Factors Affecting Procurement Planning In Public Secondary Schools in Kenya: A Case Study of Secondary Schools in Migori County.

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Abstract: The provision of teaching and learning resources to secondary schools form part of the overall policy for quality improvement and that the government expects that various resources available to education to be procured properly and utilized in the most cost effective manner to bring out efficient provision of quality and relevance in education. This implies that public procurement plays a vital role in public secondary schools. Despite its importance there is no scientific research that has been undertaken to examine the factors that influence procurement planning in public secondary schools in Kenya. The objective of this study was to establish the factors that influence procurement planning in public secondary schools in Migori County. The specific objectives of the study were to determine the effect of staff competency, budgeting procedures, cost estimation and forecasting and ethics in procurement processes on procurement planning in public secondary schools in Migori County. The study was conducted through the use of self-administered questionnaires to collect data. Questionnaires targeting 176 public secondary were issued and the target groups were the principals, deputy principals, HoDs, bursa and clerks. The study had a sample size of 123 secondary schools. Consensus method was used to select schools in different sub counties, descriptive statistics analysis and multiple regressions were used to analyze data. The results indicated that staff competence, ethics in procurement processes, budgeting procedures, cost estimation and forecasting influence procurement planning in secondary schools. The study recommends that procurement plans are not static and that their preparation should be participatory, frequently reviewed so as to improve on achieving value for money in secondary schools. Equally, people involved in procurement planning process should be by qualified, competent and experienced having adequate knowledge in procuring and tendering activities and at the same time observe the code of ethics while carrying out procurement activities. This will not only help maintain good procurement standards but also will help achieve high levels of efficiency and effectiveness. In addition, to avoid adverse impacts of inflation intensive cost estimation and realistic forecasting on the cost of items should be done and also budgeting procedures should be followed.

INTRODUCTION

1.1 Background

Every organization or institution, buys materials, services, supplies and various resources that support operations and ensure its continued existence. This implies that procurement is a core activity that forms part of the key operations within the organization. Procurement is generally defined as the process of obtaining goods or services in any way including borrowing, leasing or even force or pillage (Lysons and Farrington, 2006). In Kenya studies have shown that most secondary schools still have inadequate resources and lack basic learning facilities which in return adversely affect their service delivery for instance Omariba’s (2003) study on factors that contribute to performance in national examination in rural secondary schools in Kisii District Kenya established that for better performance in national examination inputs (textbooks, equipment, libraries and laboratories) must be availed. Even though procurement planning in any functional institution or organization is perceived as an attempt to; help improve efficiency of outcomes, counterbalance market failures, balance public and private interests and enhance consciousness of decision making, very limited scientific research has been done to examine the extent to which procurement planning is affected in public secondary schools. It is from this background that the researcher tried to ascertain the factors that affect procurement planning in public secondary schools in Kenya.

1.2. Statement Of The Problem

Procurement planning in public secondary schools in Migori County is bedevilled with various factors despite the presence of the Secondary Schools and Colleges Procurement Manual (2007). (Basheka,
2004) noted that poor procurement planning has been one of the major stumbling blocks to the economic development of Africa and it has been clear that a number of African countries have not paid adequate attention to the proper management of public resources therefore in order to realise the value for money in public secondary schools by procuring adequate resources effective procurement plan must be in place. However a number of studies have been carried out on the concept and context of procurement the researcher did not come across a study done on factors that affect procurement planning in public secondary schools. The researcher personal experience is also a great motivation in carrying out a study in this area and it is in this view that this study sought to investigate the factors affecting procurement planning in public secondary schools in Kenya by surveying secondary schools in Migori County.

1.3 Research Objectives

The study was guided by the following specific objectives.

i. To establish the effect of staff competence competency on procurement planning in public secondary schools in Migori County.

ii. To determine the effect of budgeting procedureson procurement planning in public secondary schools in Migori County.

iii. To evaluate the effect of cost estimation and forecasting on procurement planning in public secondary schools in Migori County.

iv. To find out the effect of ethics in procurement processes on procurement planning in public secondary schools in Migori County.

1.4 Research Questions

i. What is the effect of staff competenceas a factor on procurement planning in public secondary schools in Migori County?

ii. How does budgeting proceduresfactor influence on procurement planning in public secondary schools in Migori County?

iii. How does cost estimation and forecasting factor influence on procurement planning in public secondary schools in Migori County?

iv. How does ethics in procurement processes factor influence on procurement planning in public secondary schools in Migori County?

1.5 Justification

This study was significant in that its findings will be beneficial to those in the schools’ management as they will help them to improve in future in the procurement planning as stipulated by the Act. The findings will add to literature on the subject matter and serve as a basis upon which further empirical studies may be carried out in the field of procurement planning in Kenya.

1.6 Scope

Due to the diversity of the factors affecting procurement planning in public secondary schools, this study focused only on factors that are general that is competency of staff, cost estimations and forecasting, budgeting procedures and ethics in procurement process as factors that affect procurement planning in public secondary schools. Migori County is selected because public schools within the county are worst hit by the problem of inadequate resources both teaching and learning resources.

1.7 Limitation of Study

The study focused on the factors affecting procurement planning in public secondary schools in Migori County. The study was characterized by the following limitations: the time frame for undertaking the study was not adequate for thorough research given that secondary schools have busy schedules. In order to overcome this limitation, the researcher booked an appointment with the respective school administration and gave respondents a time frame to respond to the items and requested them to adhere to it, some respondents may have initially perceived such interviews to be associated with some form of help or assistance at the end. In order to overcome this limitation, this proposed study gave respondents a written and verbal assurance that data collected was to be used for research purposes only and that strict confidentiality would be observed. Finally, factors affecting procurement planning in newly created secondary schools at specific periods of the projects may not have been captured during the short period of visit by the researcher .These and other confounding circumstances would limit the understanding of the results but these were generally overwhelmed and controlled by the research design.
LITERATURE REVIEW

2.1 Theoretical Review

Several theories have been developed in this area of study. Two of them, Hegelian dialectic theory and Bloom’s Taxonomy Theory are reviewed. After discussing these theories, a theoretical framework was provided.

2.1.1 Hegelian Dialectic Theory

This study is based on Hegelian dialectic theory (ahaegel, 1995). The theory has it that the organizational entity exists in a pluralistic world of colliding events, forces or contradictory values that compete with each other for domination and control. Opposition may be internal or external to any entity with several conflicting goals or interest groups competing for priority. The theory explains that change in organisation occurs when opposing values, forces or events gain sufficient power to confront and engage the status-quo. Opposing forces are termed thesis (status quo) and antithesis (new situation). Procurement planning in public secondary schools faces several challenges to overcome the obtaining status-quo. Agency theory can be applied to education stakeholders and administrators, facilitated by legal framework. Procurement in secondary schools involves several parties with different competing goals. Parents, government, NGOs with conflicting goals, adding complexity to the procurement planning in respective institutions.

2.1.2 Bloom’s Taxonomy Of Learning Theory

Bloom (1956) produced taxonomy of learning theory which is helpful in identifying different cognitive skills. He identified six levels in this scheme: knowledge, comprehension, application, analysis, synthesis and evaluation. Movement from level 1 to level 6 represents an increase in the level of sophistication of cognitive ability. From strategic thinking perspective, higher demands is be made of the skills associated with analysis, synthesis and evaluation. At operational and tactical level; knowledge, comprehension and application may be more heavily utilised. There are implications with this theory for the ability to learn; from the point of view of attributes in relation to personnel issues with regard to staffing, training and education. Sophisticated levels take on greater importance when analysing situations in terms of relevant factors and the relationships between them, or developing, through synthesis, a picture of the wider system and its functioning as a whole as a result of the inter-dependency of its parts. An example in procurement planning is the ability to understand each stage of activity in the process right from need identification and prioritization, adherence to procurement plans to timely procurement, as one side of the coin, but also to appreciate how the stages interrelate and to consider the effectiveness of the plan as a whole. Learning is not attempting to transfer a body of knowledge as if it were an inert commodity to be regurgitated in an exam and then promptly forgotten. It should serve more useful purpose to enhance procurement planning through embracing best practice.

2.2 Public Secondary School Procurement Procedures

In Kenyan schools tender committee is composed of the deputy principal who chairs all the tender meetings, school bursar who is the accounting officer in charge of authorizing requisition from user departments and also making final payment to the supplier. Other members are lab technician who is a representative from user department, the receiving officer of supplied goods and also the custodian of all procured laboratory items. Storekeeper who is in charge of controlling the flow of procured items to the user departments, maintain inventory levels, checking reorder levels and advising on buffer stock regulation. Also we have the schools cateress who is in charge of all the foods products procured in a school system.

2.3 Conceptual Framework

Mugenda and Mugenda (2003) defines conceptual framework as a concise description of the phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study. Procurement planning is a function of several variables as depicted in figure 1.1 below;
2.3.1 Procurement Planning

Planning is a process that consists of many steps and the bottom line is that planning is not concerned with future decisions but rather with the future impact of decisions made today (Thai, 2004). Procurement planning is one of the primary functions of procurement with a potential to contribute to the success of public institution’s operations and improved service delivery (Basheka, 2008).

2.3.2 Competency of staff in Procurement Process

Public procurement professionals have to strive to achieve three competing demands of meeting commercial interests with key themes of value for money, economy, efficiency and effectiveness; the regulatory interests with key themes of competition, transparency, equality and compliance and the social interests whose key themes include public interest, employment concerns, social exclusion, economic development and environment policy (Errigde and McIlroy, 2002). In an effort to attain these demands, organizations constantly look for employees who have skills necessary to deal with the wide variety of tasks faced by purchasing professionals (Monczka et al, 1998).

2.3.3 Budgeting Procedures and Procurement Planning

According to Lysons and Farrington (2006), a procedure is a system of sequential steps or techniques for getting a task or job done. They are formal arrangements by means of which policies linking strategies are implemented. Procedural procurement will ensure orderliness and efficiency in any procurement department. Planning scope refers to the period in which the budget will cover. The planning scope will be crucial in how the budget is drawn that is if they are budgeting for long term project or short term. It will assist in planning for activities and ascertain how the subsequent year might change and steps to be taken to respond to the changes. Purchasing budgeting procedures involves various steps before the final

![Conceptual Framework](image-url)
budget is arrived at. This process must be followed to enhance effectiveness of procurement planning in secondary schools.

2.3.4 Cost Estimation and Forecasting in Procurement

According to the PPDA Act (2007), purchases must be economical and efficient. This means that they should be based on market prices and should be able to generate saving. It also means that bad practices such as irresponsible procurement leading to wastage, wear and tear of stocks, over invoicing, unplanned expenditure, shortage of goods when needed, poor quality products and similar factors to be avoided. The PPOA prepares and updates a Market Price Index (MPI) to be used by the Procuring Entity (PE) on a periodic basis therefore the Procurement Plan (PP) must be integrated into the budgetary processes based on the indicative or approved budget, as stipulated in the PPDA (2006).

2.3.5 Ethics in Procurement Process

Ethical behaviour includes avoiding conflicts of interest, and not making improper use of an individual’s position (Wee 2002). Ethical behavior is important in public procurement as it involves the expenditure of public money, and is subject to public scrutiny. Public officials should always behave ethically and fairly in their business undertakings. Ethical behavior supports openness and accountability in a procurement process and gives suppliers confidence to participate in the Government marketplace. Ethical behavior can also reduce the cost of managing risks associated with fraud, theft, corruption, and other improper behavior; and enhance confidence in public administration (Karanja and Mugo, 2010)

2.4 Critique Of The Existing Literature

The aim of the above literature review was to analyze the studies carried out on procurement planning with a special focus on staff competence, cost estimation and forecasting, budgeting procedures and ethics in procurement processes. Nwabuzor (2005) describes a comprehensive procurement performance as a function of an all-inclusive procurement planning process that analyzes all the variables in a specific environment. In relation to the above discussion, the studies and theories have established the value of, staff competence, cost estimation and forecasting, budgeting procedures and ethics in procurement processes. They, however, fail to highlight in clear terms how the above variables affect procurement planning. Therefore, the study attempting to establish these relationships is more necessary for developing application of such relationships and procurement planning with a close link to public secondary schools.

2.5 Summary

While there have been developments in regulatory framework, there is still challenges to be addressed in order to realize value for money in public secondary schools in Kenya through procurement. Some of the notable challenges include; corruption, inadequate training on procurement planning, lack of consultation, inadequate skills by user departments to accurately state their requirements insufficient funds and delays of the release of these funds. Most of the literature shows that, there is abuse of the procurement rules and regulations, but very little is said on the factors affecting procurement planning which seems to be the missing tie in the progressive regulations that have been developed for secondary schools. Although procedures supporting systematic procurement planning have been established, data from CPI survey (2007) indicates that these are far from always being complied with. In most secondary schools in Kenya it has not been possible to achieve student book ratio of 1:1, achieve student teacher ratio of 40:1 and assess the percentage of contracts which are not part of procurement plans. Besides the low share of procurements conducted through open tendering indicates that a large part of procurements are undertaken on an ad hoc basis, by quotations and direct procurements, thus suggesting absence of effective procurement planning in most public secondary schools in Kenya.

2.6 Research Gaps

Governed by a complex set of laws and regulations, secondary schools’ procurement systems are designed to achieve three goals; ensuring the best price; providing open and fair competition among local vendors; and preventing favouritism and corruption. In Kenya, procurement planning is a fundamental function that impacts on effective service delivery. There is no part of secondary schools service delivery that does not depend on procurement planning; and yet factors affecting procurement planning in secondary schools remains a neglected field of research.

METHODOLOGY

3.0 Research Design

The study employed descriptive research survey design. Descriptive survey was adapted in conducting this study because it was concerned...
with describing, recording, analyzing and reporting conditions that existed, Kothari, (2003).

3.2. Study Population
The study population was public secondary schools in Migori County and the target population comprised the principals, deputy principals, bursars/clerks and HODs. Sampling was done given the number of schools in the county and the geographical nature and the influence of financial constraints (Kothari 2003).

3.3 Sampling Frame
According to Drost (2011) sampling frame is defined as a comprehensive list of individuals or an object from which the sample is drawn, the basic idea behind sampling is to draw out certain characteristics representing the entire population. The public secondary schools in Migori County represent the entire public secondary schools in Kenya and the entire students, parents, teachers and stakeholders represent the face of Kenya.

3.4 Sample size
The sample Frame (N) shows the list of the population of groups selected for the study. In order to classify the entire population of 176 secondary school administrations. The arrival at the sample size was based on 95% level of confidence and a margin of error of ±5% using the formula suggested by Kothari C.R (2005) as:

\[ N = \frac{176}{1 + 176(0.057)} \]

N=123 schools

3.4 Sampling Techniques
Consensus sampling technique was used to ensure fair representation of the study population. This ensured a proportionate and adequate distribution of schools among the 8 sub counties. This guaranteed that all the sub counties were involved in the study thus considering all the socio-economic dynamics of the County.

3.5 Data collection Instruments
The primary data was gathered using the questionnaires administered by the researcher. The questionnaires were divided into sections and developed based on the research objectives in order to capture relevant information. The questionnaire targeted the persons involved in procurement in secondary schools. This made it possible to obtain data required to meet specific objectives of the study. This also involved meeting respondents face to face.

3.6 Data collection procedure
After obtaining letter of identification from Jomo Kenyatta University Of Agriculture And Technology the researcher sought for permission from the relevant authorities prior to the commencement of the study. The researcher reported to the relevant authority before proceeding to the field. Such authority included the Migori County director of education for self-introduction and subsequent authorization to conduct research. A letter of transmittal was written which introduced the researcher to the respondents and assured them of total confidentiality of their responses. In this study the researcher visited the sampled schools to book an appointment with the respective school principals and familiarize with them. On the agreed dates and time, the researcher administered the questionnaires to the respondents. Upon completion of the questionnaires by each of these respondents, the researcher collected them and packaged them safely to await analysis.

3.7. Data Collection
The questionnaire was administered using a drop and pick later method. Out of 1109 questionnaires administered only 932 were dully filed and returned. The primary source of data collection method used in the study included use of questionnaire that was used to source for crucial information from the respondents. The questionnaire was both open and closed ended questions in order to enable effective data collection filled in the questionnaire. The secondary data was attained from the written materials which included the journals magazines, and other past studies and other relevant books. This enabled the researcher to compare the data from the questionnaires with the written materials. This helped to enable effective data collection and analysis from secondary schools.

3.8. Pilot study
Pre testing of the instrument was taken prior to the main study on a group of respondents sample size of 1% - 10 % according to Mugenda and Mugenda (2003) of the targeted sample of 1232 respondents was sufficient; hence 1109 respondents were sampled .these respondents were not used again in the main study. Pilot testing was conducted to determine the suitability and appropriateness and the clarity of the questionnaire items in addressing the variables under investigation and at the same time determined the reliability of the instrument. To determine the validity of the instruments the
questionnaire was assessed during the pilot testing on the relevance of the content. As a result of the pilot test, changes in words selection and instructions made to the questionnaire. Regular cross checking and follow ups were done to ensure accuracy, relevance, completeness, consistency and uniformity of the data collected.

3.9. Data Processing and Analysis

The data collated was entered into a computer and analyzed using Statistical Package for Social Sciences (SPSS Version 16). The software packages enabled the researcher to analyze the data into percentages, means and standard deviations. First, a factor analysis on both the dependent and independent variable items was conducted upon which reliability analysis for the retained items was computed. Second, correlation coefficients between procurement planning and independent variables obtained from factor analysis was computed to explore possible strengths and direction of relationships. Third, multiple regression analysis was conducted to give various outputs like the model summary and coefficients results among others was used to make interpretations and discussions of the study and upon which conclusions were drawn. The other type of statistics, inferential statistics was used to give a measure of the relationship between two or more variables and establish if there was any relationship or there exists a cause effect relationship between the variables. The results were presented in form of frequency tables, pie charts and bar graphs.

RESEARCH FINDINGS AND DISCUSSION

4.1 Response Rate

The study distributed 1109 questionnaires to procurement units in public secondary schools in Migori County. Out of those, 932 sample respondents filled in and returned the questionnaire while 177 respondents did not return the questionnaire contributing to 84.04% response rate. This commendable response rate was attributed to the data collection procedure, where the researcher personally administered questionnaires and waited for respondents to fill in, and picked the questionnaires once fully filled. The response rate demonstrated the willingness of the respondents to participate in the study.

4.2 Demographic Characteristics Of The Respondents

4.2.1 Gender of the Respondents

The study sought to determine the gender distribution of the respondents in order to establish if there is gender balance in the positions indicated. According to the findings, majority (62.45%) of the respondents indicated that they were male while 37.55% of the respondents indicated that they were female. This implies that though there is gender distribution in the teaching profession most of the positions are occupied by the male.

4.2.2 Age Bracket of the Respondents

The study further established respondents age distribution categorized in a certain range. This was to determine how age relates to procurement planning based on experience. The study results revealed that 53% of the respondents were aged between 36 and 45 years, 25% of the respondents indicated that they were aged between 26 and 35 years while 22% of the respondents indicated that they were aged between 46 and 55 years. These findings indicate that majority of personnel taking part in procurement activities are middle aged and elderly. This implies that these are experienced employees who could have given the relevant information to the study area.

4.2.3 Duration In The Institution

The study found it necessary to ascertain the number of years in which the respondents had worked in the institution. This was to determine if their response could be relied upon to make study conclusions about the variables under the concern due to their longitivity in the institutions. From the findings 38% were in the institution for 4 -5 years,27% for 2 – 3 years,26% for more than 6 years and 9% had worked in the institution for less than a year this implies that the majority have been in the institution for a good duration and could therefore familiar with the factors that affect procurement planning in their respective institutions. It is also an indication that these are experienced employees who could have given the relevant information to the study.

4.2.3 Academic Qualification

The study results reveal that, 63% of the respondents had acquired bachelors’ degrees,15% of the respondents indicated had acquired diploma, 14%of the respondents indicated had acquired masters 6% of the respondents indicated had acquired PhD and 2 % of the respondents indicated had acquired certificate. These levels of distribution of academic qualifications indicate that the respondents could give responses that are factual.

4.3 Respondents involvement in procurement planning

A majority (70.95%) of the respondents indicate that they were not involved in procurement
planning while 20.05% revealed that they were involved in procurement activities. This implies that most of the members that form part of the procurement committee in secondary schools are not involved in procurement planning activities. Within the context of the secondary schools the findings are agreement with PPD Act (2005) that procuring entities, educational institutions are required by to establish tender committees to be responsible for procurement at various levels, but contradict the Act since most of the members are not involved in procurement planning.

4.3.1 Whether Procurement planning is important

According to the findings majority of the respondents 96.21% agreed that procurement planning is important to their respective schools while 3.79% disagreed. This implies that there is planning of procurement activities in secondary schools. These results are in agreement with Basheka (2008) that procurement planning is one of the primary functions of procurement with a potential to contribute to the success of operations and improves service delivery.

4.4 Effects Of ethics in procurement processes On Procurement Planning

The researcher sought to investigate the extent of ethics in procurement processes on procurement planning in secondary schools. To achieve this, the respondents were required to indicate to what extent ethics in procurement processes affect procurement planning in their respective secondary schools. The summary of the findings is as presented in table 4.1

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Per cent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>157</td>
<td>16.8</td>
</tr>
<tr>
<td>Large extent</td>
<td>467</td>
<td>50.1</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>181</td>
<td>19.4</td>
</tr>
<tr>
<td>Less extent</td>
<td>51</td>
<td>5.5</td>
</tr>
<tr>
<td>No extent</td>
<td>76</td>
<td>8.2</td>
</tr>
<tr>
<td>Total</td>
<td>932</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority of the respondents 50.1% indicated that ethics in procurement processes affect procurement planning in secondary schools. This was followed by 19.4% of respondents who indicated moderate extent, 16.8% indicated the very large extent, 8.2% indicated no extent while 5.5% indicated a less extent.

4.5 Staff Competence and Procurement Planning

The study further sought to investigate the influence of staff competence on procurement planning in secondary schools. To achieve this, the respondents were required to indicate to what extent staff competence affects the procurement planning in secondary schools. The summary of the findings is as presented in table 4.2

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>258</td>
<td>27.8</td>
</tr>
<tr>
<td>Large extent</td>
<td>363</td>
<td>38.9</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>156</td>
<td>16.7</td>
</tr>
<tr>
<td>Less extent</td>
<td>103</td>
<td>11.1</td>
</tr>
<tr>
<td>No extent</td>
<td>52</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>932</td>
<td>100</td>
</tr>
</tbody>
</table>

From the findings shown in Table 4.6, 38.9% of respondents indicated that staff competence affected the procurement planning to a great extent, 27.8% indicated a very great extent effect, 16.7 indicated a moderate extent effect, 11.1% said it affected to a low extent while the remaining 5.6 % it affected to a very low extent. This is to show that
staff competence had an effect on the procurement planning.

4.6 Budget Procedures and Procurement Planning

The study further found it necessary to investigate the influence of budgeting procedures on procurement planning in secondary schools. The findings were as discussed in the subsections herein. The researcher required the respondents to indicate to what extent budgeting procedures affected the procurement planning of secondary schools. The summary of the findings is as presented in Table 4.4

Table 4.4: extent of budgeting procedures on procurement planning

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>207</td>
<td>22.2</td>
</tr>
<tr>
<td>Large extent</td>
<td>414</td>
<td>44.4</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>156</td>
<td>16.7</td>
</tr>
<tr>
<td>Less extent</td>
<td>130</td>
<td>13.9</td>
</tr>
<tr>
<td>No extent</td>
<td>25</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>932</td>
<td>100</td>
</tr>
</tbody>
</table>

From the findings shown in Table 4.8, 414 (44.4%) of respondents indicated that budgeting procedures affected the procurement planning to a great extent. 207(22.2%) indicated a very great extent effect, 156(16.7%) indicated a moderate extent effect, 130(13.9%) said it affected to a low extent while the remaining 25(2.8 %) it affected to a very low extent. This implies that budgeting procedures has effect on procurement planning in secondary schools.

4.7. Cost Estimation and Forecasting and Procurement Planning

The researcher sought to investigate the influence of cost estimation and forecasting on procurement planning in secondary schools. To achieve this, the respondents were required to indicate the extent at which cost estimation and forecasting has affected the procurement planning in their respective schools. The summary of the findings is as presented in Table 4.5

Table 4.5: Extent cost estimation and forecasting on procurement planning

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>311</td>
<td>33.3</td>
</tr>
<tr>
<td>Large extent</td>
<td>440</td>
<td>47.2</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>103</td>
<td>11.1</td>
</tr>
<tr>
<td>Less extent</td>
<td>52</td>
<td>5.6</td>
</tr>
<tr>
<td>No extent</td>
<td>26</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>932</td>
<td>100</td>
</tr>
</tbody>
</table>

The findings in Table 4.11 show that 47.2% indicated that cost estimation and forecasting influenced procurement planning to a great extent. 33.3% indicated that it affected to a very great extent11.1 showed an effect of moderate extent, 5.6% showed an effect of low extent while 2.8% indicated that it did not affect at all. This implies therefore that cost estimation and forecasting influenced procurement planning in secondary schools.

The study further found out the influence of cost estimation and forecasting on procurement planning in secondary schools. The statements were on a scale of 1-5 where 1=strongly disagree, 2-disagree, 3-neither agree nor disagree, 4=agree and 5=strongly agree.
4.9. Correlation Analysis

Pearson correlation was used to measure the degree of association between variables under consideration that is independent variables and the dependent variables. Pearson correlation coefficients range from -1 to +1. Negative values indicate negative correlation and positive values indicate positive correlation where Pearson coefficient <0.3 indicates weak correlation, Pearson coefficient >0.3<0.5 indicates moderate correlation and Pearson coefficient>0.5 indicates strong correlation.

Table 4.6. Correlation Coefficients

<table>
<thead>
<tr>
<th>ETHICS IN PROCUREMENT PROCESSES</th>
<th>STAFF COMPETENCE</th>
<th>BUDGETING PROCEDURES</th>
<th>COST ESTIMATION AND FORECASTING</th>
<th>PROCUREMENT PLANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHICS IN PROCUREMENT PROCESSES</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAFF COMPETENCE</td>
<td>0.631</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUDGETING PROCEDURES</td>
<td>0.511</td>
<td>0.451</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>COST ESTIMATION AND FORECASTING</td>
<td>0.611</td>
<td>0.391</td>
<td>0.413</td>
<td>1</td>
</tr>
<tr>
<td>PROCUREMENT PLANNING</td>
<td>0.511</td>
<td>0.524</td>
<td>0.614</td>
<td>0.713</td>
</tr>
</tbody>
</table>

Correlation is significant at the 0.05 level (1-tailed).

The analysis above shows that cost estimation and forecasting has the strongest positive (Pearson correlation coefficient =.713; P value 0.000) influence on procurement planning. In addition, ethics in procurement processes, staff competence and budgeting procedures are positively correlated to procurement planning. The correlation matrix implies that the independent variables are very crucial determinants of procurement planning as shown by their strong and positive relationship with the dependent variable; procurement planning.

4.10 Model Summary

Regression model is used here to describe how the mean of the dependent variable changes with changing conditions. Regression Analysis was carried out for focus on ethics in procurement processes, staff competence, budgeting procedures and cost estimation and forecasting and procurement planning. To test for the relationship that the independent variables have on procurement planning, the study did the multiple regression analysis.

Table 4.7: Model Summary

<table>
<thead>
<tr>
<th>MODEL</th>
<th>R</th>
<th>R²</th>
<th>ADJUSTED R²</th>
<th>STD. ERROR OF THE ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.937</td>
<td>0.878</td>
<td>0.789</td>
<td>0.5273</td>
</tr>
</tbody>
</table>

The four independent variables studied explain 87.8% of the procurement planning as represented by the R². This therefore means that other factors not studied in this research contribute 12.2% of the procurement planning in secondary schools. This implies that these variables are very significant therefore need to be considered in any effort to boost procurement planning in secondary schools in Kenya. The study therefore identifies variables as critical determinants of procurement planning.

Table 4.8: ANOVA

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SUM OF SQUARES</th>
<th>DF</th>
<th>MEAN SQUARE</th>
<th>F</th>
<th>SIG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>2.534</td>
<td>2</td>
<td>1.267</td>
<td>9.475</td>
<td>0.0179</td>
</tr>
<tr>
<td>Residual</td>
<td>9.307</td>
<td>40</td>
<td>2.327</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>3.465</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB: F-critical Value 88.33 (statistically significant if the F-value is less than 88.33: from table of F-values).
a. Predictors: (Constant), ethics in procurement processes, staff competence, budgeting procedures and cost estimation and forecasting.

The significance value is 0.0179 which is less that 0.05 thus the model is statistically significance in predicting how ethics in procurement processes, staff competence, cost estimation and forecasting and budgeting procedures influence the procurement planning in secondary schools in Migori County. The F critical at 5% level of significance was 3.23. Since F calculated is greater than the F critical (value = 9.475), this shows that the overall model was significant.

The study ran the procedure of obtaining the coefficients, and the results were as shown on the table below.

Table 4.9: Coefficient Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>B</td>
<td>Standard Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.147</td>
<td>1.2235</td>
<td>1.615</td>
<td>0.367</td>
</tr>
<tr>
<td>Ethics in procurement processes</td>
<td>0.752</td>
<td>0.1032</td>
<td>0.152</td>
<td>4.223</td>
</tr>
<tr>
<td>Staff competence</td>
<td>0.487</td>
<td>0.3425</td>
<td>0.054</td>
<td>3.724</td>
</tr>
<tr>
<td>Budgeting procedures</td>
<td>0.545</td>
<td>0.2178</td>
<td>0.116</td>
<td>3.936</td>
</tr>
<tr>
<td>Cost Estimation And Forecasting</td>
<td>0.439</td>
<td>0.1937</td>
<td>0.263</td>
<td>3.247</td>
</tr>
</tbody>
</table>

Multiple regression analysis was conducted as to determine the relationship between procurement planning and the four variables. As per the SPSS generated table above, the equation \( Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon \) becomes: \( Y = 1.147 + 0.752X_1 + 0.487X_2 + 0.545X_3 + 0.439X_4 \)

According to the regression equation established, taking all factors into account (ethics in procurement processes, staff competence, budgeting procedures and cost estimation and forecasting) constant at zero, service delivery and achieving value for money in secondary schools will be 1.147. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in ethics in procurement processes will lead to a 0.752 increase in procurement planning; a unit increase in staff competence will lead to a 0.487 increase in organization performance, a unit increase in procurement planning will lead to a 0.545 increase in procurement planning and a unit increase in cost estimation and forecasting will lead to a 0.439 increase in procurement planning. This infers that ethics in procurement processes contribute most to the procurement planning followed by budgeting procedures. At 5% level of significance and 95% level of confidence, ethics in procurement processes had a 0.0192 level of significance, staff competences showed a 0.0269 level of significance, budgeting procedures showed a 0.0251 level of significance, and cost estimation and forecasting showed a 0.0454 level of significance hence the most significant factor is ethics in procurement processes.

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The main purpose of the study was to establish factors affecting Procurement planning in public secondary schools. The study was conducted through descriptive design with a target population of 1109 respondents. Data was collected using a structured questionnaire. The four independent variables only contribute about 87.8% to the procurement planning in public secondary schools in the county while other factors not studied in this research contribute 12.8% of the procurement planning. From the findings, most of the respondents indicated that the most important factor affecting procurement planning is ethics in procurement processes followed by budgeting procedures. This was because ethics in procurement processes and budgeting procedures result to effectiveness and efficiency in attaining service delivery in learning institutions. However, other respondents also indicated that without staff competency and cost estimation and forecasting then effective procurement planning cannot be realised in public secondary schools. The summary of findings on each variable follows:

5.1.1 Impact of staff competency on Procurement planning

From the regression model, a unit increase in staff competency will lead to a 0.511 increase in
procurement planning in secondary schools which implies that staff competency accounts for 51.1% of variations in procurement planning. Procurement staff competencies affect procurement planning both for procurement unit and to the whole institution in the sense that experienced staff carry out duties in a professional manner and reduce wastage of resources. The respondents indicated that effective and efficient procurement planning can only be achieved by proper planning by competent staff else there would be flaws in the plan formulation stage. Competent staff would ensure that items services are procured as and when the need is expected. Lysons and Gillingham, (2003) confirms this indicating that procurement personnel should be knowledgeable about specifications so as to be able to secure value for money for their employers and play their role of intermediaries between the user and the supplier.

5.1.3 Impact of budgeting procedures on procurement planning

From the regression model, a unit increase in budgeting procedures will lead to a 0.551 increases in procurement planning in secondary schools which implies that budgeting procedures accounts for 55.1% of variations in procurement planning. The findings also correlate with Burt et al (2004) who say that, procedural procurement is vital due to considerable amounts of money spent annually in the public sector.

5.1.4 Effect of cost estimation and forecasting on procurement planning

From the regression model, a unit increase in budgeting procedures will lead to a 0.611 increases in procurement planning in secondary schools which implies that budgeting procedures accounts for 61.1% of variations in procurement planning.

5.1.5 Effect of ethics in procurement process on procurement planning

From the regression model, a unit increase in ethics in procurement process will lead to a 0.713 increases in procurement planning in secondary schools which implies that ethics in procurement processes accounts for 71.3% of variations in procurement planning.

5.3 Conclusions

The study concludes that Staff competence has an effect on the procurement planning. The procurement entities should acquire the relevant knowledge and skills for procurement planning and procurement processes in secondary schools.

The study also notes that Budgeting procedures is affected by emergency purchases and price fluctuation hence budgeting procedures is not a smooth exercise. Cost estimation and forecasting has been observed to influence procurement planning in secondary schools as it has a significant impact on procurement planning. Procurement planning in secondary schools was also observed to have deteriorated over the past five years especially on efficiency and effectiveness in service delivery and achieving value for money, delay of funds, poor quality specifications, absence of relevant skills and quality.

5.4 Recommendations

This study established that procurement planning positively impact procurement service delivery in secondary schools to a large extent. The study recommends that procurement plans are not static and that their preparation should be participatory, frequently reviewed so as to improve on achieving value for money in secondary schools. Equally, people involved in procurement planning process should be qualified, competent and experienced having adequate knowledge in procuring and tendering activities. This will not only help maintain good procurement standards but also will help achieve high levels of efficiency and effectiveness, various departments should be involved in procurement planning to enable them to submit their requisitions in time and there should be timely payment of school fees by parents and timely disbursement of tuition money for subsidised secondary schools by the government. In addition, to avoid adverse impacts of inflation intensive cost estimation and realistic forecasting on the cost of items should be done and also the ministry should ensure that the tuition money for subsidised secondary education reaches the schools in time. Finally to avoid procuring items of poor quality, delays in supply and provision of services, ethics in procurement processes have to be respected. For the success of the effective procurement planning in public secondary schools, the ministry of education should move step ahead to put in place measure to mitigate factors that could be affecting procurement planning in secondary school.

5.4.1 Recommendation For Further Studies

The study recommends that further research be carried to find out the impact of the government financial management regulations on procurement planning.
planning in public secondary schools of various counties in Kenya, other factors that affect procurement planning and why it is not possible to effectively implement e-procurement in public secondary schools in Kenya and impact of public procurement reforms on access on value for money and attaining effective service delivery in public secondary schools.

REFERENCES