DETERMINANTS AFFECTING PUBLIC PROCUREMENT PERFORMANCE IN KENYAN UNIVERSITIES: A CASE OF THE CO-OPERATIVE UNIVERSITY COLLEGE OF KENYA

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ABSTRACT

Developing countries in one way or another have reformed their public procurement regulations. None the less, most developing countries are facing a problem of rapid changes in public procurement requirements. The changes are impacting pressure on how the procurement function performs its internal and external processes and procedures in order to achieve its objectives. The general objective of this study was to determine the determinants affecting public procurement performance in public institutions in Kenya with a focus on organizational budget, work environment, Quality management systems and organizational structure. The study adopted a descriptive study design. The study population included employees working at the procurement unit at the college. The study adopted a census method where all the 32 procurement staff at CUCK from senior management, middle level management and lower level management was included in the sample size. Data was collected using a questionnaire. Data collected was purely quantitative and it was analyzed by descriptive statistics. Data analysis was done with the assistance of the Statistical Package for Social Sciences (SPSS) Version 17. The findings were presented using tables and charts. The study found out that organizational budget, work environment, QMS and organizational structure are determinants that affect the performance of public procurement. The study recommended that there was need for the organization to set apart a budget that is specific to the procurement function.

Key Words: Procurement Performance, Organizational Budget, Quality management systems, Organizational Structure and Work Environment

INTRODUCTION

This study seeks to explore the determinants affecting Public Procurement Performance in Kenyan universities. Procurement is the process of acquiring goods, works and services. Public Procurement (PP) as a function of government includes decisions about the services that will be delivered to local authorities and the communities they serve (Hughes, 2005). It is utilized not only to secure goods and services required by public sector organizations for their missions and to support services provided to taxpayers, but it is also used to implement national policies and to achieve social and other objectives (Thai, 2004). Many national and international instruments have been concerned with building an effective procurement system. In this context, particular procurement issues, such as the implementation of secondary policies, the review mechanism to address complaints, provisions on electronic procurement or rules governing privately financed projects, have received an in-depth examination (De Castro, 2006). The study covered the Cooperative University College of Kenya. It targeted all staff working in the finance and administration department at the college’s Headquarters at Karen.
RESEARCH PROBLEM

Inevitably, governments are the biggest "spenders" world-wide (World Bank, 2007). The figure, varies from country to country, but according to various sources (for example Knight et al., 2003a) government spending on public services accounts for anywhere between 15-45% of GDP. Singapore reported 17%, while Canada is over 40% and the UK is in the range of 44% (Knight et al. 2003a). Most of this amount is "internal" spending (of salaries and alike), but some 25% to 50% is indeed spent "externally" (on sourcing goods and services) and mainly through Public Procurement. The sheer amount of this spending has a huge impact on the economy. Mahmood (2010) reiterated that public procurement represents 18.42% of the world GDP. In developing countries, public procurement is increasingly recognized as essential in service delivery (Basheka & Bisangabasaija, 2010), and it accounts for a high proportion of total expenditure. For example, public procurement accounts for 60% in Kenya (Akech, 2005), 58% in Angola, 40% in Malawi and 70% of Uganda’s public spending (Wittig, 1999; Government of Uganda, 2006) as cited in Basheka and Bisangabasaija (2010). This is very high when compared with a global average of 12-20 % (Frøystad et al, 2010). Due to the colossal amount of money involved in government procurement and the fact that such money comes from the public, there is need for accountability and transparency (Hui et al, 2011).

Local studies that have been done include Otieno, (2004) who did a study on procurement activities in public institutions; Akech, (2005) did a study on development partners and governance of public procurement in Kenya; Ombaka, (2009) carried a study on management of medicine procurement in Developing countries and Kiawa, (2012) conducted a study on accountability in Public Sector Procurement in the State Law Office. It is against this background that this study sought to fill the existing research gap by assessing the determinants affecting Public Procurement Performance in Kenyan universities.

GENERAL RESEARCH OBJECTIVE

The general objective of this study was determinants affecting Public Procurement Performance in Kenyan universities.

SPECIFIC RESEARCH OBJECTIVES

1. To describe the extent to which organizational budget effects public procurement performance at the Co-operative University College of Kenya
2. To discover the extent to which work environment affect public procurement performance at the Co-operative University College of Kenya.
3. To explore the extent to which Quality management systems (QMS) affects public procurement performance at the Co-operative University College of Kenya.
4. To understand the extent to which organizational structure affects public procurement performance at the Co-operative University College of Kenya.

**LITERATURE REVIEW**

**Theoretical Framework**

A theory is a set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. A theoretical framework is a collection of interrelated concepts, like a theory but not necessarily so well worked-out. A theoretical framework guides your research, determining what things you will measure, and what statistical relationships you will look for.

**Classical Organization Theory**

Classical organization theory evolved during the first half of this century. It represents the merger of scientific management, bureaucratic theory, and administrative theory. Frederick Taylor (1917) developed scientific management theory (often called "Taylorism") at the beginning of this century. His theory had four basic principles: (1) find the one "best way" to perform each task, (2) carefully match each worker to each task, (3) closely supervise workers, and use reward and punishment as motivators, and (4) the task of management is planning and control.

Initially, Taylor was very successful at improving production. His methods involved getting the best equipment and people, and then carefully scrutinizing each component of the production process. By analyzing each task individually, Taylor was able to find the right combinations of factors that yielded large increases in production.

While Taylor's scientific management theory proved successful in the simple industrialized companies at the turn of the century, it has not fared well in modern companies. The philosophy of "production first, people second" has left a legacy of declining production and quality, dissatisfaction with work, loss of pride in workmanship, and a near complete loss of organizational pride.

Max Weber (1947) expanded on Taylor's theories, and stressed the need to reduce diversity and ambiguity in organizations. The focus was on establishing clear lines of authority and control. Weber's bureaucratic theory emphasized the need for a hierarchical structure of power. It recognized the importance of division of labor and specialization. A formal set of rules was bound into the hierarchy structure to insure stability and uniformity. Weber also put forth the notion that organizational behavior is a network of human interactions, where all behavior could be understood by looking at cause and effect.

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Administrative theory (i.e., principles of management) was formalized in the 1930's by Mooney and Reiley (1931). The emphasis was on establishing a universal set of management principles that could be applied to all organizations. Classical management theory was rigid and mechanistic. The shortcomings of classical organization theory quickly became apparent. Its major deficiency was that it attempted to explain peoples' motivation to work strictly as a function of economic reward.

**Neoclassical Organization Theory**

The human relations movement evolved as a reaction to the tough, authoritarian structure of classical theory. It addressed many of the problems inherent in classical theory. The most serious objections to classical theory are that it created over-conformity and rigidity, thus squelching creativity, individual growth, and motivation. Neoclassical theory displayed genuine concern for human needs.

One of the first experiments that challenged the classical view was conducted by Mayo and Roethlisberger in the late 1920's at the Western Electric plant in Hawthorne, Illinois (Mayo, 1933). While manipulating conditions in the work environment (e.g., intensity of lighting), they found that any change had a positive impact on productivity. The act of paying attention to employees in a friendly and nonthreatening way was sufficient by itself to increase output. Uris (1986) referred to this as the "wart" theory of productivity. Nearly any treatment can make a wart go away--nearly anything will improve productivity. "The implication is plain: intelligent action often delivers results" (Uris, 1986, p. 225).

The Hawthorne experiment is quite disturbing because it cast doubts on our ability to evaluate the efficacy of new management theories. An organization might continually involve itself in the latest management fads to produce a continuous string of Hawthorne effects. "The result is usually a lot of wheel spinning and cynicism" (Pascale, 1990, p. 103). Pascale believes that the Hawthorne effect is often misinterpreted. It is a "parable about researchers (and managers) manipulating and 'playing tricks' on employees." (p. 103) Erroneous conclusions are drawn because it represents a controlling and manipulative attitude toward workers.

Writing in 1939, Barnard (1968) proposed one of the first modern theories of organization by defining organization as a system of consciously coordinated activities. He stressed in role of the executive in creating an atmosphere where there is coherence of values and purpose. Organizational success was linked to the ability of a leader to create a cohesive environment. He proposed that a manager's authority is derived from subordinates' acceptance, instead of the hierarchical power structure of the organization. Barnard's theory contains elements of both classical and neoclassical approaches. Since there is no consensus among scholars, it might be most appropriate to think of Barnard as a transition theorist.
Simon (1945) made an important contribution to the study of organizations when he proposed a model of "limited rationality" to explain the Hawthorne experiments. The theory stated that workers could respond unpredictably to managerial attention. The most important aspect of Simon's work was the rigorous application of the scientific method. Reductionism, quantification, and deductive logic were legitimized as the methods of studying organizations.

Taylor, Weber, Barnard, Mayo, Roethlisberger, and Simon shared the belief that the goal of management was to maintain equilibrium. The emphasis was on being able to control and manipulate workers and their environment.

**Contingency Theory**

Classical and neoclassical theorists viewed conflict as something to be avoided because it interfered with equilibrium. Contingency theorists view conflict as inescapable, but manageable. Chandler (1962) studied four large United States corporations and proposed that an organization would naturally evolve to meet the needs of its strategy -- that form follows function. Implicit in Chandler's ideas was that organizations would act in a rational, sequential, and linear manner to adapt to changes in the environment. Effectiveness was a function of management's ability to adapt to environmental changes.

Lawrence and Lorsch (1969) also studied how organizations adjusted to fit their environment. In highly volatile industries, they noted the importance of giving managers at all levels the authority to make decisions over their domain. Managers would be free to make decisions contingent on the current situation.

**Systems Theory**

Systems theory was originally proposed by Hungarian biologist Ludwig von Bertalanffy in 1928, although it has not been applied to organizations until recently (Kast and Rosenzweig, 1972; Scott, 1981). The foundation of systems theory is that all the components of an organization are interrelated, and that changing one variable might impact many others. Organizations are viewed as open systems, continually interacting with their environment. They are in a state of dynamic equilibrium as they adapt to environmental changes.

Senge (1990) describes systems thinking as:

> “…understanding how our actions shape our reality. If I believe that my current state was created by somebody else, or by forces outside my control, why should I hold a vision? The central premise behind holding a vision is that somehow I can shape my future. Systems thinking helps us see how our own actions have shaped
our current reality, thereby giving us confidence that we can create a different reality in the future (p. 136).”

A central theme of systems theory is that nonlinear relationships might exist between variables. Small changes in one variable can cause huge changes in another, and large changes in a variable might have only a nominal effect on another. The concept of nonlinearity adds enormous complexity to our understanding of organizations. In fact, one of the most salient argument against systems theory is that the complexity introduced by nonlinearity makes it difficult or impossible to fully understand the relationships between variables.

CONCEPTUAL FRAMEWORK

Organizational Budget

Horngren et al., (2008) state that, recent surveys show just how valuable budgets can be. They assert that, a study of more than 150 organizations in North America listed budgeting as the most frequently used cost management tools and it was also the tool with the highest value to the organization. Furthermore, they show that, study after study has shown the budget to be one of the most widely used and highest rated cost management tools for cost reduction and control. Highlighting one of the usefulness of budgeting to the users, they maintain that, advocates of budgeting claim that the process of budgeting forces manager to become a better administrator and puts planning in the fore-front of managers’ mind. In the same book, Horngren et al., (2008) also point out that the result of a survey carried out in the same place (North America) shows that most managers still agree that budgeting, correctly used has significant value to management. They reported that over 92% of the 150 companies in North America use budget and remarked budgeting as the top among the top three cost management tools. In the same view, in a round table discussions organized by CIMA and ICAEW in 2004 on “The traditional role of budgeting in organization”, it is stated that budgeting and the accompanying process are indispensable and that, research in organizations seems to suggest that this is a commonly held view. It was further stated that, traditional budgeting remains widespread.

Some claim that as many as 99% of European companies have a budget in place and no intention to abandon it (Kennedy & Dugdale, 1999, cited in CIMA-ICAEW, 2004). Consistent with this, Anand et al. (2004) in a survey carried out in India found out that the use of budgets as a part of management control system is widespread. Precisely, 88.7% of the respondents in their study prepared budgets. They assert that nearly all the companies in Australia, Japan, UK, and USA prepare budgets (Anand et al., 2004).

On the contrary, research also shows that over 60% of companies claim they are continuously trying to improve the budgeting process to meet the demands set for management in creating sustainable value (Ekholm & wallin, 2000, cited in CIMA-ICAEW, 2004). According to Bourne International Academic Journals
Cranfield University in 2001 teamed up with Accenture’s finance and performance management service line to undertake a large worldwide review of planning and budgeting. They focused on 15 companies in the US and Europe which had already made adjustments to their budgeting practice. In addition, the researchers reviewed over 100 academic and practitioner books on the subject. The result showed a widespread dissatisfaction with the budgeting process (Bourne, 2004). Contrary to this conclusion, Dugdale & Lyne (2004) also argue that there is little or no evidence to support the view mentioned above that there is a widespread dissatisfaction with budgeting process. They affirm that, there seems to be no widespread dissatisfaction with traditional budgeting. Instead, managers generally see budget as important, especially for planning, control and evaluation. More so, one of the criticisms held against the traditional budgeting is that, budgets are rarely strategically focused, but contrary to this opinion, Anand et al. (2004) in an investigation carried out in India, find out that the respondents as a matter of fact used more than one goal in formulating the master budgets.

**Work Environment**

In fact a recent study reported in the *New York Times* (Amible and Kramer, 2011), suggests that employees perform better when they are positively psychologically engaged at work. Amible and Kramer (2011) argue that managers must be facilitators of employees’ work by helping to eliminate barriers, offering support, and assistance and recognizing high level of effort. Supporting employees’ personal lives as whole people can also lead to higher performance. A randomized field study I conducted using control groups, showed that training leaders to be more supportive of family life lead to higher job satisfaction, performance, and lower turnover in grocery stores when compared to those stores where managers were less family supportive in their behaviors (Hammer et al., 2011).

A positive working environment for procurement and supply chain managers will make them more resourceful and efficient. Such an environment encompasses favorable working conditions, good air quality, timely management feedback and an understanding of job goals and priorities that will make the procurement and supply chain managers more result oriented (Kotz, 2004).

Hiring extra labor to help support the existing staff and giving extra time off, upgrading facilities to make them safer and more pleasant to work in, and the mere availability of dust masks are examples of good investments to ensure employee satisfaction and retention rates. Supply chain management can succeed if the working environment will be enabling them to concentrate on their work.

The environment that people are required to work in can have a significant impact on their ability to undertake the tasks that they have been asked to do. This can affect productivity and employee health and well-being. The key determinants fall into two categories, those that are driven by
procedures and processes, protocols and management requirements and the determinants that arise from premises, office or factory design make supply chain managers deviate from concentrating on performance (Hayes, 1999).

Management driven determinants include the development of organization plans such as the allocation of responsibilities at all levels of a process, definition of job descriptions and the degree of access to the management and administrative support needed to complete their tasks. Working patterns, shift-working, break times, absence or holiday cover and health and safety policies, including the provision of training, development of safe working practices and the adequate supply of protective clothing and equipment all aid in improving the work environment of procurement managers. (Miles, 2006) The work environment can also have an impact on supply chain manager’s ability to work safely, competently and in compliance with operational performance targets.

**Quality Management Systems**

Salvador et al. (2001) carried out an empirical study in 164 industrial plants on their relationship with suppliers and customers. The study found that in those relationships to do with Quality Management, the organization would indirectly improve their time performances – delivery punctuality and speed of operations – as a result of full mediation via internal practices in: quality management; low management, inter-unit coordination and vertical coordination. On the other hand, in relationships to do with managing the flow of materials, the impact on time-related performances can either be completely or partially mediated via internal practices. Romano and Vinelli (2001) published a study describing the case of a company from the textile sector, to help to understand how quality could be managed using an SCM perspective, and what the operative and strategic consequences were for the company under study and the chain to which it belonged. They showed how SCM improves the capacity of the companies to recognize the expectations of the end customers.

Miles (2006) investigated the correlation between 12 determinants (practices) in quality management and business performance. The study concluded that there are differences between service and manufacturing organizations. One example was supplier relationships, which are essential for a manufacturing organisation, compared to process improvements, which are more important for a service organisation. These findings suggest that individual quality management principles might have differing impacts on performance in manufacturing and service organizations.

Corbett et al. (2005) found that organizations that sought ISO 9000 certification had improved return of assets. They also found that organizations that had failed to seek certification experienced gradually worsening performance. The authors explained that these results were
associated with the organizations management practices, which means that the decision to seek certification is positively associated with other ,good management practices and that it is these latter practices that improve return of assets rather than the ISO 9000 development and certification process itself (Corbett et al., 2002). Poksinska (2005) reached the same conclusions in her thesis of ISO 9000.

In an empirical study of state-level administrative reforms and organizational changes in Pennsylvania, Boyd (2009) noticed that TQM was implemented with success in some agencies but not others. The reason for this mixed result is that, as Boyd summarized, “TQM was typically conceived within a department, and sometimes shared with other agencies, but it was never a priority of the governor or upper level executive staff. Where it did take hold, it was promoted by the top executive leader of an agency or bureau and implemented at multiple levels or in pockets of an organization” (Boyd, 2009: 235). Simply stated, it was just a product of a piecemeal approach of TQM implementation. Only when TQM was seriously taken by the next governor, who instituted a top down vision of the state by advancing a number of policy goals in the process of “reinventing government,” did the desired outcomes of TQM in administrative reforms and organizational changes become the desirable results.

**Organizational Structure**

Organization structure displays the system of task and authority relationship that control how employees use resources to achieve the organizational goals. The evidence generally indicates that work specialization contributes to higher employee productivity but at the price of reduced job satisfaction (Robinson, 2001). Some organization structure is necessary to make possible the effective performance of key activities and to support the efforts of staff. The structure of an organization affects not only the productivity and the efficiency of the economy but also the morale and job satisfaction of the work force. Therefore the Structure should be designed in such a way to encourage the willing participation of members of the organization and effective organizational performance (Mullins, 1999). According to Frøystad (2010) a good organization structure does not by itself produce good performance. But a poor organization structure makes good performance impossible, no matter how good the individual manager may be. Improved organization structure will therefore always improve performance. Heggstad (2010) claims that the formal bureaucratic organization restricts individual growth, self-fulfillment and, the psychological health of a person, causes a feeling of failure, frustration, and conflict. Ford demonstrated that work can be performed more efficiently if employees are allowed to specialize (Robinson, 2001).

According to Robinson (2001), it may be claimed that the extent to which an organization structure reduces ambiguity for an employee and clarifies problems such as “What am I supposed to do”?, “How am I supposed to do it”, “Whom do I report to”, “Whom I go to if I...
have a problem?”, shapes their attitudes and facilitates and motivates employees to higher levels of performance. It is difficult to assert categorically the positive effect of organization structure on performance. This is so because there are conflicting findings about the relationship between structural variables like span of control, subunit size, specialization, centralization vs. decentralization and employee performance. Some studies have found positive effects and some have found negative effects (Aswathappa, 2000). Robinson (2001) has indicted that strategy, size, technology, and environment determine the type of structure an organization will have. Here, the structure is designed around one of the two models: mechanistic or organic. The specific effects of structure designs on performance and satisfaction are moderated by employees’ individual preferences and culture norms.

RESEARCH METHODOLOGY

Research Design

In this study, descriptive survey design was adopted to determine the determinants affecting public procurement performance at the Co-operative University College of Kenya.

Population

The target population for the study was employees who worked at the Co-operative University College of Kenya. The study population included all the 32 employees working at the Finance and Administration Department at the college.

Sample Size and Sampling Technique

The study adopted a census method where all the 32 staff working at the Finance and Administration Department at CUCK from senior management, middle level management, lower level management and non management staff was included in the sample size. Census method was used since the sample size is considered manageable. For this study, the sampling frame came from the official list of staff working in the Finance and Administration department, at the Co-operative University College of Kenya. The sample elements came from the personnel department of the college.

Data Collection Procedure

This study collected both qualitative and quantitative data. Data was collected using a self-administered questionnaire. Semi-structured questions was used in an effort to conserve time and money as well as to facilitate in easier analysis as they would be in immediate usable form; while the unstructured questions were used so as to encourage the respondent to give an in-depth and fill responses without feeling held back in revealing of any information (Chandran, 2003).
Data Analysis and Presentation

Before processing the responses, the completed questionnaires were edited for completeness and consistency. The data was then coded to enable the responses to be grouped into various categories. Data collected was purely quantitative and it was analyzed by descriptive statistics. In addition, to determine the level of significance between the independent variables and the dependent variable, regression analysis was carried out. In addition variables were regressed using a model and all coefficients interpreted. The model took this form:

\[ Y = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \epsilon \]

Where: \( Y = \) Dependent Variable (Procurement Performance)

\( \chi_i \) = independent variable (\( \chi_1 \) is Organizational Budget, \( \chi_2 \) is Quality management systems, \( \chi_3 \) is Work Environment and \( \chi_4 \) is Organizational Structure)

\( \beta_0 \) = the constant

\( \beta_i \) = the regression coefficient or change included in \( Y \) by each \( \chi \)

RESEARCH FINDINGS

Inferential Statistics

Multiple regression can establish that a set of independent variables explains a proportion of the variance in a dependent variable at a significant level (significance test of R2), and can establish the relative predictive importance of the independent variables (comparing beta weights). The \( \beta \)'s are the regression coefficients, representing the amount the dependent variable \( y \) changes when the independent changes 1 unit. The \( c \) is the constant, where the regression line intercepts the \( y \) axis, representing the amount the dependent \( y \) will be when all the independent variables are 0. Associated with multiple regression is R2, multiple correlation, which is the percent of variance in the dependent variable explained collectively by all of the independent variables.

The regression model adopted was:

\[ Y = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \epsilon \]

Where: \( Y = \) Dependent Variable (Procurement Performance)

\( \chi_i \) = independent variable (\( \chi_1 \) is Organizational Budget, \( \chi_2 \) is quality management systems, \( \chi_3 \) is Work Environment and \( \chi_4 \) is Organizational Structure)

\( \beta_0 \) = the constant
\beta_{1-n} = \text{the regression coefficient or change included in Y by each } \chi

e = \text{error term}

**Table 1: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.763^a</td>
<td>.580</td>
<td>.289</td>
<td>.7952</td>
<td>.580</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.972</td>
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<td></td>
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<td></td>
<td></td>
<td>4</td>
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<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>a. Predictors: (Constant), organizational budget, QMS, work environment and organizational structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R is a measure of the correlation between the observed value and the predicted value of the dependent variable. In the above regression, this is the correlation between procurement performance reported by respondents and the levels predicted for them by the independent variables. R Square (R2) is the square of this measure of correlation and indicates the proportion of the variance in the dependent variable. In essence, this is a measure of how good a prediction of the dependent variable can be made by knowing the independent variables. However, R square tends to somewhat over-estimate the success of the model when applied to the real world, so an Adjusted R Square value is calculated which takes into account the number of variables in the model and the number of observations (respondents) the model is based on. This Adjusted R Square value gives the most useful measure of the success of the model. In the above model, the Adjusted R Square value of 0.580. This means that 58% of procurement performance can be explained by this model.

**Table 2: Analysis of Variance (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</td>
<td>Regression</td>
<td>0.015</td>
<td>4</td>
<td>1.235</td>
<td>1.953</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>3.161</td>
<td>5</td>
<td>.632</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8.100</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Predictors: (Constant), organizational budget, QMS, work environment and organizational structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Dependent Variable: procurement performance</td>
<td></td>
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</tr>
</tbody>
</table>

The above table reports an ANOVA, which assesses the overall significance of the model. As p < 0.005 the model is significant. F4, 5 = 0.015, P < 0.005
Table 3: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.894</td>
<td>.004</td>
</tr>
<tr>
<td>Organizational Structure</td>
<td>.453</td>
<td>.002</td>
</tr>
<tr>
<td>QMS</td>
<td>.327</td>
<td>.001</td>
</tr>
<tr>
<td>Work environment</td>
<td>.024</td>
<td>.001</td>
</tr>
<tr>
<td>Organizational Budget</td>
<td>.654</td>
<td>.003</td>
</tr>
</tbody>
</table>

The estimated model here is $Y=4.894+0.453X_1+0.327X_2+0.024X_3+0.654X_4$

From the table above we see that: All the explanatory variables are statistically significant, All independent variables have positive coefficients meaning that a greater percentage of these variables is associated with a higher level of procurement performance. Taking work environment as an example, we see that having held the other variables constant, for every 1% in work environment, there is an increase of 0.024% in the predicted value of procurement performance. However from the model organizational budget is the most significant factor that affects procurement performance at the Cooperative University College of Kenya.

**SUMMARY OF FINDINGS**

**Organizational budget**

On the extent to which organizational budget effected procurement performance, the study found out that majority of respondents said that the procurement department did not have its own budget. This shows that the college had not fully recognized the procurement unit as a fully fledged department. In addition, for those who said that there was a budget, half of them said it was adequate while the rest said it was inadequate. In addition, respondents agreed that procurement planning and associated expenditures were part of the budget formulation process and contribute to multiyear planning.

Respondents also agreed that budget law and financial procedures supported timely procurement, contract execution, and payment. In addition respondents agreed that there were no initiations of procurement actions without existing budget appropriations. Finally respondents also agreed that systematic completion reports were prepared for certification of budget execution and for reconciliation of delivery with budget programming. About their opinion on the extent to which organizational budget influenced procurement performance at the college, most respondents said that organizational budget influenced procurement performance to a large extent.
Work environment

The study attempted to determine the extent to which work environment affected procurement performance at the college. From the study, respondents rated the influence of good air quality, enough employees, upgraded facilities, networked office, provision of safety gear while working and reasonable compensation, influence procurement performance to a moderate extent. The study sought to establish the extent to which work environment affected public performance. From the results, majority of respondents rated the influence of work environment on procurement performance to be of a large extent.

Quality management systems (QMS)

The study also attempted to answer the extent to which QMS influenced procurement performance at the college. Respondents agreed that auditors were sufficiently informed about procurement requirements and control systems to conduct quality audits that contributed to compliance. Further, they agreed that a legal framework, organization, policy and procedures for internal and external control and audit of public procurement operations was in place to provide a functioning control framework; that internal control systems were sufficiently defined to allow performance audits to be conducted and that there existed Codes of Conduct/Codes of Ethics for participants that were involved in aspects of the public financial management systems that also provide for disclosure for those in decision making positions. However, respondents disagreed that quality control standards were disseminated and used to evaluate staff performance and address capacity development issues and that the college had an effective control and audit systems. Results showed that most respondents thought that QMS influenced procurement performance to a large and very large extent.

Organizational Structure

The final objective was to determine the extent to which organizational structure affected procurement performance in the college. The study showed that respondents agreed that the organizational structure of the procurement department enabled it to exercise its duties adequately, that work specialization in the procurement department contributed to higher employee productivity, that there was continuous improvement in the efficiency of internal processes and systems and that the organizational structure was in such a way that it avoided unnecessary costs. Respondents were asked to name the various challenges in the organizational structure within the procurement department. From the responses, respondents gave various challenges that included; the organizational structure failing to promote progression in ranking, poor staffing, lack of its own budget, the current structure requires a lot of staff that could be combined taking advantage of IT, upgrading of knowledge and skills of the staff in the department and the structure being centralized. The study sought to determine the extent to
which organizational structure influenced procurement performance at the college. From the results, majority of respondents said that organizational structure influenced procurement performance to a large extent. This shows that organizational structure is integral to procurement performance.

CONCLUSIONS

Several conclusions can be derived from the study findings. The following are conclusions made as guided by study objectives:

Organizations with established performance measures for their procedures, processes, and plans experience lower customer dissatisfaction and employee turnover than those which do not have. The issue is to ensure that measures are being implemented and measure what they were intended to measure. Implementing purchasing measures is not as easy as it may sound. It requires preparation, coordination, team work, constant communication and feedback. To ensure value for money, there should be continuous improvement in the efficiency of internal processes and systems and public entities should maintain structures that avoid unnecessary costs.

From the findings of this study, organizational budget, work environment, QMS and organizational structure affect the performance of public procurement. Working conditions for the procurement officers boost their morale which in turn boosts their productivity. Organizational budget specific to procurement department is helpful in maintaining the autonomy of the procurement function thus safeguarding it from manipulation from the top management. QMS among employees in the procurement department is also a major concern to the performance of public procurement. It is clear that quality management systems including control systems need to be fully operationalized to improve procurement performance. The organizational structure at the college is bureaucratic due to lack of decentralization.

RECOMMENDATIONS

As part of recommendations, there is need for the organization to set apart a budget that is specific to the procurement function. The management should strive to ensure that procurement unit is independent to avoid manipulation. This would ensure that the department executes its core mandate professionally thus enhancing procurement performance. Further, there is need to provide adequate office accommodation in order to improve work environment as most staff are crowded in one office with interns. The organization needs to decentralise procurement function as the university to enhance efficiency in all the four campuses. Finally, the college needs to ensure that quality control standards are disseminated and used to evaluate staff performance and address capacity development issues as well as having an effective control and audit systems.
REFERENCES


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