European Economic Letters
ISSN 2323-5233
Vol 15, Issue 1 (2025)
http://eelet.org.uk

FACTORS AFFECTING PUBLIC PROCUREMENT PERFORMANCE IN THE CONTEXT OF MICROFINANCE LOAN UTILIZATION: A CASE STUDY OF PUBLIC ORGANIZATIONS IN THE SOUTHERN REGION OF ETHIOPIA

Fikru Etana Gudeta
Ph.D. Scholar, Faculty of Management Studies,
Parul University, Vadodara, Gujarat, India
fikiruetana@yahoo.com
Dr. Mayur Rao
Ph. D Supervisor /Guide, Faculty of Management Studies,
Parul University, Vadodara, Gujarat, India
rao.mayur28@gmail.com

ABSTRACT
This research aims to examine factors affecting public procurement performance of public organizations: A case of Southern Region Ethiopia public organizations. Based on literature reviews, the researcher identified five factors that affect the procurement performance. These includes: procurement planning, operating procurement procedure, contract management, competency of staff, and application of Information Communication Technology on procurement. Purposive sampling technique was employed and a sample of 191 respondents was used to collect the data. However 173 were filled and returned questionnaires. The return rate was 90.6%.The research design is made based on descriptive and explanatory research design. Both primary and secondary data were used throughout this research. For primary data, both structured, semi structured type questionnaires and interview questions were prepared. Both descriptive and inferential data analysis methods were used. Beside descriptive statistics tools like frequencies, percentages, mean, and standard deviation are used to illustrate the demographic characteristics of respondents and perception of respondents from data collected through questionnaire. The study revealed that majority of respondents feel disagree on factors affecting procurement performance. Thus inferential statistics method like correlation analysis was used to assess the relationship the between independent variables and dependent variables. Multiple liner regression analysis also was employed to examine the influence of independent variables on dependent variable. Based on the finding of the study all factors affecting procurement performance have a positive correlation with procurement performance. The multiple regression analysis result revealed that all explanatory variables have a significant effect on procurement performance. This implies that the studied independent variables namely, procurement planning, operating procurement procedure, contract management, staff competency, and application of ICT have significant effect on procurement performance. Therefore, the study recommended that procurement planning should be continuous process and not a onetime event, operating procurement procedure should be revised to avoid redundant steps, contract management procedures should be improved, the staff working in the procurement department should be well trained in all procurement processes, and automate their procurement systems of the organizations.

Keywords: Factors, Procurement, and Performance

1. INTRODUCTION

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. The Procurement function usually takes large amounts of organizations' resources. Hence it is becoming an expensive undertaking for many organizations and if not properly done it can lead to significant regret (Japhath, 2013).

Ethiopian procurement manual (2011) counsels that procurement plan is an instrument for implementation of the budget and should be prepared by the user departments with a view to avoiding or minimizing excess votes in the entities' budgets and to ensure that procurements do not proceed unless there are funds to pay for them. This implies that all procurement plans must be well integrated into the budget process based on the indicative budget as appropriate and in compliance with the procurement law. Moreover, in developing country, many procurement activities still suffer from neglect, lack of proper direction, poor coordination, slow with a number of bureaucracy, lack of open competition and transparency, lack of accessibility, differing levels of corruption and not having a cadre of trained and qualified procurement officer who are

capable to conduct and manage the procurement process in a professional, timely and cost effective manner (Wanyonyi, 2015).

Mamiro (2010) described on his findings that one of the major setbacks in public procurement is poor procurement planning and management of the procurement process which include needs that are not well identified and estimated, unrealistic budgets, and inadequacy of skills of procurement staff responsible for procurement. In Ethiopia, More project works are being affected due to the lack of effective procurement process, which is the main cause of insufficient service delivery in all public sectors (Anteneh, 2015).

Another study conducted by Aketch and Karanja (2014) pointed out in their findings that there is a lack of efficiency in time use which results in additional cost, waste of time and problems on definition of quality due to specification gap on few items. These studies have also indicated that such poor practices could lead to the delay of procurement which has high effect on the needs and use of goods for intended purpose (Kumala and Abayneh, 2014).

This study identified the major factors affecting procurement performance of public organizations in Southern Region from organization's annual report of 2008 and 2009 E.C. those are: Departments do not request their procurement needs on timely base , lack of proper knowledge, skill and capacity of staffs, Poor implementation of Information communication technology ,inadequate linking of demand to the budget, poor contracts monitoring, lack of accountability, fraud and corruption practice, long duration of the purchase process and excessively delayed purchases (wrong timing). Furthermore, it has been becoming a serious hurdle on organizations procurement performance.

Additionally, I could be easily observed and complains were heard from end users regarding qualities of goods and services purchases, unfair purchasing price, excessively delayed purchases (wrong timing) and incurring additional costs as result of long duration of the purchase process.

Even though there were international and local empirical studies on procurement performance, these studies focused on the influence of procurement planning, employee competency, utilization of information communication technology and procurement procedures on procurement performance. Abebe Aberu (2017) conducted a research on factors affecting procurement performance in the Ethiopia public procurement and property disposal services. Zegeye Bekele (2015) conducted a research on factors affecting procurement performance of public higher education institutions. Boniface (2014) conducted a research on factors influencing public procurement performance in the Kenyan public sector.

Moreover, as to the researcher knowledge, no study has been undertaken regarding the factors that affect procurement performance of public organizations of Southern Region. This prompts the researcher to conduct the study on factors affecting public procurement performance. To this effect, it is crucial to find the fact through scientific research and to suggest appropriate remedies for the identified factors above and fill this research gap by examining factors such as procurement plans, operating procurement procedure, contract management, staff qualification, and application of ICT more specifically in Southern Region public organizations. The study tried to examine factors affecting procurement performance of public organizations of Sidama Region.

2. RESEARCH METHODOLOGY

The research approach

The research is made based on mixed method research approach. Because, mixed research is useful to capture the best of both qualitative and quantitative data and in these the researcher also intended to examine detail features of procurement practices in the public organizations. The advantage of using mixed methods is that it enables to triangulate and support the data and result collected by questionnaire (Saunders et.al, 2007).

Research design

This research has applied explanatory type of research since it attempts to describe the relationship between independent (factors affecting procurement performance) and dependent variables (procurement performance).

Target population

According to Sekaran (2009) population is the universe of units from which the sample is to be selected or it is an entire group of persons, or elements that have at least one thing in common. Target population for this study are all staffs

working at procurement and property administration work process and other staffs directly and indirectly linked with procurement process from Southern Region Finance and Economic Development Department.

Sampling technique

In regarding to the selection of respondents, the researcher used both probability and non-probability sampling technique (Saunders et.al, 2007). According to Walliman (2005) & Saunders (2007) purposive sampling is a useful sampling method which allows a researcher to get information from a sample of the population that knows most about the subject matter. Purposive or judgmental sampling method used to include all procurement officer and other staffs directly and indirectly linked with procurement process from selected public organizations and to include public organizations of Southern Region.

Sample size

A sample is a set of observations drawn from a population by a defined procedure. The target population 365 is large to calculate the minimum size out of targeted workers in the organizations. Yamane (as cited in Israel, 2009) the following formula to determine the sample size which is trustworthy when the population size is known. By considering the homogeneity of the respondents and to reduce the sample size the researchers applied 5% precision level in the formula.

$$n=\frac{N}{1+N(e)^2}$$

Where n = sample size N = population size e = probability of error (i.e., desired precision 0.05 for 95 confidence level)

The target population is 365; implying n is 191 it is derived below:

$$n=\frac{365}{1+365(0.05)^2}=191$$

Data collection method

The data collection instrument, for collecting the primary quantitative data was structured questionnaire that contains self-assessment items measured on 5-point Likert scale type (strongly disagree, disagree, neutral, agree, and strongly agree) and qualitative data collected in the form of open-ended questions-questionnaires were distributed to respondents to compensate for invalid and uncollected questionnaires. The questionnaires administered using a drop and pick later method. For this study an interview was conducted from Procurement and property administration core work process coordinator.

The questionnaire constitutes two parts; the first part aims at getting the personal information of respondents and it includes questions regarding educational status, work experience, and position. The second section of the questionnaire was designed to collect data about the overall information related to the factors affecting procurement performance of the organization and other supporting questions. Secondary data were collected from procurement core work process reports, public procurement manuals, literature (journals, magazines, other past studies, books and other relevant documents) on about procurement performance in Ethiopia and abroad literatures.

Data analysis methods

The data analysis was performed by using Microsoft Excel and SPSS version 20 software. The descriptive analysis techniques including frequency, percentages, means, and standard deviation were used. Additionally inferential analysis (correlation & multiple regression analysis) also used in this research. Correlation analysis was used to measure the direction, strength and significance of the relationship between the independent variables (procurement plans, operating procurement procedures, contract management, staff competency and application of ICT) and dependent variable (procurement performance).

3. RESULTS AND INTERPRETATION

Effects of procurement factors on procurement performance

To test the hypothesis, it was deemed appropriate to use multiple regression estimation for testing the proposal hypothesis since multiple linear regressions refers to an analysis concerned with the study of the dependence of one

variable, the dependent variable on more other variable, the independent variable, with a view to estimating and/or predicting the (population) mean or average value of the former in terms of the value of the latter (Pallant, 2016).

Due to the existence of significant correlation between procurement planning, operating procurement procedure, contract management, staff competency, & application ICT with procurement performance, it was mandatory to establish the strength of the predictive relationships between the variables. In line with the existence of significant associations amongst the construct, regression analysis was conducted in order to examine the correlation more closely and to examine the effects of the independent variables on the dependent variable. To test predictive relationships of procurement planning, operating procurement procedure, contract management, staff competency, & application ICT were used as independent variables and procurement performance was used as dependent variable.

R2 tells us how much of the variance in dependent variable is accounted for by the regression model from our sample, the adjusted R2 value tells us how much variance in dependent variable would be accounted for if the model had been derived from the population from which the sample was taken (Field, 2006). Regression coefficients (R) and R Square of the research are discussed below

Table 1: Results of regression analysis model summery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928	.862	.858	.252

Source: (Field survey result, 2022)

According to the model summery of multiple regression analysis in table 1, the value(R = 0.928) is the multiple correlation coefficient between independent variables (procurement planning, operating procurement procedure, contract management, staff competence and application of Information communication technology) and dependent variables (procurement performance) is a strong positive relationship; as a result working on those selected factors have positive impact on procurement performance of the public organization of Sidama Region.

The R^2 value measures of how much variability in the outcome is accounted for by the independent variable the result showed that a value of R^2 was 0.862, indicates that 86.2% variance in procurement performance was accounted by procurement planning, operating procurement procedure, contract management, staff competence and application of ICT while the rest 13.8% is explained or determined by other factors.

The standard error of the estimate is a measure variability of the multiple correlations. Therefore, as shown in the model summary for the regression analysis table above, the standard error of the estimate of this model is .252. This implies that the variability of the multiple correlations is as much as this numeral. Positive and significant of all values showed that model summary is also significant and therefore gives logical support for this study. This means the fitness of the model is explaining procurement performance is affected by the independent variables considered.

Model generalization

Generalization is a critical additional step and if we find that our model is not generalizable, and then we must restrict any conclusions based on the model to the sample used Field, (2006). The adjusted R square gives some idea of how well the model generalizes and ideally it would like its value to be the same or close to, the value of R square. In addition, the adjusted value tells us how much variance in dependent variable would be accounted for if the model had been derived from the population from which the sample was taken. The model generalization value is calculated by the difference between R square and adjusted R square Field, (2006). As a result model generalization summary of procurement performance is calculated as the difference between adjusted R square and R square. Referring table 1 above, value of adjusted R square and R square is, respectively. Hence the difference between R square and adjusted R square is give the shrinkage value 0.862-0.858 = 0.004, about 0.4%. This shrinkage means that if the model was derived from the population rather than a sample, it would account for approximately 0.4 % less variance in the outcome. Therefore, we can conclude that if this model is applied on the total population, only 0.4 % of variance occurs on the result.

Analysis of Variance (ANOVA)

ANOVA tests indicate that whether the model is significantly better at predicting the outcome than using the mean as a "best guess" (Field, 2006). ANOVA model is more likely to be significant, indicating that at least one group mean is different from another group mean. ANOVA is the appropriate statistical technique to examine the effect of a less-than interval independent variable on an at-least interval dependent variable. If the F test result is not significant, the model should be dismissed and there is no need to proceed to further steps (William & Barry, 2010). On the other hand, regarding to ANOVA test Saunders (2012) discussed that a very low significance value (usually less than 0.05) means that your coefficient is unlikely to have occurred by chance alone. A value greater than 0.05 means you can conclude that your coefficient of multiple determinations could have occurred by chance alone. Therefore, the ANOVA table and test result is presented and discussed below.

Table 2: Results of ANOVA out put

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	66.328	5	13.266	208.559	.000
	Residual	10.622	167	.064		
	Total	76.951	172			
a. Dependent Variable: procurement performance						

Source: (Field survey result, 2022)

According to table 2, shows analysis of variance (ANOVA) regression analysis between independent variable considered and a dependent variable procurement performance were examined. The ANOVA tells us whether the model, overall, results in a significantly good degree of prediction of the outcome variable (Field, 2009). The table depicts that in regression, the value of sum of square is 66.328, the value of degree of freedom (df) is 5, and the value of mean square is 13.266. The most important part of the table is the F-ratio, which is calculated using the below equation, and the associated significance value of that F-ratio. F- Ratio is a measure of how much the model has improved the prediction of the dependent variable (procurement performance) compared to the level inaccuracy of the model (Field, 2009). The value of F- statistics is 208.559 which is significant at $p < 0.001$(because the value in the column labeled sig < 0.001). This result tells us that there is 0.1 percent chance that F-ratio this large would happen if the null hypothesis true.

Coefficients of regression analysis

Standardized regression coefficient (Beta) is the estimated coefficient indicating the strength of relationship between an independent variable and dependent variable expressed on a standardized scale where higher absolute values indicate stronger relationships (range is from -1 to 1) (William and Barry, 2010).

Table 3: Regression Standardized Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	SE	Beta		
(Constant)	.361	.079		4.556	.000
Procurement planning	.295	.029	.347	10.122	.000
procurement procedure	.157	.031	.181	5.055	.000
contract management	.210	.034	.208	6.197	.000
staff competence	.377	.034	.364	11.030	.000
Implementation ICT	.167	.028	.201	5.886	.000

Note B=regression coefficient, SE= standard Error, Dependent Variable: procurement= performance
Source: (Field survey result, 2022)

To compare the different variables, it is important that you look at the standardized coefficient, not the unstandardized one. "Standardized" means that these values for each of the different variables have been converted to the same scale so that you can compare them. If you were interested in constructing a regression equation, you would use the unstandardized coefficient values listed as B (Pallant, 2016).

By examining the unstandardized regression coefficient (ß) for each of the predictor variables, the result found that procurement planning (ß1 = 0.295, $p < 0.05$), operating procurement procedures (ß2 = 0. 157, $p < 0.05$), contract management (ß3 = 0.210, $p < 0.05$), staff competency (ß4 = 0.377, $p < 0.05$ and application of ICT (ß5 =0.167, $p < 0.05$) resulted significant effect on procurement performance.

CONCLUSION AND RECOMMENDATIONS

According to the five R's of purchasing (at the right time, from the right source, at the right price, at the right quality, right quantity) public organization of Southern Region procurement unit is working poor. Therefore researcher recommends public organization has to work on the five R's of purchasing (right source, at the right price, at right time, at the right quality, right quantity) to improve its procurement performance in particular and organizational performance in general.

REFERENCE

1. Abayneh, K., &kumala, B. (2014).Significance framework agreement and factors influencing the adaption of E-procurement.The Case of Public Procurement and Property Disposal Services.
2. Abebe, A. (2017). Factors Affecting Procurement Performance in the Ethiopia public procurement and property disposal services
3. Anteneh, G. (2015). Assessment on Procurement Planning and Implementation: Effectiveness in Ethiopia: The Case of Ministry of Urban Development, Housing and Construction".
4. Boniface.S., Ikumu, A., &Chimwani, D. (2014).Factors influencing procurement performance in the Kenyan public sector.International Journal of Innovation and Applied studies.
5. Field, A. (2000). Discovering Statistics using SPSS for Windows.(2nd Edition). London. Thousand Oaks.
6. Field, A. (2006). Reliability Analysis.Introduction to descriptive statistic (2nd Edition). London. Thousand Oaks.
7. Israel, G.D. (2009). Determining the sample size (PEOD6). Florida: Gainesville: http://edis.ifas.ufl.edu/pd006.
8. Mamiro, R. G. (2010). Value for Money, the Limping Pillar in Public Procurement.Tanzania Procurement Journal, 4 -5.
9. Saunders, M. , Lewis. , P., and Thorn hill, A. (2007). Research Methods for Business Students. (4thed.). England: Pearson Education Limited.
10. Sekaran, U. (2005). Research Methods for Business, a Skill Building Approach, (7th Ed.). Essex: Pearson Education Ltd.
11. Zegeye, B. (2015). Factors Affecting Procurement Performance in Public Higher Education Institutions: The Case of Jimma College.