Does Budgeting Strategy influence Organizational Performance of public Universities in Kenya?

1Charles Momanyi, 2Dr. Stella Moraa Omari

1Department of Human Resource, and Strategic Management, Kisii University
2Department of Human Resource, and Strategic Management, Kisii University
E-mail: cmomanyi2007@yahoo.com, stellaomari@yahoo.com

Abstract: The purpose of this study was to examine the impact of budgeting strategy on the performance of public universities in Kenya. Although a number of empirical studies have given a different view on the weak financial performance of public Universities, research evidence of the impact of budgeting strategy on performance of public universities in the Kenyan context is insufficient. The study used descriptive survey research design. The population of the study was 1480 employees comprising of the top and middle-level management drawn from twenty-nine charted public universities by October 2016. The study used a sample size was 391. Descriptive statistical techniques were used to analyze data with the assistance of statistical package of social science (SPSS) software. Inferential statistical techniques were adopted to test the strength of the relationship among and between the variables and interpret the results. Simple linear regression analysis was applied to test the strength of the relationship and establish the level of significance (r=0.231, Ar²=0.051, F=18.313, P<0.05). The study results showed a weak positive significant relationship between budgeting strategy and performance of public universities in Kenya. The study created knowledge by establishing that budgeting strategy attributes to the performance of public universities in Kenya (5.1%). The study recommended to universities management councils to ensure that all the budgeting strategy attributes are fully implemented in their universities. The study recommended for further research to be conducted on other financial management strategies and future research should include other cadres not included in this study.

Keywords: budgeting strategy, empirical studies, financial performance, public Universities.

1. INTRODUCTION

Performance is achieved if an organization maintains a culture of teamwork among its employees, good policies on research and development, good public relations, good interaction among stakeholders and regular attention on internal attributes (Ismail, Rose and Uli, 2012). Effective organizational management develops strategies to enable it to achieve its organizational objectives. Budgeting strategy is one of the attributes of organizational performance, which assists university management councils to adhere to budget guidelines by ensuring proper financial planning.

Budgeting strategy is a key tool in determining the performance of an organization since it assists to plan future financial activities of an organization. A productive budget must involve all stakeholders and goodwill of organizational commitment. The organizational commitment will ensure that the budget guidelines are followed, that there is no diversion of resources. In addition, employees should be involved in budget preparation because they will be motivated, they will feel recognized, they will own the budget and perform the oversight role on budget implementation (Andry Arifian Rachman, 2014). A productive budget implementation requires enough trained staff and good structures showing clearly the processes and procedures to be followed for the purpose of monitoring and evaluation. Stakeholders must be involved in the entire process, and similarly, a firm should have financial management systems to ensure proper management of funds and adequate information to all stakeholders for oversight role (Onduso, 2013).
Budgeting strategy requires an organization to have effective internal control systems, proper financial planning, and effective workforce for effective implementation of the budget. Further, the budget guidelines and policies improve efficiency and accountability. The effective budget implementation consists of adherence to budget regulations, proper accounting systems put in place, and budget planning (Muli & Rotich, 2016). Budget planning models act as a go-between budget emphasis and performance of management and performance of an organization. Budgeting planning helps management to forecast in order to reduce costs and unnecessary spending, so that the company may fulfill its corporate vision and mission (Kung, Huang and Cheng, 2013). In view of this, Proper implementation of budgeting strategy will enable public universities to have an effective budget.

Auditor general reports for the financial year 2014 revealed that majority of public universities were declared insolvent. Some universities were unable to avail supporting documents for payments made, others would not account for funds allocated, while some universities were spending without following budget guidelines. Empirical studies established that financial management processes in public universities in Kenya are weak and lack sufficient resources, leading to a financial crisis and, hence the provision of low quality of services (Muli and Rotich, 2016; Andry Arifian Rachman (2014; Mutahi and Buisinei, 2015; Barasa, 2015). This then provides a basis for conducting a study to show that universities must embrace strategic thinking and management in the use and allocation of financial resources so as to survive and thrive while providing customer satisfaction and fulfilling their core mandates.

**Research Problem and Focus of Study:**

Effective budgeting strategy ensures that budget guidelines are adhered to and an organization; achieves its goals, survives for long, is secure, enjoys a competitive advantage and maximizes value for its shareholders. The previous studies conducted on budgeting failed to show whether the budgetary process was inclusive of all stakeholders in the entire budget preparation process and whether budget committees regularly evaluated and monitored the budget implementation. Other similar studies (Muli and Rotich, 2016; Noor and Othman, 2012; Auditor general report 2014 ) showed that public universities have weak financial management systems and majority of public universities were declared insolvent due to financial mismanagement. The empirical studies the studies reviewed have concentrated on the financial management strategies in profit and non-profit organizations; they have also looked at financial management as a functional activity. This study would like to fill the gap created by the previous studies by assessing the relationship between budgeting strategy and performance in public universities. It also sought to look at budgeting as a strategic management activity.

**Purpose of Research**

University management councils should ensure that available resources are effectively utilized for their core business that includes; academic, research, and innovations. Unfortunately, universities are unable to pay their creditors', fund research, and innovation as well as meet their financial obligations. This study provided guidance on the optimum utilization of resources and gave the relevance of a strategic approach to budgeting strategy. The study shall benefit various stakeholders, as the findings will assist university management councils of public universities who have challenges of financial mismanagement to develop financial management strategies and guidelines overcome them. The study will do this by pointing out the weak areas that need improvement to enable them to compete in dynamic global environments. The results of this study will enrich existing knowledge by adding to the pool of information available in this area.

2. **THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

**Organizational Budget Perspectives Theory:**

According to organizational isomorphism DiMaggio & Powell, (1983), budgeting diffused via three mechanisms: coercive, mimetic, and normative. Under mimetic diffusion, organizations adopt budgets because they observe that other groups become more financially confident and successful with a systematic budgeting process. As budgeting became more popular, there were coercive pressures to adopt budgets. Stockholders who demand sound financial management may expect yearly budgets for key activities. Budgets have also become a "national myth" for modern organizations. According to this theory, Budgets necessary for legitimacy can be de-coupled from daily operations. Money may be transferred from one budget category to another to cover over-spending. Often there are little pressures to maintain budgeted spending levels once it has been developed.
This theory is relevant to this study since budgeting strategy is a key element in planning the activities of the university through focusing on the expected revenue and on how to spend by taking into account the budget guidelines of any given university. Universities that follow the budget guidelines will manage their revenues efficiently and this will result to increase in return on assets that is a key indicator of performance (Olowookere, 2011). In addition, trained and qualified staff contributes to the success in budget implementation; this is also in line with this theory, which emphasizes that when budgeting became famous organizations were forced to employ qualified personnel to come and assist to prepare standardized budgets in order to compete in the market. In any normal circumstance transfer of funds when there is over expenditure on some sections of the budget to others that have not exhausted the allocated funds, this is also opinioned by Womack and Jones (2010) on this theory.

**Empirical Literature Review:**

Effective budget would be attained when an organization has enough trained staff and good structures put in place showing clearly the processes and procedures to be followed for the purpose of monitoring and evaluation. Budget to be executed and implemented properly, all Stakeholders must be involved in the entire process and similarly, a firm should have financial management systems to ensure proper management of funds and adequate information to all stakeholders for oversight role (Onduso, 2013). Budget guidelines and policies improve efficiency and accountability while, budget regulations, accounting systems, financial management and budget planning have a positive significant influence on budget implementation (Muli and Rotich, 2016).

Budget planning models act as a go-between budget emphasis and performance of management and performance of the organization. There is a positive impact of budget emphasis and satisfaction to a small extent on budgeting model. Differentiation strategies have a positive impact on budget emphasis, budget planning models and performance (Kung, Huang and Cheng, 2013). Financial performance of the county government is determined by its financial capacity and there is a positive significant relationship between financial capacity and financial performance in county Governments (Isaboke, 2016). Andry Arifian Rachman (2014) established that organizational commitment has a positive relationship with budgeting and significantly affect the performance and participative budgeting has a negative relationship and significantly affect the performance. Budget coordination, budget planning, budget control and budget evaluation has a positive relationship with the firm performance (Pimpong and Laryea, 2016).

Yamamoto (2010), found out that performance-oriented budget was influenced by the relative strength of the budget and the extent the departments’ respondent, government policy through funding had an impact on performance-oriented budgeting systems, performance-oriented budgeting could be weakened by discretionary expenditures by top management and zero games in departments where they compete for fixed funds adversely affected performance-oriented budgeting. There is a statistically significant positive relationship between budgetary participation and managerial performance, budgetary participation, and organizational commitment and organizational commitment and managerial performance (Noor and Othman, 2012). Employee commitment and budget goal have a statistically significant influence on employee performance and budget participation led to budget goal clarity, goal commitment, the perception of fairness of resource distribution and employee performance (Owusu, Dwomoh, Yaa and Daniel, 2014).

**Budgeting Strategy**
- Budget preparation process
- Monitoring and Evaluation activities
- Implementation of Budget guidelines

**Performance**
- The increase of Student Enrolment
- Customer Satisfaction
- Timely Completion Rate of Infrastructures

**Figure1: A conceptual framework showing the relationship between budgeting strategy and performance of public universities in Kenya**
Budgeting strategy is the independent variable in this study. From figure 1 the parameters of measuring budgeting strategy are; the activities and stakeholders involved in the entire budgeting process, whether the budget committee monitors and evaluates the budget implementation and whether university management councils are committed to budget guidelines. The dependent variable of this study if the organizational performance that is attributed to; whether there is an increase in student enrolment, whether infrastructures the universities are undertaking are completed in time and whether there are indications on customer satisfaction.

### 3. RESEARCH METHODOLOGY

**Research Design:**

The study adopted descriptive survey research design as it sought to assess the impact of budgeting strategy on organizational performance of public universities in Kenya. This was consistent with Pimpong and Laryea, (2016); Kamwana and Muturi, (2014), who conducted similar studies using descriptive research design and found it suitable in their application on respondents who have the homogenous characteristic.

**The population of Research and Sample size:**

The target population of this research study was 1480 employees of public chartered universities (Universities chartered by October 2016) that comprises top and middle-level management. The study selected these cadres due to their role in dealing with strategic issues in the management of universities. The study used stratified sampling techniques to identify the sample size. The employees were stratified in five categories; top management, Directors, Deans, Chairpersons of academic departments and Heads of nonacademic departments. A sample size of 391 respondents was obtained using Israel (1992) model indicated below;

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

Where: \( n \) is the sample size, \( N \) is the population size and \( e \) - is the sampling error.

Other previous similar studies have been conducted using the same model such as Wamwayi, Amuhaya, Elegwanukulu and Waititu (2016), a sample size of 384 and Uwaoma and Ordu (2015), used a sample size 222.

**Research Instrument and Procedures:**

The questionnaire was suitable for this study as it was appropriate, reliable, and accurate in collecting primary data. The questionnaire was developed that contained both open and closed-ended questions. The questionnaire had three sections; demographic section, budgeting strategy measurement variables section and organizational performance variables section.

**Validity and Reliability of Research Instrument:**

Validity is the extent to which a scale or set of measure accurately represents the concept of interest. In other words, validity was ascertained when means of measurement is accurate and actually measuring what they are intended to measure (Nia, Alouj, & Gezelbash, 2012). The study used content validity to ascertain the degree to which data collected represents the content of the concept being measured. Experts in the field of strategic management were useful as they ensured that the instrument made the minimum threshold.

Reliability refers to the ability of a measuring instrument to give the same result, in the same circumstances and at different times (Johnson, Harris, Spitzer and Williams, 2002). This means that a reliable instrument should be able to give the same answer from different people at different times. Internal consistency on reliability technique was suitable for this study. A pilot study was conducted in one the public university that was not included in the main study. The study used coefficient alpha model Cronbach (1995), to establish the reliability of research instruments. The Cronbach's alpha coefficient values were 07.18, this is well above the accepted value of 0.5 (De Vaus, 2002), implying that the research instrument was reliable.
Data Analysis:

Data analysis involves the reduction of accumulated data to a controllable size, developing summaries, looking for patterns, and applying statistical techniques (Cooper and Schindler, 2012). Study data was edited, coded, keyed in using Statistical Package for Social Sciences (SPSS). Descriptive statistical techniques were used to analyze data, while inferential statistical methods were adopted to test data and establish the strength of the relationship. Pearson's product moment correlation was used to determine the strength of the relationship between the variables and Simple linear regression analyses analysis to establish the level of significance at a confidence interval of 95%.

Table 1: A Table showing a regression model for the study

<table>
<thead>
<tr>
<th>Objective</th>
<th>Hypothesis</th>
<th>Analytical Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>To examine the influence of budgeting strategy on performance of public universities in Kenya</td>
<td>$H_0$: Budgeting strategy has no statistical relationship on the performance of public universities in Kenya</td>
<td>A simple linear regression equation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$Y = \alpha + \beta_1 X_1 + \epsilon$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$Y =$ Performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$\alpha =$ Regression Constant or intercept</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$\beta_1 =$ is the coefficient of Auditing strategy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$X_1 =$ Budgeting strategy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$\epsilon =$ Error term.</td>
</tr>
</tbody>
</table>

4. RESEARCH RESULTS AND FINDINGS

Descriptive statistical analysis results indicated the number of responses, their average mean, and standard deviation on budgeting strategy and performance of public universities in Kenya. Table 2 shows variables that are attributed to budgeting strategy, which influence the success of the performance of public universities in Kenya. The statements helped respondents to indicate the level of agreement on budgeting strategy measurement variables. A structured five-Likert scale was developed as a response format for various variables which were assigned values ranging from 1 representing strongly disagree to 5 representing strongly agree. Table 1 shows the number of respondents, mean, and standard deviation on budgeting strategy.

Table 2: Responses on Budgeting strategy of Public Universities in Kenya

<table>
<thead>
<tr>
<th>Budgeting Strategy</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>University has a working Budget</td>
<td>325</td>
<td>4.40</td>
<td>3.318</td>
</tr>
<tr>
<td>University forecasts income first and then creates expense budgets to avoid budget constraints</td>
<td>289</td>
<td>4.31</td>
<td>3.169</td>
</tr>
<tr>
<td>All stakeholders are involved in entire budget preparation process</td>
<td>321</td>
<td>4.42</td>
<td>.855</td>
</tr>
<tr>
<td>University has a budget committee which monitors and evaluates the budget on timely basis</td>
<td>324</td>
<td>4.23</td>
<td>.873</td>
</tr>
<tr>
<td>Management ensures budget guidelines are followed</td>
<td>323</td>
<td>4.19</td>
<td>1.016</td>
</tr>
</tbody>
</table>

Source: Research Data, 2017

Table 2 shows that 323 employees who represent lowest mean of 4.19 agreed that the management ensures budget guidelines are followed. This implies that majority of universities would not be fully following the budget guidelines. Responses with the highest mean of 325 employees who represent mean of 4.4 indicated that the University has a working Budget. This result implies that respondents generally agreed that there is a working budget in their respective universities.

Testing of Hypothesis:

The study sought to establish the relationship between budgeting strategy and performance of public universities in Kenya. The hypothesis stated:

$H_0$: Budgeting strategy has no statistical relationship on the performance of public universities in Kenya

Simple linear regression analysis was conducted that generated three models as presented in Table 3, Table 4 and Table 5. Table 2 shows the regression results for budgeting strategy and performance of public universities in Kenya.
Table 3: Model Summary for Simple Regression analysis

<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>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.231*</td>
<td>0.053</td>
<td>0.051</td>
<td>0.554</td>
<td>1.446</td>
</tr>
</tbody>
</table>

Sources: Research Data, 2017

Table 3 shows the value for Durbin-Watson (D=1.446) that is within the accepted range of 1 - 3 and therefore indicates that the data met the assumptions for normality in using regression analysis. Further, the correlation for the relationship between budgeting strategy and performance is weak, positive and significant (r=0.231, p<0.05). The model summary shows that the Adjusted R-squared was 0.051, which means that, budgeting strategy explains up to 5.1% of the changes in the public university performance.

Analysis of variance test was conducted to find out the level of significance on the influence of budgeting strategy on the performance of public universities. Table 4 provides the summary of the ANOVA test.

Table 4: A Table showing the ANOVA summary of budgeting strategy on performance in public universities in Kenya

<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>Regression</td>
<td>5.621</td>
<td>1</td>
<td>5.621</td>
<td>18.313</td>
<td>0.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>99.456</td>
<td>324</td>
<td>0.307</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105.077</td>
<td>325</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Research Data, 2017

The results on Table 4 indicate that budgeting strategy has a positive and significant influence on the performance of public universities in Kenya. The F critical value where V1=1 and V2=324 is 5.10. Since the calculated F value is 18.313 that is more than the F critical with p<.000. This implies that the relationship is significant.

In order to test the appropriateness of the regression model, explaining how the outcome variable Y is caused by the predictor variable X1, regression coefficient table is generated and analyzed. Table 4 represents regression table.

Table 5: A Table showing simple regression coefficient

<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></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.055</td>
<td>0.137</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Budgeting Strategies</td>
<td>-0.188</td>
<td>0.044</td>
<td>-0.231</td>
</tr>
</tbody>
</table>

Sources: Research Data, 2017

The regression coefficient Table 5 shows that the constant α=2.055 is significantly greater than zero. The coefficient of; budgeting strategy β = -0.231, is significantly different from zero with a p-value of 0.000. However, in order to use the predictor variable to predict the outcome in performance, the unstandardized coefficients of budgeting (X1) was used. The unstandardized coefficient was used to build the linear regression equation that would be used to predict new scores of Y using the available score of X1. The results show that for each unit increase in the independent variable, there is an expected unit change of -0.188, in the dependent variable. A simple linear regression model was formulated to determine the relationship between budgeting strategy and the performance of public universities. The regression equation (Y = β0 + β1X1 + ε). Therefore, the proposed regression model will be Y = 2.055 + -0.188X1

Table 6: A Table showing a summary of the findings

<table>
<thead>
<tr>
<th>Objective</th>
<th>To examine the influence of budgeting strategy on performance of public universities in Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis</td>
<td>H0: Budgeting strategy has no statistical relationship on the performance of public universities in Kenya, H1: Budgeting strategy has a statistical relationship on the performance of public universities in Kenya</td>
</tr>
<tr>
<td>Findings</td>
<td>r=0.231, 6=0.051, F calculated=18.313, F critical=5.10; Then F calculated &gt; F critical at significant level of 95%, Budgeting strategy had a weak positive and significant relationship. Implying that, budgeting strategy explains 5.1% of the changes in the performance of public universities in Kenya.</td>
</tr>
<tr>
<td>Interpretation</td>
<td>This result shows that budgeting strategy had the influence on the performance of public universities in Kenya. Therefore, alternate hypothesis accepted and null hypothesis rejected.</td>
</tr>
</tbody>
</table>

Source: Research Data, 2017
5. SUMMARY AND CONCLUSION

The study examined the influence of budgeting strategy performance of public universities in Kenya. Hypothesis testing results indicated that budgeting strategy had a weak positive and significant relationship on performance ($r=0.231$, $R^2=0.051$, $F=18.313$, $P<0.05$). The measurement variables of budgeting strategy included; involvement of all stakeholders on entire budget preparation process, adherence to budget guidelines by all stakeholders, budget committee to monitor and evaluate budget activities, university management councils to be committed to the budget. The study concluded that budgeting strategy has the influence on the performance of public universities in Kenya since it contributes 5.1% of the overall performance.

**Contribution to Knowledge:**

Universities management councils will benefit from the study by ensuring the existence of budget committee that regularly monitors and evaluates the budget implementation. In addition, the Council will have information that for an effective budget to be attained all stakeholders must be involved in the entire budget preparation process, budget guidelines must be followed and top management must be committed to the budget.

**Implications for Theory and Practice:**

Organizational budget Perspectives theory perceptive on budget argued that organizations adopted budgeting systems because budgets will assist organizations to manage the financial resources better and budgets were prepared on annual basis. Budgeting strategy in this study revealed that budget preparation process must involve all stakeholders and budget committee must evaluate and monitor the budget implementation activities regularly. The study results further showed that for an effective budget to be achieved management must own the budget by following the budget guidelines, however, budgeting did not have a significant contribution to performance.

6. RECOMMENDATIONS

The study recommended future research to include other staff cadres that were not covered. This study concentrated on budgeting strategies variables leaving out other variables that contribute over 84.9% of performance, the study recommends future research on other variables.

REFERENCES


