Determinants of Procurement Performance in Arba Minch University

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Abstract

The main purpose of the study is to assess the determinants of procurement performance at Arba Minch University. In this study, the researcher tries to see the correlation between the independent variable (management style, organizational culture, Information Technology (IT) adaption, staff competency, stockholders commitment and records management) and dependent variable (performance of procurement with appropriate time, price, and quantity, quality, source, budget consumption, and contract management). The study assessed theoretical, empirical, and conceptual review of related literature. The research design was descriptive (frequency and percentage) and explanatory design (Pearson product-moment correlation and multiple linear regressions) analysis with the help of SPSS 20.0 software packages was used and also used mixed approaches (quantitative and qualitative research approach). The finding was assessed procurement performance strongly affected management style, staff competency, organization culture, stockholders commitment, IT adoption, and records management. The data gathering tools were primary and secondary data which were questioner and focus group discussion from 210 respondents using self-administered questionnaire and 57 interviewers and the final response rate was 90.16%. The correlation result (0.75) shows there is a strong correlation between the outcome variable and the predictor variable. The regression result (r^2 =0.63) also shows predictor variables explain public procurement performance and except ICT adaption all predictor variables significant and high impact on performance and the reaming factors which account 0.36 which were unexplored variable affect procurement performance. The finding revealed that procurement performance was strongly affected by management style, staff competency, organization culture, stockholders' commitment, IT adoption, and records management. And the result of the finding shows in AMU there were to some extant problems in management style, staff competency, organization culture, stockholders' commitment, IT adoption, and records management which lead to less performance in public procurement.

Keywords: Procurement performance • Efficiency • Effectiveness

Introduction

Backgrounds of the study

Procurement can be defined as "the acquisition, whether under formal contract or otherwise, of goods, services, and works from third parties by contracting authorities from the right source, time, price, quality, and quantity ". In the broadest sense, the government defines procurement to include the entire process by which all classes of resources (People, materials, facilities, and services) for a particular project are obtained. Procurement is not simply the act of buying but "encompasses a complex range of operational, business, information technology, safety and risk management and legal systems, all designed to address on institution needs". An effective and efficient public procurement system is very important to the development of African countries and is a tangible implementation of their national commitments to make the best possible use of public scarce resources. As per the organization for Social and Economic Development on average developing countries public procurement accounts for up to 50% of GDP and 20% of public expenditures.

This huge budget allotment makes procurement as the heart of government operations [1-4].

"In Sub Saharan African Countries, studies have shown that out of the total public resources, procurement of goods, works and services account for about 70 percent of the total public expenditures" Gizachew, A. (n.d). As cited By Procurement is the nerve center of performance in every public or private institution, thus needs a tight system to be followed and adopted. Many procurement activities still poor in leadership style (lack of proper direction), poor organizational culture, poor record management, lack of stockholders commitment, lack of IT, and not having competent, trained and qualified procurement specialists who are competent to conduct and manage the procurement process in a professional, timely and cost effective manner [5,6].

"The efficiency and effectiveness of a public procurement system determine whether citizens get value from public expenditures. Procurement, when it is effective, improves service delivery, enhances trust between government and citizens, and assists in the development of a competitive private sector," [7].

According to a report prepared by the Ethiopian Procurement and Property Administration Agency, public procurement was started in Ethiopia in 1940 E. C, and the recent Ethiopia government, to serve its citizens, in which much amount of money is invested (more than 65% of the government budgets), to maximize government economic value and enhance procurement and property administration and, established the Public Procurement and Property Administration Agency under Proclamation No 649/2009. According to the Public Procurement and Property Administration Agency manual, since public organization entirely depends on the government budget and the organization's success comes mainly from appropriately spending the procurement budget, the public organizations should manage the public procurement systems by ensuring value for money [8].

Since Arba Minch University is a federal government institution, its budget is allocated and approved by the Ministry of Finance and Economic Development. The University is responsible to perform the procurement activities according

to the federal government procurement guidelines and manual. The high amount of budget allocated for procurement and the strict government regulations and procedures demand careful and effective procurement management. The University has a centralized and decentralized purchasing policy. The centralized policy concentrated on the Federal Procurement and Property Administration Agency and the University also decentralized to the campuses (AMU Procurement department manual). Studies have been carried out in the past concerning procurement especially in the public sector in Africa but, a few related studies were done in Ethiopia, and also as the knowledge of the researcher never found study conducted particularly in AMU concerning determinants of procurement performance. Different researchers in the different country identified problems in the efficiency and effectiveness of procurement and this study were assessed determinants of procurement performance particularly in AMU, and come up with these ideas and identify the determinant factors affecting the performance of procurement in Arba Minch University. Besides, this research aspires to be a pioneer in triggering further researches on the issue since it is an untouched area by researchers.

Statement of the problem

Procurement is vital to government service delivery, yet constraints (different factors) affect its performance. Despite the Ethiopian Government trying to improve the procurement system, it is still poor in procurement planning and implementation, poor organizational culture, ICT adoption, bureaucratic procurement procedures, poor quality goods and services, and poor records management, and lack of stockholders commitment. Suppliers complain about the capability of public sector buyers. Although procurement is perceived as a major function of government, and although governmental entities, policymakers, and procurement professionals have paid a great deal of attention to procurement improvements, procurement has been a neglected area of academic education and research [9,10].

Many procurement activities suffer from leadership style in implementing procurement plan, week in organizational culture, week record and contract management, week internal operation system in relation to stockholders commitment, poor in Information communication technology adoption and most importantly not having trained and qualified procurement specialists, who are competent to conduct and manage such procurements, in a professional, timely and cost-effective manner [11]. In Ethiopia, there is a problem in preparing and properly implementing a procurement plan in public institutions; most organizations have been undertaking too much unjustified and unplanned purchase in each budget year [12].

According to Tewodros research finding shows it is ineffective and inefficient in purchasing practice in Addis Ababa University College of commerce (AAUCC) (the Right quality, the right quantity, the right time, the right source and the right price). According to Amsalu keno, determinants of procurement performance in Wolaita Sodo University: customer perception (procurement planning, staff competence, management support, and work environment). Identified factors leading to effective procurement implementation in Amhara Region (familiarity, accountability, transparency, ethics, and efficiency) [13-15].

Research which was done in Kenya identified factors affecting the performance of procurement functions (strategic planning, organization culture, and regulation enforcement), (Wanyonyi & Muturi), and also study in Zimbabwe shows there are challenges in implementing procurement practice in developing countries [16]. So, similar to other researchers have done in a different area about procurement the focus of this study is to assess what are the determinant factors affecting procurement performance in AMU. This study most importantly tried to identify practical gaps in the performance of procurement practice in AMU. The rational or central problems that need solution are, procuring at the right time, with the right quality, the right contract, the right quantity, the right source the right price inappropriate allocated budget and satisfying customers by deploying all management style in implementation of the procurement plan, high competency of procurement officers in using annual procurement budget, high stockholders commitment, and efficient purchasing budget utilizations since a huge amount of budget spent at the end of the budget year that leads inefficient use of public resource and the federal government procurement directives and manuals to lead to bureaucratic operations and the filling and contract management system in AMU is too. As a result, this study sought to fill this research gap by identifying the determinant of procurement performance in AMU. The directive by the Federal Democratic Republic of Ethiopia (FDRE), to adhere to procurement is aimed at increasing effectiveness and efficiency and thus enhances competitiveness. To address the issues by stating the problem as the factors determining procurement performance at Arba Minch University in line with this, the study attempts to answer the following questions:

- What are the challenges of procurement at Arba Minch University?
- What is the correlation between procurement challenges and procurement performance?
- What is the effect of procurement challenges on organizational performance in Arba Minch University?
- Which challenges are the best predictors of overall procurement performance?

Objective of the study

General objective of the study: The general objective of this study is to assess the determinants of procurement performance in AMU.

Specific objectives: The specific objectives of the study were:

1. To identify challenges of procurement in Arba Minch University.
2. To examine the effect of procurement challenges on organizational performance in Arba Minch University
3. To show the possible direction to improve procurement performance for responsible bodies.

Conceptual framework

This part of the study was identified dependent and independent variables by deep assessment of theoretical and empirical framework from the related literature review in the determinants procurement performance. The dependent variable parameters to be used in assessing the performance of the procurement are: reduced lead time, satisfied customers, employee competency, and value for money, quality goods, and service and works. Each independent variable will be discussed in the literature review. From this, the researcher develops their own model from different sources (Figure 1).
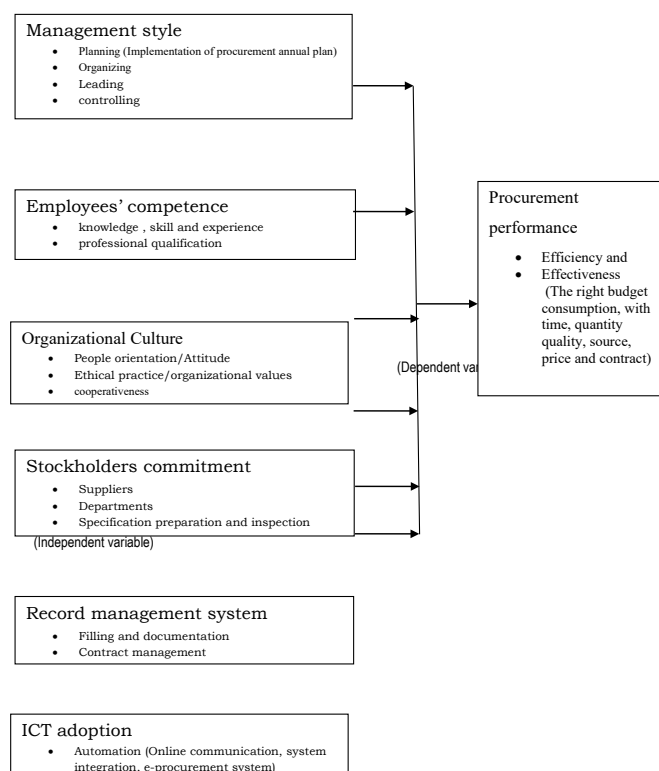
Figure 1. Conceptual framework. Source: Kiage (2013), Wanyonyi and Muturi (n.d) and (Bashuna, 2013) adapted from.

Hypothesis test

The hypothesis testes the significance of the predictor over the outcome variable in AMU

H1: management style has a significant effect on the performance of procurement in AMU.

H2: Employees' capacity/staff competency has a significant effect on the performance of procurement in AMU.

H3: Organizational culture has a significant effect on the performance of procurement in AMU.

H4: ICT adoption has a significant effect on the performance of procurement in AMU.

H5: Records management has a significant effect on the performance of Procurement in AMU.

H6: Stockholders' commitment has a significant effect on the performance of Procurement in AMU.

Scope of the study

The scope of this study was focus on determining factors affecting the performance of procurement in Arba Minch University 6 campus which is located in SNNPP region; specifically in Gamo Gofa Zone. This study will cover sub 6 campuses of Arba Minch University. In this study, only limited variables that determine procurement performance will assess other variables like job rotation, resource allocation, and external variables (political, economic, social, and market environment) will not include.

Significance of the study

Effective and efficient implementation of procurement practices plays a significant role towards enhancing the sustainability of organizational operations with less negative impact to environmental issues [17]. An organization that successfully manages to efficient implement procurement practices helps in minimizing procurement expenditure and sustaining organization operations continuously [18]. Therefore, the finding of this study provides a systematic and comprehensive insight into the state of procurement practices in higher education in general and Arba Minch University in particular. Besides, the finding of this study benefits particularly the university to improve procurement performance, the business community, and the country at large to know certain determinant factors affecting the performance of procurement practice and take measures to improve procurement performance. Furthermore, this study helps for a clear understanding of the reasons behind inefficient procurement practice and its implications on the accomplishment of AMU mission. Lastly, the finding of this study will contribute to the literature of the country on the subject and the output of the study will give information for different stakeholders and policymakers to strengthen public procurement. It also serves as a reference for other researchers who are volunteers to undertake a further investigation on similar or related topics.

Limitation of the study

Regardless of the fact that the researcher has made all the best to maximize its fruitfulness, the study subjected to some limitations that originated from its scope. Due to the purpose of the study, the researcher only focused on determinant factors affecting the performance of public procurement practice in AMU main campus. So, these may have a limitation on the results of the study to generalize/conclude/ about the whole of Ethiopia higher education procurement performance. Since the previous researchers were not given much emphasis to this issue, academic resources on issues helpful to the body of this study were very few. So; the researcher will constrain accessing adequate empirical studies conducted in Ethiopia which directly related to public procurement. Furthermore, since this study will employ cross-sectional design (three years of data), it is difficult to check the change that could be possible through the longitudinal survey.

Organization of the paper

This paper organized into five sections. The first section includes the research background, statement of the problem, the objective of the study, delimitation, significance and structure of the study, and the Second section examines theoretical and empirical framework from related researches and developed conceptual framework from review related literature. The third section dealt with the methodology of the study and also in the fourth chapter includes results and discussion. Finally, the conclusion and recommendation will be presented in chapter five.

Research Methodology

Study area

Arba Minch University is found in the southern part of the country 490 km away from Addis Ababa, the capital city of Ethiopia is located in the Eastern part of the town approximately three kilometers from the central square. It covers an area of over 150 hectares. Arba Minch University nestled at the foot of GamoGofa Mountain ranges facing huge Abaya and Chamo Lakes in idyllic surroundings forms the part of East African Rift Valley; its historical foundation dates back to late 1980s. AMU has consisted of an institute and six colleges situated across the university's sprawling six campuses i.e. Main Campus, Abaya, Chamo, Kulfo, NechSar, and Sawla.

The University main campus mainly organizes procurement activities and some part of procurement activities decentralizing to 5 campuses, including the main campus procurement directorate having 1 director 7 team leader 10higher expert 20 exports, and 18 procurement officers serve more than 3500 administrative and academic staffs having 210 middle and lower-level managers in a different position and having over 48,000 students by offers graduate degree and postgraduate degree and Ph.D. programs with regular, extension, summer and distance programs given by the University to be competent University in Africa as well as in the world in 2025 E.C is the vision of the University. And it started its operation by producing competent and innovative professionals, carrying out problem-solving research, and providing demand-driven community and consultancy service.

Study design

The descriptive and explanatory designs were employed in the study. According to Seiliger and Shohamy (1997), descriptive study is helpful when a researcher wants to look into a phenomenon or a process in its natural contexts to get its overall picture instead of taking one or some of its aspects and manipulating it in a simulated or an artificial setting. This design is appropriate because it gives an opportunity for one aspect of a problem to be studied in-depth and the causal relationship between variables with minimal expenditure of effort, time, and money. It is a scientific method of investigation where data will be collected and analyzed to describe the current conditions, terms, or relationships concerning a problem [19]. The design was used to describe and see a causal relationship between the independent variables (management style, staff competency, organizational culture, IT adoption, stockholders commitment, and records management) with the dependent variable (public procurement performance which is on-time delivery, right quality, right quantity, the right price, source and Economic value of goods, service, and works). This is appropriate to obtain information concerning the current status of the phenomenon to describe what the current situation and the cause and effect with respect to the variable of the study and also the researcher will use both quantitative and qualitative research approach because the data will be collected by using open-ended questioners and focus group discussion questioners in addition to closed-ended questioners. It also involves the use of both approaches in tandem so that the overall strength of the study is greater than either qualitative or quantitative research [20].

Sample size determination

The study population was targeted the academic and administrative staffs of middle, lower-level managers and procurement departments of Arba Minch University 6 campuses. The researcher was used purposive sampling techniques to select participants having middle and lower level managerial positions in order to get appropriate information from colleges and directorates. This is because managers in each category have more contact with the

procurement department/unite and have better knowledge about procurement practice than individuals across the University and the purposive sampling method helps in minimizing bias, free from errors when dealing with this type of population.

This study took all the middle and lower-level managers whose numbers were 210 from the total population of 3500 staff in AMU. Sample sizes of 210 respondents were for survey questionnaire and 57 respondents for focus group discussion question using purposive sampling technique from each 6 campuses. Questionnaires were distributed for colleges and directorates of 93 middle-level managers including deans, vice deans, directors, and vice directors and 117 for lower-level managers which include department heads, college research coordinators, directorate team leaders, and college administrators who have more responsibility and frequent contact with procurement department/unit and from 210 respondents 200 Questionnaires returned the remaining 10 was left due to different reasons.

Data gathering tools

The source of data for the study was the primary and secondary source. Primary data were collected from 6 campuses of Arba Minch University based on the respondent's feedback. The secondary information was obtained from files, Reports, office manuals, websites, articles journals and books were used to provide additional information where appropriate to make the study fruitful. Structured questionnaires and focus group discussion questions were used to collect primary data. The questionnaire contains close-ended(44) and open-ended (1) items of five points Likert scale type with five points ranging from one to five, representing strongly agree(5) to strongly disagree(1). Standardized questionnaires were adopted from different sources, mainly the questionnaire had been adopted from Gizachew, A.(n.d.) and [21]. With little modification in their study on internal factors affecting Drug procurement processes and factors affecting effective management of the procurement function respectively. The questionnaire and focus group discussion questions were prepared and questionnaires reliability checked by pilot test Cronbach's alpha and its validity checked by management instructors. The questionnaire was prepared in English because all of the target respondents' education level is degree and above.

Data quality assurances

To measure the reliability of the instruments used, Cranbach's alpha was employed. If the cronbach's error alpha is less than, 0.7, this means that the instrument used has low reliability (and thus opens for some errors). If the alpha value is more than 0.7, the instrument has acceptable [22]. A pilot test was used to pre-test or try out a research instrument. A sample size of 10%-12% is a reasonable number of participants to carry out a pilot test [23].

Method of data analysis

The collected primary data was processed by descriptive (frequency, percentage, and qualitative description) and inferential statistic (Pearson product-moment correlation and multiple linear regression) analysis with the help of statistical package for social science (SPSS) version 20.0 software packages, and this is due to the fact that the software package reduces time, cost and reduces the researcher's burden. The necessary steps such as questionnaire checking, editing, and coding, transcribing, data cleaning and statistical adjustment of data will be made before analyzing the data.

Descriptive statistics which includes frequencies and percentage will be used to present the main characteristics of the sample. In addition, the researchers will be conducted inferential statistic (a Pearson product-moment correlation and multiple linear regression analysis) to test the relationship among variables (independent) on public Procurement performance and the normality will be checked by p-p plot and by a histogram, and also the linearity, hetorodacitecity, and autocorrelation checked by scatter plot.

In this, study, a person's correlation coefficient was used to determine the relationship between the determent factors affecting public procurement performance (management style, staff competency, organizational culture, stockholders commitment, records management, and ICT adoption) on the performance of public procurement practice. Person correlation will be used to identify the correlation between independent and dependent variables.

Multiple regression analyses were used to identify the cause and effect relation between the predictor variable (management style, staff competency, organizational culture, stockholders commitment, records management, and ICT adoption) and the outcome variable which is the performance of public procurement practice (the right quality, price, quality, source and time in the appropriate budget). It is used because the study has multiple predictors and single outcome variables. This model was used to examine how multiple independent variables were related to a dependent variable as well as the actual predictive ability of the model for future cases. If there is more than one independent variable, there may be a more accurate prediction of the dependent variable.

The equation of multiple regressions on this study was generally built around two sets of variables, which were dependent variables (performance of public procurement practice and independent variables (management style, staff competency, organizational culture, stockholders commitment, records management, and ICT adoption). The basic objectives of using regression equation in this study were to make the researcher more effective at describing, understanding, predicting, and controlling the stated variables. The following multiple linear regressions model was used to test the research question:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$$

Equation 2.1

Where,

β_0 is the regression intercept; $\beta_1 - \beta_6$ are the regression coefficients; Y is the dependent variable (performance of public procurement practice in AMU); X1 is management style; X2 is employee's competence; X3 is organizational culture; and, X4 is ICT adoption, X5 is stockholders commitment and X6 is records management and also 'ε' is the error term.

Results and Discussion

Reliability analysis

The consistency checked by distributing for 12 respondents and the questioners were made adjustment which is not clear and redundant. After the adjustment the main survey respondent's cronbach alpha coefficient as shown in Table 1. From Table 1 the predictor variables Cranbach's alpha is 0.79 and the outcome variable alpha value is 0.89 which is reliable. According to Sekaran (2003), if the cronbach's error alpha is less than, 0.7, this means that the instrument used has low reliability (and thus opens for some errors). If the alpha value is greater than 0.7, the instrument has acceptable.

Background of respondents

In this section sex, age, and managerial position distribution of respondents were discussed As depicted in Table 2 from 200 respondents, 87% were males and the remaining 13% were females. This shows that majority of managerial position in the university was dominated by male. With regard to the age category of the respondents, 1.5% respondents belonged to an age group below 22 years, 29% of the respondent's replied that their age was found within the range of 22-30 years, 44.5% of respondents belonged to age group 31-40 years and 16% of respondents belonged to age group 41-50 years and only 9% of respondents belonged to age group above 51 years. This shows that majority of the respondents' age was found within the range 22-50 age. This implies that large numbers of the respondents were adults which are believed to be a highly active age group. In relation to the managerial positions 1.5% higher, 54.5% middle, and 44% lower level managers which shows the data mostly collected from middle and lower-level managers.

It can be understood from Table 3, in terms of educational level respondents have a range of educational qualification from degree to Ph.D. and above 62.5% of respondents were masters' holder and followed by first-degree holders representing 29.5% and the remaining 8% of the respondents were Ph.D. holders. These show that majority of the respondents were educated. Regarding to service year majorities (58.5%) of respondents were served for 1-6 years, 17% of respondents served for below 1 year and 15% of respondents served 7-9 years and 9.5% of respondents served more than 9 years. This implies that large numbers of the respondents were less experienced in managerial positions.

Table 1. Reliability analysis.

Variables Name	Cronbach Alpha Coefficient	Number of Items	Predictor Variables Alpha Coefficient	Number of Respondents
Management style	0.71	8		
Staff competency	0.74	5		
Organizational culture	0.83	8		
Stockholders commitment	0.72	6	0.79	200
ICT adoption	0.85	5		
Records management	0.73	4		
performance/outcome variable	0.89	6	-	

Source: Own survey results, 2020.

Table 2. Sex, age, and managerial position distribution of respondents.

Respondents	Managerial position			Sex		Age of Respondents					Total
	Higher level	Middle level	Lower level	male	female	Below 22 year	22-30 years	31-40 years	41-50 years	Above 51 years	
Administrative and Academic staffs	3 (1.5%)	109 (54.5%)	88 (44%)	174 (87%)	26 (13%)	3 (1.5%)	58 (29%)	89 (44.5%)	32 (16%)	18 (9%)	200 (100%)

Source: own survey results, 2020.

Table 3. Distribution of respondents by education level and service year.

Respondents	Educational level					Service year					Total
	Below degree	degree	masters	PhD and above	total	Below 1 year	1-3 years	4-6 years	7-9 years	Above 9 years	
Administrative and Academic staffs	0 (0%)	59 (29.5%)	125 (62.5%)	16 (8%)	200 (100.2%)	34 (17%)	55 (27.5%)	62 (31%)	30 (15%)	19 (9.5%)	200 (100%)

Source: own survey results, 2020.

Analysis of determinates of public procurement and performance

Descriptive analysis: In this part, the agreement of determinants of public procurement and its performances were analyzed item by item based on the response rate of respondents. As Table 4 shows respondents were asked whether urgency work program is a major challenge to implement procurement plan or not. As a result, 110 (55%) respondents replied that urgency work program /harsh order is a major challenge to implement procurement plan. On the other hand, 60 respondents representing 30% indicates neutral and the remaining 30(15%) harsh order is not a major challenge to implement procurement plan. Therefore, based on the above result we can deduce that urgency work program is a major challenge to implement procurement plan.

The respondents were also asked about public procurement bureaucratic procedures and the finding indicates that 80 respondents representing 40% replied that the presence of long procedures to acquire martials. On the other hand, 32.5% of the respondents indicate neutral and the remaining 54 (27%) agree on the long procedures. From this, the researcher concluded that the presence of public procurement bureaucratic procedures in AMU.

From the respondent's response 85 (42.5%) indicated that on-time need requisition is one hindrance to implement an annual procurement plan that leads to poor public procurement performance. On the other hand, 44 (22%) is needed requisition not a factor for proper implementation of procurement plan and 69 (34.5%) indicates neutral. From this, the researcher deduces that need requisition was one of the challenges to implement annual procurement plan, and also it indicates even if planning present in procurement implementation

based on the plan is also a major challenge. And also the grand mean (2.66) result shows respondents disagree on the proper implementation of procurement plan in AMU. Therefore, the findings of this study consistent with Mamiro.

According to (Mamiro, 2010) side that one of the major setbacks in public procurement is poor planning and the management of the procurement process which include that needs that are not well identified and estimated, urgency of work program, unclear specification and not having participatory procurement plan and implementation as planned. The overall grand mean (3.00) indicates most respondents were neutral to give a response.

As shown in Table 5 the respondents were asked about the competency of the procurement staff and most of them (37%) answered neutrally. 28.7% of the respondent show their level of disagreement and 33.9% of respondents show their level of agreement. The grand mean (3.00) also shows the level of neutral response. From this, the researcher concludes that there is a gap in staff competency like skill, motive, empowerment, knowledge, and experience in procuring goods, services, and works and also most respondents do not interested to give comments and also the majority of the respondent agrees on staff competence but the performance is poor and the reason may be different. Procurement professionals need a set of flexible skills due to changing local government contexts. No single skill can be adequate to manage the procurement portfolio of great complexity in local government systems procurement tasks demand professionals with a high level of strategic, tactical as well as operational skills [24].

As shown in Table 6 the respondents asked for their level of agreement

about transparency and accountability, collaboration between staffs and other departments, decentralization procurement system, accessibility of laws and regulations, and officials obey by ethical principles and showed their level of disagreement (37.20%). On the other hand, respondents were asked about the management accessibility and promoting cooperation between different departments and replied that there is most positive response (82%) and from the average response (31%) respondents were neutral and (30.4%) shows their agreement. From this, it can be concluded that the majority of the respondents are showing their level of disagreement whereas the reaming percentage is neutral on organizational culture on public procurement of AMU.

As shown in Table 7 the respondents' opinion were collected about information communication technology (ICT) adoption and ICT infrastructure facility in Arba Minch University and the majority of respondents 38%) replied that their level of disagreement. The grand mean (2.86.) result also shows the level of disagreement. From this, it can be concluded that there was poor ICT adoption on procurement practice in AMU.

As shown in Table 8 respondents were asked the relationship of external as well as internal stockholders and the finding indicates that 30.12% of respondents reply their agreement, 34.13% of respondents reply their disagreement, and 35.8% of respondents reply neutral. From this, the researcher concluded that most of the respondents did not have information about procurement the some of them were satisfied, and others were dissatisfied with stockholders' commitment. The respondents also asked about clarity and completeness of specification preparation by the concerned department and the finding indicated that 23% of respondents showed their disagreements, 33% agreed others 42% neutral. From this, the researcher concludes that there is a problem in preparing clear and complete specification from the concerned department. Lysons and Gullingham (2003), confirm that procurement personnel should be knowledgeable about specifications to be able to secure value for money for their employers and play their role of intermediaries between the user and the supplier.

As shown in Table 9 the respondents were asked about adequate procurement record activities, easy accessibility of files, controlling of suppliers, and good file and contract management in Arba Minch University and the majority of respondents replied that their level of neutrality (38.25%) and also the grand mean (3.22) result also shows the level of neutrality. The reaming and shows their level of disagreement (30.76%) and level of their

Table 4. Response on management style.

No	Item/Questions	Rate of Response					mean	SD. deviation
		Strongly disagree	disagree	Neutral	agree	Strongly agree		
1	Employees and other stakeholders have easy access to senior management	5 (2.5%)	28 (14%)	72 (36%)	61 (30.5%)	33 (16.5%)	3.45	1.00
2	Need requisition is planned to implement annual procurement plan	9 (4.5%)	76 (38%))	69 (34.5%)	28 (14%)	16 (8%)	2.56	0.66
3	Strict follow up and expediting to implement annual procurement plan	22 (11%)	46 (23%)	73 (36.5%)	50 (25%)	9 (4.5%)	2.89	1.05
4	Procurement planning is participatory to implement procurement plan	15 (7.5%)	46 (23%)	62 (31%)	61 (30.5%)	14 (7%)	3.07	1.06
5	Urgency work program is not a major challenge to implement procurement plan	0 (0%)	110 (55%)	60 (30%)	28 (14%)	2 (1%)	2.61	0.76
6	Leaders are not more bureaucratic in arba Minch university	1 (.5%)	79 (39.5%)	65 (32.5%)	54 (27%)	0 (0%)	2.86	0.82
7	Procurement decision making process is independent and transparent	18 (9%)	43 (21.5%)	74 (37%)	50 (25%)	15 (7.5%)	3.01	1.06
8	Leaders are not Laissez-faire	0 (0%)	57 (28.5%)	87 (43.5%)	46 (23%)	2 (1%)	2.96	0.76
	Average Response	6 (3%)	60.63 (30.31%)	70.25 (35.12%)	47.25 (23.6%)	11.38 (5.8%)	3.00	0.90
			33.3%	35.12%	29.4%			

Source: Own survey results, 2020.

Table 5. Response on staff competency.

S. No	Item/Questions	Rate of Response					mean	SD. deviation
		Strongly disagree	disagree	Neutral	agree	Strongly agree		
1	Procurement staffs have knowledge to work effectively	10 (5%)	38 (19%)	69 (34.5%)	62 (31%)	20 (10%)	3.22	1.03
2	Procurement staff have motives and empowered to do their work	10 (5%)	51 (25.5%)	76 (38%)	49 (24.5%)	12 (6%)	3.01	0.97
3	There is continues training on procurement directives and manuals	20 (10%)	47 (23.5%)	69 (34.5%)	56 (28%)	8 (4%)	2.93	1.03
4	Procurement staffs have the skills and abilities to do their work well	12 (6%)	31 (15.5%)	82 (41%)	62 (31%)	13 (6.5%)	3.17	0.97
5	Procurement staffs do their work effectively and efficiently	16 (8%)	52 (26%)	74 (37%)	48 (24%)	9 (4.5%)	2.91	1.00
	Average Response	13.5(6.8%)	43.8(21.9%)	74(37%)	55.4(27.7%)	12.4(6.2%)	3.00	1.00
			28.7%	37%	33.9%			

Source: Own survey results, 2020.

Table 6. Response on organizational culture.

S.No	Item/Questions	Rate of response					mean	SD. deviation
		Strongly disagree	disagree	Neutral	agree	Strongly agree		
1	There are transparency and accountability in the procurement process.	18 (9%)	57 (28.5%)	64 (32%)	51 (28.5%)	10 (5%)	2.89	1.05
2	The university procurement staff works together to achieve procurement objectives.	10 (5%)	56 (28%)	71 (35.5%)	52 (26%)	11.5 (5.5%)	2.99	0.98
3	Procurement system is decentralized in Arba Minch university	82 (41%)	45 (22.5%)	42 (21%)	17 (8.5%)	14 (7%)	2.96	1.03
4	The university senior management promotes cooperation between different departments and staff levels.	5 (2.5%)	39 (19.5%)	64 (32%)	74 (37%)	18 (9%)	3.31	0.96
5	officials involved in the procurement are using their position properly	5 (2.5%)	41 (20.5%)	81 (40.5%)	62 (31%)	11 (5.5%)	3.17	0.90
6	Laws and regulations concerning procurements are easily accessible and addressed to the user.	24 (12%)	58 (29%)	59 (29.5%)	47 (23.5%)	11 (5.5%)	2.81	1.09
7	Officers involved in procurement are committed to high standards for professional conduct	16 (8%)	59 (29.5%)	57 (28.5%)	63 (31.5%)	5 (2.5%)	2.91	1.01
8	There is an adequate system in place to prevent fraud and corruption in procurement	19 (9.5%)	62 (31%)	67 (33.5%)	44 (22%)	7 (3.5%)	2.99	1.01
Average Response		22.35 (11.17%)	52.12 (26.06%)	63.12 (31.06%)	51.25 (25.07%)	10.94 (5.46%)	3.00	1.00
		37.20%		31%	30.40%			

Source: Own survey results, 2020.

Table 7. Response on ICT adoption.

No	Item/Questions	Rate of response					mean	SD. deviation
		Strongly disagree	disagree	Neutral	agree	Strongly agree		
1	The university officials and leaders strive to ICT adoption in order to enhance the procurement processes.	18 (9%)	61 (30.5%)	61 (30.5%)	51 (25.5%)	9 (4.5%)	2.86	1.04
2	Procurement staffs are provide excellent service to their customers by using ICT	28 (14%)	66 (33%)	58 (29%)	40 (20%)	8 (4%)	2.67	1.07
3	The leaders in the university strive to facilitate ICT infrastructure to be cost effective in procurement process	18 (9%)	54 (27%)	53 (26.5%)	62 (31%)	12 (6%)	2.98	1.09
4	Leaders are implementing scalable communication infrastructures to enhance procurement service	18 (9%)	48 (24%)	71 (35.5%)	47 (23.5%)	16 (8%)	2.98	1.07
5	The university automate the procurement system to improve procurement service	22 (11%)	50 (71%)	71 (35.5%)	49 (24.5%)	8 (4%)	2.86	1.04
Average Response		20.8 (10.4%)	55.8 (27.9%)	62 (31.4%)	49.8 (24.9%)	10.6 (5.3%)	**2.86**	**1.06**
		38.3%		31.4%	30.2%			

Source: Own survey results, 2020.

agreement (27.13%) respectively. From this, it can be said that there is a great difference in users' understanding and flow up of the procurement system at Arba Minch University (Figure 2).

As Table 10 (Figure 2) the responses were given by the respondents feeling about their satisfaction, buying at the right quality, quantity, time, source, and price with the overall aspects of the performance of public procurement practice and the grand mean (2.25) response result in Arba Minch University and the majority (65%) of the respondents showed their disagreement about the performance of procurement. This implies that there was a problem in buying the right quality, price, quantity, source, and time and having a greater impact on the performance of public procurement at Arba Minch University.

Inferential analysis

Correlation analysis: From Table 11, finding shows that there is a positive correlation between the dependent variable (performance of public procurement) and independent variable (management style in implementation of annual procurement plan, staff competency, organizational culture, ICT adoption, stockholders commitment and records management). When the

correlation is 1 or -1, a perfectly linear positive or negative relationship exists; when the correlation is 0, there is no relationship between the two sets of data (Coetzee, 2003). If the correlation between two variables is from 0 to 0.19, every week, from 0.20 to 0.39, weak, from 0.40 to 0.59, moderate, from 0.60 to 0.79, strong and from 0.80 to very strong (Evans, 1996). As a result this study finds that there is a moderate correlation between the dependent and independent variables and also a moderate correlation between independent variables. When considering the correlation between the independent variable and dependent variable (effectiveness), the larger the magnitude of the correlation, the stronger the linear association. This implies the variables are significant at p= 0.000 significance at 99% confidence level which is $p \leq 0.05$ and Pearson Correlation result for all variables are positive. Multi colinearity is not a threat if a correlation value is less than 80% (Kline, 1998). Since the correlation between the independent variable is positive and less than 0.8 and no multi co linarite problem exists.

Regression analysis: From this regression result this liner mathematical model developed:

$$Y = \beta0 + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \beta5X5 + \beta6X6 + \varepsilon$$

Table 8. Response on Stock holder's commitment.

S.No	Item/Questions	Rate of response					Mean	SD. deviation
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
1	Regular meeting about procurement with internal and external customers	16 (8%)	57 (28.5%)	74 (37%)	51 (25.5%)	2 (1%)	2.83	0.93
2	Strong buyer-supplier relationship	13 (6.5%)	53 (26.5%)	85 (42.5%)	40 (20%)	34 (17%)	2.89	0.97
3	Procurement staff collaboration with other departments	7 (3.5%)	55 (27.5%)	70 (35%)	60 (30%)	4 (2%)	2.99	0.90
4	Attentions given for procurement department	9 (4.5%)	48 (24%)	60 (30%)	76 (38%)	8 (4%)	3.14	0.97
5	Clear and complete specification is prepared by responsible persons	10 (5%)	54 (27%)	56 (28%)	70 (35%)	10 (5%)	3.08	1.00
6	Separation and segregation of duty in procurement staff	8 (4%)	38 (19%)	84 (42%)	60 (30%)	9 (3%)	3.12	0.91
	Average Response	10.5 (5.25%)	50.83 (25.9%)	71.5 (35.75%)	58.5 (28.75%)	11.16 (5.58%)	3.00	0.95
		30.12%		35.75%	34.13%			

Source: Own survey results, 2020.

Table 9. Response on records management.

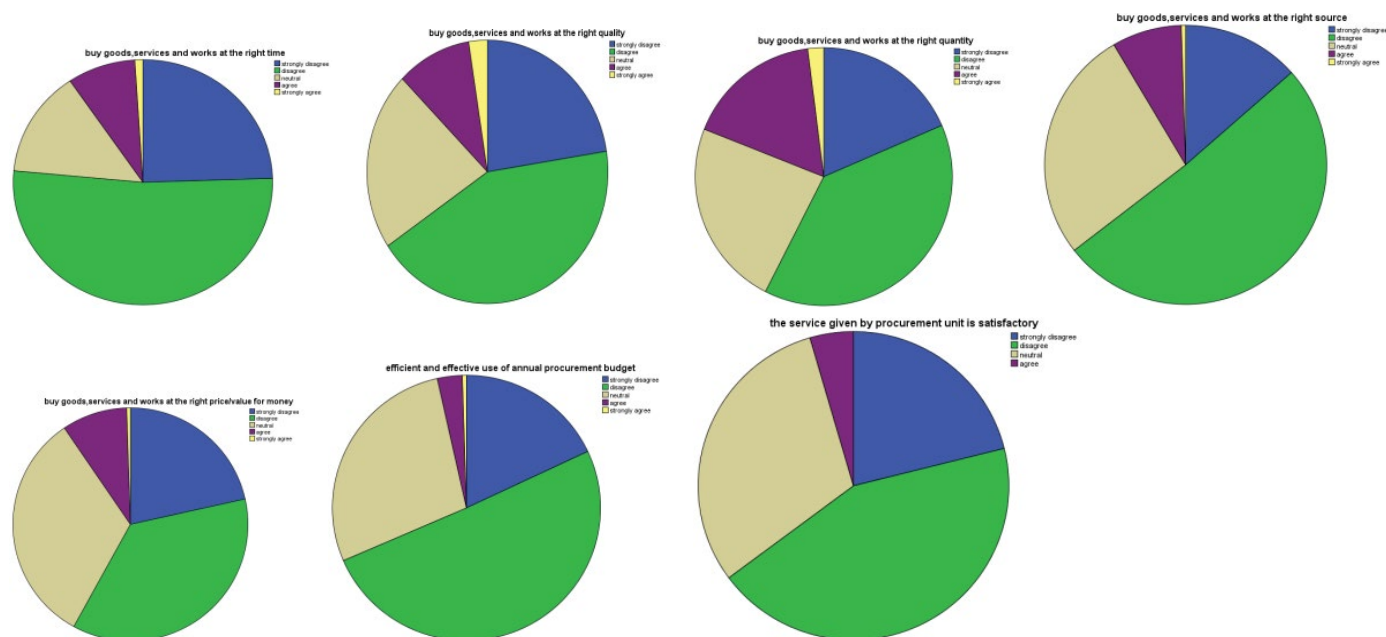| S.No	Item/Questions	Rate of response					Mean	SD. deviation
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
1	A complete and adequate record of procurement activities	4 (2%)	81 (40.5%)	73 (36.5%)	64 (32%)	16 (8%)	3.24	0.93
2	Procurement files are easily accessible to the users	9 (4.5%)	34 (17%)	79 (39.5%)	62 (31%)	16 (8%)	3.21	0.97
3	Records are always ready for suppliers follow up and expediting	4 (2%)	38 (19%)	87 (43.5%)	61 (30.5%)	9 (4.5%)	3.17	0.95
4	Files are separated based on year level	7 (3.5%)	40 (20%)	67 (33.5%)	18 (9%)	0 (0%)	3.24	0.99
	Average Response	6 (3%)	48.25 (24.13%)	76.5 (38.25%)	51.25 (25.63%)	10.25 (5.13%)	3.22	0.95
		27.13%		38.25%	30.76%			

Source: Own survey results, 2020.

Figure 2. Pie chart.

Table 10. Response on the performance of public procurement.

S.No	Item/Questions	Rate of response					Mean	SD. deviation
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
1	The University buy goods & services at the right time	49 (24.5%)	104 (52%)	28 (14%)	17 (8.5%)	2 (1%)	2.10	0.90
2	The University buy goods & services at the right quality	45 (22.5%)	86 (43%)	44 (22%)	20 (10%)	5 (2.5%)	2.27	1
3	The University buy goods & services at the right quantity	37 (18.5%)	78 (39%)	47 (23.5%)	34 (32%)	4 (2%)	2.45	1
4	The University buy goods & services at the right source	27 (13.5%)	102 (61%)	54 (27%)	16 (8%)	1 (0.5%)	2.31	0.82
5	The University buy goods & services at the right price/value for money	43 (21.5%)	73 (36.5%)	65 (32.5%)	18 (9%)	1 (0.5%)	2.31	0.92
6	The University uses the annual procurement budget effectively and efficiently	36 (18%)	101 (50.5%)	56 (28%)	6 (3%)	1 (0.5%)	2.18	0.77
7	The service delivered by procurement is satisfactory	42 (21%)	87 (43.5%)	61 (30.5%)	9 (4.5%)	0 (0%)	2.19	0.81
		40(20%)	90(45%)	50.7(25.4%)	17(8.5%)	2(1%)	2.25	0.90
	Average Response	65%		25.4%	9.5%			

Source: Own survey results, 2020.

Table 11. The Results of correlation analysis.

		Management style	Staff competency	Organization culture	ICT adoption	Stockholders commitment	Records management	Performance
Correlations								
Management style	Pearson Correlation	1	.316**	.463**	.285**	.317**	.074	.393**
	Sig. (2-tailed)		.000	.000	.000	.000	.298	.000
	N	200	200	200	200	200	200	200
Staff competency	Pearson Correlation		1	.629**	.366**	.395**	.287**	.539**
	Sig. (2-tailed)			.000	.000	.000	.000	.000
	N		200	200	200	200	200	200
Organization culture	Pearson Correlation			1	.597**	.625**	.331**	.649**
	Sig. (2-tailed)				.000	.000	.000	.000
	N			200	200	200	200	200
ICT adoption	Pearson Correlation				1	.562**	.246**	.470**
	Sig. (2-tailed)					.000	.000	.000
	N				200	200	200	200
Stockholders commitment	Pearson Correlation					1	.324**	.536**
	Sig. (2-tailed)						.000	.000
	N					200	200	200
Records management	Pearson Correlation						1	.446**
	Sig. (2-tailed)							.000
	N						200	200
Performance	Pearson Correlation							1
	Sig. (2-tailed)							
	N							200

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

Table 12. The results of regression analysis.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
Coefficients								
1	(Constant Bo)	-.655	.265		-2.468	.014	-1.179	-.132
	Management style (B1)	.192	.083	.130	2.323	.021	.029	.354
	Staff competency (B2)	.156	.055	.181	2.841	.005	.048	.264
	Organization culture(B3)	.287	.089	.267	3.238	.001	.112	.463
	ICT adoption(B4)	.061	.057	.069	1.081	.281	-.050	.173
	Stockholders commitment (B5)	.136	.064	.142	2.133	.034	.010	.262
	Records management (B6)	.228	.052	.233	4.374	.000	.125	.330

a. Dependent Variable: Performance
Source: Own survey results, 2020.

Where,

$\beta_{0=} 0.655$, $\beta_{1=} 0.192$, $\beta_{2=} 0.156$, $\beta_{3=} 0.287$, $\beta_{4=} 0.061$, $\beta_{5=} 0.136$, $\beta_{6=} 0.228$
$\varepsilon_{=} 0.56$

So,

$$Y = -0.655 + 0.192X1 + 0.156X2 + 0.287X3 + 0.061X4 + 0.136X5 + 0.56$$

At 5% level of significance and 95% level of confidence management style had a 0.021, staff competency 0.005, organizational culture 0.001, ICT adoptions 0.281, stockholder commitment 0.034 and records management 0.000 had significance level, except ICT adaption all factors are significance (accept all hypothesis except ICT adaption) and the data findings analyzed Beta also shows that the most predictor factor is organization culture (beta =0.267) followed by records management (beta=0.233) and staff competency (beta=0.184) and the fourth and fifth were stockholders commitment (beta=0.142) management style (beta=0.130) the last ICT adoption (beta=0.069) respectively. There is no Multi Co linearity between variables since the tolerance value is greater than 0.1 and VIF (variance inflation factor) not greater than 10. Multi colinearity is not a threat if the tolerance value greater than 0.1 and the VIF value not greater than 10 (Field, 2013) and (Liu, 2010) respectively (Table 12).

The regression results in this study revealed that organizational culture in public procurement has a positive (beta=0.267) and significant (P<0.01) association with the performance of public procurement. This finding is similar to the finding of This implies responsible officials in public procurement should strive to build good organizational culture like people's attitudes, beliefs, traditions, ethics, transparency, accountability, and teamwork between procurement units and departments that will contribute to the performance of public procurement. Record management system in the internal procurement system has positive (beta=0.223) and significant (P<0.01) association with the performance of public procurement by applying better need requisition and withdrawal format, proper contract management. Records management had a positive and significant influence on public procurement performance if adduct and good practice were implemented [9]. So the finding of this study is consistent with the above researcher.

Staff competency in public procurement processes have a positive (beta =0.181) and significant (p<0.01) impact on public procurement performance and a need for knowledge and clarity of procurement rules is a very important factor. Assigning competent and skillful persons to the procurement department and familiar with rules & regulations can be improved the effectiveness of public procurement practice this finding is consistence with the other researchers like [24,25].

Stockholders' commitment in the procurement system has a positive (beta=0.142) and significant (P<0.05) association with the performance of public procurement by applying good supplier relationship and a mechanism of strict follow-up and expediting of the actual suppliers and internal user relationship. Stockholder commitment had a positive and significant influence on public procurement performance if adduct and good practice implemented [9]. So the finding of this study is consistent with the above researcher.

The finding of this study furthermore revealed that management style has

a positive (beta=0.130) and significant (P<0.05) association with performance of public procurement and proper implementation of annual procurement plan increase effectiveness with planned need requisition, participatory planning with different departments, avoiding unnecessary bureaucratic procedures and increasing use of budget efficiency and value for money and developing better management style had a positive and significant effect on procurement performance [25]. Finally, ICT adoption has a positive (beta=0.069) and insignificant (P>0.05) effect on the performance of public procurement in order to reduce rotten activates, to save time, and to increase transparency. This finding is supported by the previous researcher of [6,21,26].

From the above regression Table 12 gives the estimated parameters of the model. R^2 of 0.636 can be interpreted as 63.6% of the variation in the dependent /outcome variable (performance of public procurement) can be explained by variation in independent /predictor variable (management style, staff competency, organization culture, record management, stockholder commitment, and ICT adoption), whereas the others (36.4%) are attributed by other variables. Hence the six independent variables explain 63.6% of the factors affecting the performance of public procurement with a particular reference to Arba Minch University. Durbin- Watson test check the autocorrelation of the data and if the value of Durbin- Watson test 1.5 to 2.5 shows that there is no autocorrelation in the data. AS a result in this study the Durbin- Watson test result is 1.97 as a result there is no auto-correlation between the data (Table 13).

As shown in Table 13 the significance value is 0.00 which is less than 0.01 thus model is statistical significance and fits with the data in predicting how management style, staff competency, organizational culture, stockholders commitment, and ICT adoption affect the performance of the public procurement (Table 14).

Qualitative analysis of the focus group discussion

The qualitative research response of the respondents through focus group discussion interview questions was presented below in generalized terms. Data collected from the respondents show that there were factors affecting public procurement performance in AMU. The respondents asked by focus group discussion questions for each 6 campuses of procurement workers about the factors affecting public procurement performance and the remaining structured questioner is given for procurement department supervisor and finance and budget administration department concerning the administration of procurement budget.

The respondents' sex in the procurement unit was 40 male, 17 female total 57 respondents with 30-45 years old which were procurement experts, procurement officers, marketing experts, team leaders, and director and all employees are degree holders having 1- 7 years' work experience in procurement unit and also most of the employees were Accounting and management in their profession. Only two purchasing officers' employee specialized BA in purchasing and supplies management. From this, the researcher concludes that most of the respondents were less experienced and not specialized in procurement/purchasing and supplies management.

In the procurement unit marketing department takes the responsibility of preparing procurement annual budget plan and the annual procurement plan

Table 13. The results of regression analysis model summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.758[a]	.636	.624	.32054	1.972

Table 14. The Results of Regression analysis variance (ANOVA).

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.119	9	2.824	58.054	.000[a]
	Residual	9.058	191	.039	-	-
	Total	23.177	200	-	-	-

was not achieved in 3 successive years (2008-2010 E.C) as to the plan on quarterly basis since most of the budget conception was high during the end of the budget year due to deliberate need requisition from departments, poor specification, out of stock item from suppliers, due to variation of department needs in different time and departments forcing to change the plan, poor knowhow about procurement rules and regulations from departments/units.

The training given for the procurement experts was low and not motivated, not empowered to improve procurement activities rather than anxiety and frustration to go in line with government rules and procedures.

The university did not hold a regular meeting about public procurement with internal and external customers and extremely poor cooperation between procurement unites with other departments and showed negative attitude to procurement department that after need requested all works left for procurement department rather than working in cooperation.

Sometimes the procurement activities like open tendering were posted by a website but others communicated with a manual system.

According to different interviewee, the procurement need request should be in written form instead of using model 20 of the pad before the purchase of material because most of the time supplier not supplied based on our request and lead wastage of resource for filling this model, it is better to use model 20 and 22 at the same time after products purchased.

From this, the researcher concluded that ICT adoption and using e-procurement system is weak in Arba Minch University.

According to the interviewers, there were some reasons for delay in acquiring materials/performance. These were:

- Most of the time the suppliers fill with list price when asked to supply not matched with the University need and this makes delay in the procurement process.

- Lack of transportation facility for the procurement department.

- The purchasing unit strictly follows the purchasing process which involves verification and approval at different levels and this will take some time.

- Sometimes the requested order might not be available in the market (out of stock items) so, the requisitions shall be reprocessed.

- Users are not exactly specifying the items they request for purchase

- Suppliers quoting price with a time limit

- The supplier quote price without specifically stating the item assuming that can change the item by lower quality and profit more.

The contract was managed with an assigned responsible person but not managed properly because of the assigned person lack skills, and experience and also poor file management system due to: bulky files, office discomfort for filling, poor post purchasing evaluation process. Inefficient and ineffective use of allocated budget due to miss-match between departments need and asking a lot of need at the end of the budget year and the budget is approved by MOFED and many amounts of the budget are allocated at the end of the budget year that lead materials purchased with poor quality, quantity, a source with the right time with economic value of money.

Finally, respondents revealed that there was no mechanism/means to check whether customers were satisfied or not, and what will be improved in the future that caused poor communication between departments and procurement Unites.

Major findings

The study was centrally aimed at examining the actual determinants of procurement performance at Arba Minch University. To achieve this objective the researcher assesses determinants of procurement performance in Arba Minch University and the relationship between challenges of procurement and organizational performance were, identified through the data collected from both primary and secondary sources. Through these, the researcher has summed up and presented major findings below:-

Procurement plays an important role in Arba Minch University. The main purpose of the study was to assess determinants of procurement performance in AMU. This study conducted using a descriptive and explanatory design with a target population of 110 respondents and 57 focus group interviewers. Data was collected using close-ended and open-ended questions.

The 1st factor affecting of public procurement performance were organization culture (beta=0.27) followed by record management (beta=0.233) and staff competency (beta= 0.184) and stockholders commitment (beta= 0.142) respectively and the 5th and 6th factor are management style (0.130) and ICT adoption (0.069). All of these factors have a positive effect on the performance of procurement except ICT adaption all are significance effect on the performance of procurement and using ICT in procurement reduce ordering time, enhance effective tendering through advertisement and provide excellent service in a transparent manner, implementing annual procurement plan reduce bulky purchase at the end of the budget year, products purchased with better quality and price, that lead increase the satisfaction of customers. Good operational procedure/management reduces the processing time, and increase efficiency and better staff competency is the base for procurement activity that needs knowledge, skillful, empowered, and motivated workers required and organizational culture plays an important role for coordination and cooperation, creating good ethical standards and developing good attitude between organization employees.

The education level of the procurement department are degree holders graduate in accounting and management not specialized in procurement/ purchasing and supplies management and most of the respondents were less experienced.

In AMU the presence of better management accessibility and the management promote cooperation between departments, whereas weak controlling for unethical practice, poor transparency and accountability, less regular meeting about public procurement with internal and external customers, and extremely poor cooperation between procurement unites with other departments and other departments showed a negative attitude to procurement department and after need request, all works left for procurement department rather than working in cooperation. The University tries to improve ICT adoption but still poor in using ICT for the procurement department like automation, e-procurement, and modern file system.

According to the interviewers, the procurement department has a procurement plan but the procurement plan is not implemented and follows a manual operational system in the contract management, record management and with long way bureaucratic procedures. Inefficient and ineffective use of allocated budget due to miss-match between departments need and asking a lot of need at the end of the budget year and also the budget is approved by MOFED that much amount of budget is allocated at the end of the budget year which lead materials purchased with poor (quality, quantity, a source with the right time with an economic value of money). The contract is managed with an assigned responsible person but not managed properly because of the assigned person lack skills, and experience and also poor file management system due to the presence of bulky files, office discomfort for filling, poor post purchasing evaluation process.

Conclusion

The following are the major conclusions made by the researchers based on findings:

- In the AMU, management style lacks due to:

- Unplanned requisition from departments

- Procurement units to focus on retune activities rather than planned activities.

- Flirty of bid announcement at different times

- Suppliers stock out items

- Poor preparation of specification

- Not having participatory procurement planning

- Variation of department needs in a different time and forcing to changing the plan,

- poor knowhow about procurement rules and regulations from departments

- At the end of the budget year much amount of budget spent on procurement due to poor implementation of purchasing activities and many amounts of money allocated at the end of the budget year

- The finding revealed that there was a Lack of familiarity with rules and regulations' regarding public procurement in middle managers, lower managers and within procurement units. So, most Procurement experts lack skill, are less motivated, less empowered, and low competent due to lack of training, high frustration, and anxiety, lack of confidence, lack of trust between procurement experts.

- There was Poor organizational culture in the University in holding a regular meeting with internal and external customers, poor follow up in preventing unethical issues and developing ethical principles and standards from higher officials, Lack of coordination and communication between store and procurement departments and from other departments that lead bulky purchase with unwanted materials which lead obsolescence, and also according to interviewers, customer attitude towards procurement department is negative and considering the procurement activities left only for procurement department since procurement needs high cooperation with manager, employees, and suppliers.

- Finding records and files from the procurement department is a difficult task and it takes a long time and also the long way procedure PPPA agency procurement directives and manuals is one of the factors that affect public procurement effectiveness and efficiency. According to the interviewers, there were some reasons for a delay in acquiring materials with the right time, right place, right quality, right quantity and the right place which were supplier fill list price without market analysis, the procurement unites strictly following the purchasing process rather than flexible, out of stock items, poor specification of items, quoting price with a time limit, quoting price without specification considering the room for cheating which leads ineffective operational procedures/management system.

- From the correlation analysis result, it can be concluded that the predictor variable is highly correlated with the outcome variable, and the correlation result r = 0.75.

- Furthermore the regression analysis it is concluded that the predictor variable explains r^2 value 63.6% of the outcome variable.

- According to different interviewee, the procurement needs request in model 20 of the pad before the purchase of material that leads wastage of resources.

Finally, it can be conclude customers were not satisfied by the procurement department and the procurement units have no customer assessment mechanisms to improve the procurement system and the research conducted in this study found that performance of procurement affected procurement challenges.

Recommendations

In light of the findings the researcher forwards the following suggestions for the concerned body:

For higher officials and managers:

- Staff competency can be improved by providing continuous training for procurement staffs by inviting professional expertise in procurement, motivate and empowered employees and also better train and create awareness about procurement directives, manuals, and procedures,

provide access to rules and regulation for internal customers and also higher officials enhancing the purchasing professionalism by improving technical knowledge and adhering to the highest ethical standards since, it is an important element to improve procurement performance.

- The University higher officials better develop a comfortable culture among procurement teams and departments by creating awareness about procurement standards and develop the means and the way to prevent unethical behaviors by giving all responsibilities and building a culture of trust and give necessary incentives like salary improvement for procurement experts.

- Minister of finance and development approve the annual procurement Budget in advance and federal procurement agency should announce which materials are bought centrally and which are not and communicate each stage with the University procurement unite and also bureaucratic procedures is another challenge, as a result, the PPPA agency should improve procurement directives and manuals by discussing with procurement practitioners and also higher management bodies in university give higher attention in implementing the procurement plan since it is one of the sensitive department which strongly contribute for quality of education.

- To solve delivery problems quality, quantity, and adequate time problems in acquiring materials it is better to form a group of experts to study the immediate requirement of needs and flow up of the supply of these needs and give feedback and support the higher official decision-making.

- Give more concern for the department and full fill the necessary facility for the procurement department

For procurement unit:

- The procurement department better to go in line with the procurement plan and need strict follow-up to implement the procurement plan within specified procurement plan and procurement method by assigning skill full and experienced persons in achieving the procurement plan.

- Procurement staff must develop confidence rather than frustration in their work by reading public procurement manual and directives, empowered themselves, and distributing the workload among the experts accordingly in order to reduce risks and increase the accuracy of the work.

- According to the different interviewee, the procurement need request better to be in written form instead of using model 20 of the pad before the purchase of material because most of the time supplier not supplied based on our request and lead wastage of resource for filling this model, it is better to use model 20 and 22 at the same time after products purchased.

- there must be a means of clear communication between procurement and property administration department, to reduce the purchase of redundant and unwanted need requests, creating good coordination between internal and external customers by holding regular meeting and discussion in solving problems about procurement activities of the department and make publicity about the rules and regulations and make the user part of decision-maker.

- Develop an adequate record of files which is easily accessible to any users, good Contract administration by assigning skillful contract personal which needs strict follow-up and control, Creating good buyer-supplier relationship with 1st Sample quality check before materials transported and received from supplies since it reduces the cost of suppliers and increase customer satisfaction and improves future cooperation between buyers and suppliers and also Post-purchase evaluation system should be developed in their purchasing process because it helps to learn from the past and to strengthen the future purchase.

For internal users:

- As much as possible reduce unplanned purchasing requests and also better request their needs in accordance with the annual budget and whenever the work plan changes departments should communicating with the procurement department.

- The internal users better to know the type of materials requested and the existence of them in the market.

Finally, the researcher recommends, the performance of procurement can be enhanced by reducing the challenges of procurement performance.

Suggestion for Further Research

This study directly focuses on the internal challenges of procurement performance. However, the external factors affecting procurement performance are not studied. Future research will also make to investigate the other procurement performance determinants such as Resource allocation, job rotation, and external factors like political, legal, economic, cultural, and technological factors.

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