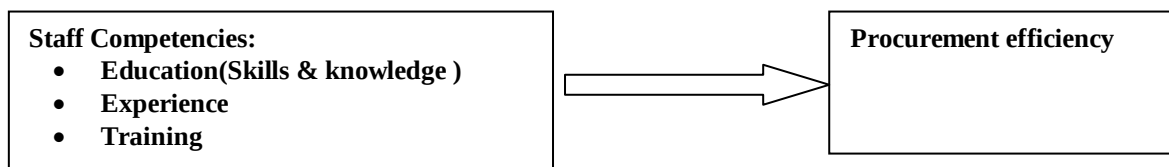


Figure 1: Proposed conceptual framework for procurement efficiency

Having the research problems and objectives discussed, this study intends to test the following hypotheses.

Hypothesis 1: skills and knowledge on procurement have a statistically significant influence on procurement efficiency in Public Universities in Ethiopia.

Hypothesis 2: work Experience on procurement has statistically significant influence on procurement performance in Public Universities in Ethiopia.

Hypothesis 3: training on procurement has a statistically significant influence on procurement efficiency in Public Universities in Ethiopia.

Objective of the Study

This study is designed to:

- Examine the effect of procurement skills and knowledge on procurement efficiency in Public Universities in Ethiopia.
- Assess the effect of work Experience on procurement efficiency in Public Universities in Ethiopia.
- Evaluate the effect of employee training on procurement efficiency in Public Universities in Ethiopia.

Research methodology

This section describes include research approaches, econometric model, research data and collection instruments, and data analysis methods or techniques to be used in the study.

Study Population, Sample Size and Sampling Technique

The target population for the study is the 32 public Ethiopian universities of procurement and property administration staff. These respondents are considered since they assumed have knowledge on the study area. The study includes all members of staff in all levels. The study was conducted in some selected Public University in Ethiopia. These include: Bahir Dar University, Gondar University, and Debre Tabor University. The selected universities were identified to represent other public universities because their procurement procedures, regulations, systems and challenges are the same. From 32 public Ethiopian universities three universities were randomly sampled (Bahir Dar, Gondar and D/tabor). All Procurement staffs of these universities were surveyed.

Data collection Instruments

The study was occasioned using self-administered questionnaires. The questionnaires were designed to seek information in determinant of procurement performance which included staff competency, application of information Communication Technology. The questionnaires were designed using both open ended and closed ended questions. Respondents' opinions were quantified by rating them on a five point Likert scale.

Data Analysis

The data collected was analyzed using inferential statistics. The collected data was processed and analyzed using Statistical Package for Social Sciences (SPSS) version 20. Multiple regression analysis and t-test statistics were used to determine the relationship between predictor variables (determinants) and the dependent variables (procurement efficiency). The study used the following multivariate linear regression model:

$$F(x) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \varepsilon$$

Where,

F(x)=procurement efficiency (dependent variable)

X₁=Skill and knowledge of procurement staff

X₂=Work experience on procurement

X₃= Training on procurement

β 's =parameter coefficients

ε —Random or stochastic term

Research Findings

Correlation Analysis

Table 1 presents the correlation test results which skills and knowledge has correlation of (0.873) and regular training (0.575), procurement experience (0.709) had a strong and positive correlation with procurement efficiency.

Table 1: Correlation Analysis

		Correlations			
		skills and knowledge	Regular Training	procurement experience	Procurement efficiency
skills and knowledge	Pearson Correlation	1	.483**	.667**	.873**
	Sig. (2-tailed)		.001	.000	.000
Regular Training	N	42	42	42	42
	Pearson Correlation	.483**	1	.267	.575**

procurement experience	Sig. (2-tailed)	.001		.087	.000
	N	42	42	42	42
	Pearson Correlation	.667**	.267	1	.709**
	Sig. (2-tailed)	.000	.087		.000
Procurement efficiency	N	42	42	42	42
	Pearson Correlation	.873**	.575**	.709**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	42	42	42	42

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

Model Summary Statistics

In order to establish the relationship between the study variables, the researchers used regression analysis to establish coefficient of determination (R) and correlation coefficient (R-Square). Coefficient of determination (R) measures the direction of the relationship while correlation coefficient measures the strength of the relationship. The study established coefficient of correlation (R) of 0.909 and coefficient determination (R-Square) of 0.827 while the adjusted R- Square was 0.813. Since R was large and positive, the results indicated a positive relationship between the study variables. The adjusted R square statistic indicates that the model as fitted explains 81% of the total variability in procurement efficiency. However, the model did not explain 19% of the variations in procurement efficiency.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.909 ^a	.827	.813	.35763

a. Predictors: (Constant), skills and knowledge , Regular Training, procurement experience

Model regression coefficient and Hypothesis testing

The hypotheses of this study were tested using the p-value of the respective independent variables from the multiple linear regressions with procurement efficiency as outcome variable and Employee Competencies (skill and knowledge, experience and training) as the independent variables. The significant values represented by p value are all < 5% (from 0.000 to 0.009); hence each has a statistically significant influence on procurement efficiency in Public Universities in Ethiopia.

Table 3: model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.119	.358		-3.122	.003
	Regular Training	.153	.055	.217	2.803	.008

procurement experience	.272	.099	.249	2.744	.009
skills and knowledge	.797	.132	.602	6.018	.000
a. Dependent Variable: Procurement efficiency					

The multiple linear regression models become:

Procurement performance = -1.119+ .153(Regular Training) + .272(procurement experience) + .797(skills and knowledge).

This therefore implies that when workers get a training program the procurement efficiency in Public Universities in Ethiopia will be improved by 0.153 (B=0.153) when other factors are held constant. Similarly, for other factors, procurement experience, skills and knowledge increased by one unit, the procurement performance improved by .272, and .797 respectively.

Conclusion

In the examination of the influence of staff competencies, the study concluded that the staff competencies have a significant influence on procurement performance in Public Universities in Ethiopia. the study concludes that staffs attained professional qualification; that organization undertake regular training for procurement department staff to enable them update their skills and knowledge and that organization undertake regular training for procurement department staff to enable the update their skills and knowledge and that procurement staffs are conversant with Public Procurement directive.

Recommendations

Universities should have competent professional workforce equipped with skills and knowledge for specified procurement. In the context of staff competencies, the study recommends that emphasis be placed on hiring qualified staff, on job training, and retaining experienced staff through organizational motivation mechanism.

Recommendations for Further Research

The study was undertaken in public universities in Ethiopia. It is recommended that the same study could be conducted across all public sectors in the country. This would provide a wide range of findings, conclusions and recommendations. In addition, a study could be conducted by linking the same independent variables with customer satisfaction instead of procurement efficiency

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