EFFECT OF INTERNAL CONTROLS ON OPERATIONAL COST EFFICIENCY AMONG KENYAN PARASTATALS

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Abstract: This research seeks to determine how internal controls influences operational cost efficiency among Kenyan parastatals. The specific objectives include evaluation of the effect of internal auditing, systems controls, physical controls and personnel controls on cost efficiency in the Kenyan parastatals. Descriptive design and a population of the 186 parastatals were used. The research adopted descriptive and inferential statistics to analyze the collected data. From the analyzed data, the results showed that there was a positive and a significant relationship between internal auditing, physical controls, personnel controls and operational cost efficiency in the Kenyan parastatals. The study however found an insignificant positive effect between systems controls and operational cost efficiency in the Kenyan parastatals. The study agreed and deferred with other several studies as shown in the data analysis. The study concluded that internal auditing, physical controls and personnel controls significantly influences operational cost efficiency in the Kenyan parastatals. The study used four theories which include: The Agency Theory, Financial Control Theory, Firm Theory and Institutional Theory. Following the results of this research, it is recommended that the management board of these parastatals should work towards strengthening the internal audit department by providing enough resources, work force, training and ensuring that the departments are independent since such would ensure that efficiency in operational costs. The study also recommended that parastatal should put more emphasis on system controls and invest in them and they should invest on seminars to train employees on system controls. Further recommendation was that the administration of parastatals in Kenya should ensure that there is reasonable investment on physical control to avoid losses due to access of the systems by unauthorized individuals and manipulation of financial information. Finally, this research recommends management of parastatals to recruit staff, which are suitable, and with relevant professional qualifications. These staff should understand the vision, Mission and the core values of the organization to enhance easier implementation of the strategies leading to achievement of the set goals.

Keywords: Internal control, Systems control, Operational Cost Efficiency

1. Regional Perspective of Internal Controls

In Zambia, there was conscious attempt to have all public sector develop, incorporate and implement these controls through financial management Temtime and Pansiri (2008). The government tried to put all necessary measures in place so as to achieve a better financial management including putting proper checks in the public sector to help safeguard the financial aspect as much as possible. This included alternating public servants in the public sector and having these servants checked by other public departments for proper financial management. One of the major control put in the public sector was to have all government entities checked and audited by one office i.e. Office of the Auditor General Owino (2017). The implementation of this plan is
still in progress bit by bit for resistance by these public servants also faces the system. Most of these servants do not want to be checked and where there is checks, sometimes there is collusion to swindle public funds by officers of bad moral Temtime and Pansiri (2008). Historically, there has been capacity challenges accompanied by information breakdown. Additionally, if there is poor predictability of public spending there will be poor analytical capacity and this can lead to poor development and implementation of these controls. Poor development and implementation will in turn lead to poor performance and can lead to losses. This will be measured by having poor return on assets, low profitability and poor growth accompanied by decline in sales.

A study carried out by Awino (2015) investigated the existence and adequacy of implemented security controls of computerized accounting information systems in the Saudi banking sector. The results of study revealed that the vast majority of Saudi banks have adequate security controls in place and that these controls have a significant influence on banks performance in the banking sector. Their results also could be used to enable bank managers and practitioners to better secure their computerized accounting information systems and to champion the security of information technology for the success of their banks.

Mohamed (2017) study on his study on factors affecting financial performance of income generating units among universities in Puntland state of Somalia: the case Puntland state university (PSU), the second objective sought to find out the effect of internal control systems on the performance of the income generating units in Universities in the Puntland State of Somalia. The finding from the regression model shows that internal control systems have a positive effect on financial performance. The study concludes that internal controls have a positive effect on performance of income generating units among Universities in Puntland State of Somalia.

Owino (2017) on his study on effects of internal control systems on financial performance in an institution of higher learning in Uganda (a case of Uganda Martyrs University). The results of the multiple regression model shows that there is a positive relationship between internal control systems and financial performance. It can be said that effective internal controls include; the maintenance of proper accounting records, employee accountability, timely reporting on financial matters, risk mitigation by internal employees, effective communication among employees, efficient and effective utilization of financial and non-financial resources and information and communication technology in service delivery.

2. Local Perspective

A study done by Suomala and Lyly-Yrjänäinen (2010) using a case study of the Kenyan manufacturing sector and with the aim of evaluating internal control specifically ascertaining whether such control provide adequate internal control framework of checks and balances to ensure the project funds are utilized solely and wholly for intended poverty reduction. The results showed that strong internal controls were lacking in those projects. The study found out that any money allocated to these projects either by grant or donation a good chunk of it will bet lost through embezzlement by officers put in place to handle these finances. The study found out that any project with poor or weak internal controls is prone to loosing funds. The study ended with recommendations to improve the existing internal control in the projects. The study gap was that the authors did not focus on contribution of internal control towards frauds reduction and proper utilization of resources in Kenyan Parastatals.

A study carried out by Gray (2013) on effect of internal control systems on financial performance of companies quoted in the Nairobi securities exchange. Effect of internal control systems on financial performance of companies quoted in the Nairobi Securities Exchange examined the importance of a well organized system of internal control in regard with the bank sector financial performance. The sample was based on 25 credit
institutions of Romania. The analysis of the survey answers revealed that there is a positive relationship between internal controls and banks financial performance.

Kimani (2017) investigated factors influencing operational cost efficiency among cement manufacturing firms in Kenya. The study found out that internal controls significantly influenced how these firms make their sales as well as distributing their sales to their clients. Firms, which had poor internal controls, were prone to making losses while firms that had strong controls were associated with growth in sales and financial performance. Financial performance was measured in terms of profitability. The study had used regression analysis and found out that internal controls significantly impacted operational cost efficiency recommended that, cement manufacturing firms to have strong controls to help enhance financial performance.

3. Statement of the Problem

Internal Controls includes all assets safeguarding measures that are put in place to help an organization be in check and in control of its assets NBAA (2009). It is one of the important items to check during audit as an auditor. It involves check of the safety measures put in place by the management to safeguard assets. The work of an auditor will be to check how strong or weak these measures are. If the auditor is if the opinion that weak internal control measures are in place, He will suggest and recommend measures to be put in place to help strengthen the existing ones Gray (2013). An organization without these internal controls is prone to incurring unnecessary costs and eventually will find itself operating inefficiently. These operation costs consumes the working capital of the organization and need to put in proper controls. These will be the purpose of the internal controls.

In Kenya there are several major investments made through Parastatals. The management of these parastatals despite the fact that they play important roles in the development, have left so many begging questions unanswered (Kingdom et al. 2017). In Kenya, these parastatals are run with a big part of financial elements coming from taxes. These makes tax payers to demand for prudential management of these finances. In Kenya, public sector the quality of service has been affected by financial management personnel issues (Kingdom et al., 2017). Public Officer Ethics Act of 2003 defines that money imprest should to be accounted for whereas any major purchases in public sector be done through the open and transparent tendering process.

For instance the National Youth Service (NYS) a parastatal is said to have lost approximately KES 800M ($8M US) through irregular transfers from its bank accounts Star (2016). Senior government officials implicated in the scandal and conspiracy to defraud another KES 695M ($6.95M US) from the same parastatal. Due to Such corruption there is always a bid mismatch between the funds allocated to a parastatal and the actual spending by the parastatals for the benefit of public (Daily, 2016). An audit of reports for the year ended 30 June, 2016, showed that 252 firms audited, 6% had a clean audit reports 51%, had qualified, 10% had adverse and 33% had disclaimer opinions Kimani (2017).

A study done by Corrigan (1995) using descriptive statistics on how internal controls impacts operational cost showed a strong positive correlation between internal controls and operational cost efficiency in public institutions. The research did not highlight the specific internal control factors influencing operational cost efficiency. Pansiri et al., (2008) did a study on the factors influencing operational cost efficiency on private sector using regression analysis. The results showed that among other factors, internal controls positively and significantly influence operational cost efficiency. A study by Kpedor (2012) on internal controls on operation cost efficient among Listed Agricultural firms in Kenya using regression analysis found a negative effect of internal controls on Operation cost efficiency. This study conflicted with the findings of Corrigan (1995) and that of (Pansiri et al., 2008). Despite many challenges in the management of financial resources, there has been
no definite research that seeks to address specifically how internal controls influence operational cost efficiency and by which specific factors. Therefore, this research seeks to bridge that gap by plugging into the existing researches.

4. Objective of the study

i. To establish the effect of internal auditing on operational cost efficiency in the Kenyan parastatals.

ii. To determine the effect of systems controls on operational cost efficiency in the Kenyan parastatals.

iii. To examine the effect of physical controls on operational cost efficiency in the Kenyan parastatals.

iv. To establish the effect of personnel controls on operational cost efficiency in Kenyan parastatals.

5. Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of inquiry and used to structure a subsequent presentation (Salehia & Ghorbanib 2011). It explains correlation dependent and independent variables (Ibrahim, 2017).

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal auditing</strong></td>
<td></td>
</tr>
<tr>
<td>- Timeliness</td>
<td></td>
</tr>
<tr>
<td>- Internal checks</td>
<td></td>
</tr>
<tr>
<td>- Verification</td>
<td></td>
</tr>
<tr>
<td>- Implementation of the Auditors recommendations</td>
<td></td>
</tr>
<tr>
<td><strong>Systems controls</strong></td>
<td></td>
</tr>
<tr>
<td>- Passwords</td>
<td></td>
</tr>
<tr>
<td>- Individual responsibility upon use of personal password</td>
<td></td>
</tr>
<tr>
<td>- Update of authority to access</td>
<td></td>
</tr>
<tr>
<td><strong>Physical controls</strong></td>
<td></td>
</tr>
<tr>
<td>- Assets accountability</td>
<td></td>
</tr>
<tr>
<td>- Lock and key</td>
<td></td>
</tr>
<tr>
<td>- Security guards</td>
<td></td>
</tr>
<tr>
<td><strong>Personnel controls</strong></td>
<td></td>
</tr>
<tr>
<td>- Segregation of duties</td>
<td></td>
</tr>
<tr>
<td>- Staff rotation</td>
<td></td>
</tr>
<tr>
<td>- Staff recruitment</td>
<td></td>
</tr>
</tbody>
</table>

**Cost Efficiency**
- Increase cost efficiency
- Decrease cost efficiency

![Conceptual Framework](image)

Figure 1 Conceptual Framework
6. Research Methodology

The researcher used descriptive research design. The study targeted the 186 parastatals in Kenya as the population. It is out of these 186 parastatals where the sample was taken using simple random sampling technique. A sample of 30% of the parastatals hence a sample of 56 entities was selected. The study focused on the internal audit managers of the selected parastatals. The respondents were selected using simple random sampling. The selected parastatals were given each a questionnaire to respond to the provided questions. The study only covered 186 parastatals in Kenya.

Results and Discussions

7. Internal Auditing

This section sought to assess various statements on the internal auditing and its impact on operational cost efficiency. Table 1 shows the results

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management assigned responsibilities for the timely review of audit reports</td>
<td>4.47</td>
<td>.504</td>
</tr>
<tr>
<td>The internal auditor carries out internal checks in the organization</td>
<td>4.51</td>
<td>.505</td>
</tr>
<tr>
<td>Proper verification before and after processing is strictly adhered to by internal auditors</td>
<td>4.40</td>
<td>.415</td>
</tr>
<tr>
<td>The internal audit report recommendations are implemented</td>
<td>3.68</td>
<td>.701</td>
</tr>
</tbody>
</table>

Table 1: Internal Auditing

The findings on table 1 shows that the respondents agreed that the management assigned responsibilities for the timely review of audit reports and resolution of any non-compliance items as noted in internal audit reports as indicated by mean value of 4.47 which corresponds to the scale value of 4 which stands for agree. The results also indicate that the respondents agreed that the internal auditor carries out internal checks in the organization and proper verification before and after processing was strictly adhered to by internal auditors as indicated by mean values of 4.51 and 4.40 respectively. The results however shows that the respondents were neutral on whether all the internal audit report recommendations were implemented by the management as shown by the mean value of 3.68 respectively.

8. Systems Controls

This section sought to assess the availability of system control in the organizations and various statements on system controls and operational cost efficiency

The results on the availability of system controls in the parastatals are shown by figure 2 below.

Figure 2: Availability of System Controls
The results on figure 2 shows that all the respondents indicated that there systems controls had been instituted by their organizations. These indicates that parastatals had instituted various system controls as part of their internal controls. The respondents also gave out the following results:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only selected individuals are able to access the systems</td>
<td>4.28</td>
<td>.455</td>
</tr>
<tr>
<td>The selected few have personal responsibility setting up passwords</td>
<td>4.42</td>
<td>.497</td>
</tr>
<tr>
<td>If an employee leaves the organization and had access to the system, update is done on time</td>
<td>4.36</td>
<td>.484</td>
</tr>
</tbody>
</table>

Table 2: Influence of System Controls

Table 2 shows that the respondent agreed that only selected individuals are able to access the systems as indicated by a mean value of 4.28, which corresponds to the scale value of 4 in the Likert scale. The results also show that the respondents agreed that only selected few have personal responsibility setting up passwords and if an employee leaves the organization and had access to the system, update was done on time as indicated by mean values of 4.42 and 4.36 respectively.

9. Physical Controls

This section assessed how frequently the parastatals reviewed their physical control systems and various statements on physical controls and operational cost efficiency. The results were as follows

Figure 3: Frequency of Physical Controls Review

The results on figure 3 shows that 55% of the respondents indicated that there reviewed their physical controls on annual basis while 26% indicated that physical controls were reviewed on need basis while 19% indicated that the review was carried out on half-year basis.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are specific individuals who are responsible for the security of the assets</td>
<td>4.45</td>
<td>.503</td>
</tr>
<tr>
<td>Lock and key is observed by all the departments</td>
<td>4.36</td>
<td>.484</td>
</tr>
<tr>
<td>The organization has security team</td>
<td>4.55</td>
<td>.503</td>
</tr>
</tbody>
</table>

Table 3: Influence of internal controls
The results on table 3 shows that the respondents agreed that there were specific individuals who were responsible for the security of the assets as indicated by a mean value of 4.45, which corresponds with the scale value of 4 in the questionnaire. The respondents also agreed that rock and key was observed by all the departments and that the organization had a security team as indicated by mean values of 4.36 and 4.55 respectively.

10. Personnel controls

This section evaluated whether the parastatals management carried personnel controls and various statements on personnel controls and operational cost efficiency. The results were as follows

Figure 4: Personnel controls by the Management

The results on figure 4 indicates that that all the respondents indicated that organizations administration carried out personnel controls. These indicates that parastatals had instituted various personnel controls measures.

Influence of Personnel controls

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees take on new tasks at a different job for a period of time before rotating back to their original position</td>
<td>4.58</td>
<td>.497</td>
</tr>
<tr>
<td>No single person is responsible for doing everything</td>
<td>4.23</td>
<td>.423</td>
</tr>
<tr>
<td>Management recruits suitable staff and there exists appropriate ongoing training for all employees</td>
<td>4.36</td>
<td>.484</td>
</tr>
</tbody>
</table>

Table 4: Influence of Personnel controls

Table 4 shows that the respondents agreed that employees take on new tasks at a different job for a period of time before rotating back to their original position. This is indicated by the mean value of 4.58, which corresponds to the likert scale value of 4 in the questionnaire. The respondents also agreed that, no single person is responsible for doing everything in their organization. This is indicated by a mean value of 4.23 as shown in the table above. Finally, the respondents also agreed that, management recruits suitable staff and there exists appropriate ongoing trainings for them. This is indicated by a mean of 4.36 as shown in the last line in the table above. We can therefore conclude that the respondents agreed that personnel controls is part of internal controls and affects the operability of an organization.

11. Operational Cost Efficiency

This section assessed extent of increase in cost efficiency upon introduction of the controls. The results were as follows.
Table 5: Operational Cost Efficiency

The cost efficiency results indicates that upon implementation of internal audit efficiency in operational costs increased to a large extent as indicated by the mean value of 4.91 which corresponds to the scale value of 4 in the likert scale which stand for large extent. The results also indicate that upon the implementation of system controls, physical controls and personnel controls efficiency in operational costs increased to a large extent as indicated by mean values of 4.45, 4.25 and 4.34 respectively.

12. Regression Analysis

The study adopted the regression model to determine the relationship between independent variables and dependent variable. The regression model comprises of the model summary, Analysis of Variance (ANOVA) and the regression coefficients. The results were as follows

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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.610a</td>
<td>.373</td>
<td>.320</td>
<td>2.43518</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), personnel controls, systems controls, internal auditing, physical controls

Table 6: Model Summary

The results on table 6 shows that the R square (coefficient of determination) is 0.373 which indicates that the independent variables which comprise of personnel controls, systems controls, internal auditing, physical controls account for 37.3% of the variation in the dependent variable (operational cost efficiency). The other percentage 62.7 is explained by other factors which the study did not consider and the error term. The R-value (correlation coefficient) shows that there is a strong correlation between the dependent and independent variables.

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>168.987</td>
<td>4</td>
<td>42.247</td>
<td>7.124</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>284.644</td>
<td>48</td>
<td>5.930</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>453.631</td>
<td>52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Operational cost efficiency
b. Predictors: (Constant), personnel controls, systems controls, internal auditing, physical controls

Table 7: ANOVA

Table 7 shows that the F statistics value of 7.124 is statistically significant as indicated by the P value of 0.000<0.05. This indicate that the regression is fit and significant to explain the relationship between the dependent and the independent variables.
13. Regression Coefficients

<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>(Constant)</td>
<td>12.728</td>
<td>3.366</td>
<td></td>
<td>3.782</td>
</tr>
<tr>
<td>Internal auditing</td>
<td>.058</td>
<td>.027</td>
<td>.252</td>
<td>2.163</td>
</tr>
<tr>
<td>Systems controls</td>
<td>1.338</td>
<td>.883</td>
<td>.177</td>
<td>1.515</td>
</tr>
<tr>
<td>Physical controls</td>
<td>.384</td>
<td>.106</td>
<td>.449</td>
<td>3.628</td>
</tr>
<tr>
<td>Personnel controls</td>
<td>.367</td>
<td>.101</td>
<td>.435</td>
<td>3.619</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Operational cost efficiency

Table 8: Regression Coefficients

The results on table 8 show that the relationship between internal auditing and operational cost efficiency of parastatals in Kenya was positive and statistically significant as indicated by the B=0.058 and p value of 0.036<0.05. This study concurs with the study of Transparency international, (2013) which found out that there was a positive and significant relationship between internal auditing and operational cost efficiency. However, this study did not agree with the findings of Baxter & Chua (2003) which found a positive insignificant relationship between internal auditing and operational cost efficiency. The results also shows that there is a positive (B=1.338) and statistically insignificant (P value = 0136>0.05) relationship between systems control and operational cost efficiency of parastatals in Kenya. This research did not agree with the study of Mouritsen (2014) which found a positive significant relationship between systems control and operation cost efficiency. However the study was in agreement with the findings of Byamuhaya and Fondo (2014) that found a positive insignificant relationship between systems control and operations cost efficiency. The findings further shows that physical control had a positive (B=0.384) and statistically significant (P value= 0.001<0.05) relationship with operational cost efficiency of parastatals in Kenya. These findings were in agreement with the findings of Byamuhaya and Fondo (2014) that found a positive significant relationship between physical controls and the operation cost efficiency. The study however did not agree with the study of Wernerfelt (2017) which found a positive insignificant relationship between physical controls and operations cost efficiency. Finally, according to the results, there is a positive (B=0.367) and significant relationship (P value = 0.001<0.05) between personnel controls and operational cost efficiency of parastatals in Kenya. This study was in agreement with the findings of Ezzamel and Bourn (2017) which found a positive significant relationship between personnel controls and operation cost efficiency. This study however did not agree with the finding of Graw Hill (2018) which found a positive insignificant relationship between personnel controls and operation cost efficiency. From table 4.11 the following regression equation was formulated:

\[ Y = 12.728 + 0.058X_1 + 1.338X_2 + 0.384X_3 + 0.367X_4 \]

14. Summary of Findings

Internal Auditing

The findings on the effect of internal auditing on operational cost efficiency in the Kenyan parastatals revealed that the management of parastatals assigned responsibilities for the timely review of audit reports, resolution of any non-compliance items as noted in internal audit reports, and that internal auditor carried out internal checks in the organization. The results also revealed that proper verification before and after processing was strictly adhered to by internal auditors all the internal audit report recommendations were implemented by the management. The regression results revealed that the relationship between internal auditing and operational
cost efficiency of parastatals in Kenya was positive and statistically significant. These findings conform to that of Pansiri & Temtime (2008) in Uganda who found a significant positive relationship between internal auditing and organizational performance. Salehia Ghorbanib (2011) also observed that effective internal auditing practices like communication, and timely reporting contributed to improved performance of Government ministries. Salehia and Ghorbanib (2011) supports that by detecting weaknesses in management operations, internal audit provides a basis for correcting deficiencies that have eluded the first line of defense before these deficiencies become uncontrollable or are exposed in the external auditor’s report.

**System Controls**

The results on the effect of systems controls on operational cost efficiency in the Kenyan parastatals established that all the parastatals had instituted systems controls and that only selected individuals were able to access the systems. The results also revealed that only selected few have personal responsibility of setting up passwords and if an employee leaves the organization and had access to the system, update was done on time respectively. The regression results however revealed that there was a positive and statistically insignificant relationship between systems control and operational cost efficiency of parastatals in Kenya. A study by Harrisson and Walter (2013) posits that effective internal control system support profitability and growth of an organization by protecting the general assets and resources thereby averting cases of loss. Graw Hill (2018) supports that strong internal control system helps to prevent, minimize, transfer or eliminate personnel issues, which may affect a profitable operation. Graw Hill (2018) found that system control enable bank managers and practitioners to better secure their computerized accounting information systems and to champion the security of information technology for the success of their banks. Ezzamel and Bourn (2017) observed that lack of transparency and clear system control systems was a key challenge to performance of local authorities in Kenya.

**Physical Control**

The findings on the effect of physical controls on operational cost efficiency in the Kenyan parastatals established that the most of the parastatals reviewed their physical controls on annual basis and that there were specific individuals who were responsible for the security of the assets. The findings further established that rock and key was observed by all the departments and that the organization had a security team respectively. The regression findings revealed that physical control had a positive and statistically significant relationship with operational cost efficiency of parastatals in Kenya. A study by Graw Hill (2018) indicates that physical controls are essential for an effective internal control system and from a quality standpoint, preventive controls are essential because they are proactive and emphasize quality. Gray (2013) also posits that detective physical controls play a critical role providing evidence that preventive controls are functioning and preventing losses.

**Personnel Controls**

The results on the effect of personnel controls on operational cost efficiency in the Kenyan parastatals established that organizations administration carried out personnel controls and that the management identifies personnel issues that affect achievement of the objectives. These personal issues include: rotation of employees among tasks, making sure that no single person is in control of a complete transactions including recording, authorizing and processing of a transaction of document. The study also revealed that the management puts measures to avoid the occurrence of an identified personnel issues and that when a personnel issues are experienced, the management tries to handle them. The regression results revealed a positive and significant relationship between personnel controls and operational cost efficiency of parastatals in Kenya. A study by Ezzamel & Bourn (2017) posits that personnel controls give management information about the entity’s
progress or lack of it towards achievement of objectives but cannot change an inherently bad manager into a
good one.

15. Conclusions

The study results established that internal auditing had a positive and statistically significant relationship with
operational cost efficiency. The study based on this finding concludes that internal auditing significantly
influences the operational cost efficiency of parastatals in Kenya. The study results also revealed that systems
control had a positive but statistically insignificant relationship between systems control and operational cost
efficiency. The study based on this finding concludes that systems controls do not have a significant effect on
operational cost efficiency of parastatals in Kenya.

The results further revealed that there was a positive and statistically significant relationship between physical
controls and operational cost efficiency. The study based on this observation concludes that physical controls
significantly influences the operational cost efficiency of parastatals in Kenya. Finally, the study found that
personnel controls had a positive and significant relationship with operational cost efficiency. The study
therefore concludes that personnel controls has a significant effect on operational cost efficiency of parastatals
in Kenya.

16. Recommendations

The study based on the findings concluded that there was a significant positive relationship between internal
auditing and operational cost efficiency. Based on the conclusion the study recommends that the board of
management of parastatals in Kenya should strengthen the internal audit department by providing enough
resources, manpower, training and ensuring that the departments are independent since such would ensure that
efficiency in operational costs.

The study concluded that there was an insignificant and positive relationship between systems control and
operational cost efficiency. The study however recommends that parastatal should put more emphasis on
system controls and invest in them and also they should also invest on seminars with different employees with
respect to the control of these systems and have policies with respect to them and any misuse associated.

The study concluded that physical control had a significant positive relationship with operational cost
efficiency, which implies that, minor controls like closing the doors, having guards, delegating individual
responsibility on asset security among others should not be assumed as insignificant. The study therefore
recommends that the administration of parastatals in Kenya should ensure that there is reasonable investment
on physical control to avoid any cost that may arise.

The findings led to the conclusion that there was a significant and positive relationship between personnel
controls and operational cost efficiency. Based on the conclusion the study recommends that, the management
of parastatals should be aware of personnel controls through continuous assessment at the beginning, along the
way and towards the end of a predetermined period. This can also be achieved by continuous job evaluations
and analyzing performance of the employees. Employees should possess different skills from different
departments to enable job rotation.

17. Further Research suggestions

The study model summary indicated that the independent variables which included internal auditing, systems
control, physical control and personnel controls accounted for 37.3% of the variation in operational cost
efficiency of parastatals in Kenya. This indicates that there are other factors which influence operational cost
efficiency of parastatals in Kenya. This study therefore recommends a study on the determinants of operational cost efficiency of parastatals in Kenya.

The study was carried out in all parastatals in Kenya however, parastatals are classified in various group like education, which mostly include public universities and colleges, financial, which include banks and other institutions, commercial and manufacturing parastatals like Kenya power, service corporations among other categories. The various parastatals operate differently and other are fully funded by the government while other have ways in which they generate income. The study therefore recommends an additional research on effect on internal controls on operating cost efficiency on different categories of parastatals in Kenya.

18. References


