

Capital Budgeting Procedures and Practices in Public Secondary Schools in Kenya.

[The Case Study of Meru North District]

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Abstract

This study investigated the extent to which capital budgeting practices and procedures are employed in public schools in Kenya. Previous work in this area has been focusing on corporate enterprise, paying little attention to non-profit making organizations. The study design adopted is the survey design. All Secondary schools in Meru North District were used in the case study. The study focuses on primary data as well as secondary data. Primary data were obtained from principals of individual schools using self-designed questionnaire, while secondary data were obtained from financial reports of the same schools. Data were analyzed using SPSS software. The findings in this study indicate that the initial stages of capital budgeting process are being followed in schools, but minimal implementation follows. This is supported by:- proportion of participants who showed that they normally divert funds, presence of stalled and idle projects in schools and an indication that modern appraisal techniques of capital budgeting are not highly applied.

Keywords: Capital budgeting, Public Schools, Practices, procedures, Capital budgeting practices and procedures

1.0 Introduction

In Kenyan education sector, much concern has been given to physical facilities. According to the report by the National Committee on Education Objectives (1970), the committee reiterated its concern about an enormous backlog of expenditure on maintenance of secondary schools buildings and other physical facilities, many of which have deteriorated badly. In support of these, The Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond (1985), pinpointed provisions of

sufficient and optimal allocation of human, physical and financial resources as one of the key remedies to achievement of educational objectives.

2.0 Research Objectives

The main objective of the study was to investigate capital budgeting procedures and practices in public secondary schools in Kenya. The following are the specific objectives of the study:- i) to evaluate the status of the capital budgeting procedures and practices in public schools of Meru north district
ii) to evaluate the extent to which principals are capable of following financial procedures
iii) to find out the challenges that principals face when implementing these processes and practices
iv) to identify possible solutions to solve these challenges.

3.2 Empirical literature review

3.2.1 Capital Budgeting Techniques Used outside Kenya.

Surveys conducted by Pike (1992) relating to investment appraisal techniques by 100 large United Kingdom (UK) companies between 1975 and 1992 provide an indication of the changing trends in practice.

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The study showed that large organizations ranked Internal Rate of Return (IRR) first, followed by Net Present Value (NPV) and Pay Back Period (PBP) whereas smaller organizations ranked PBP first, Accounting Rate of Return (ARR) second and adjusted PBP and IRR third. Gultekim and Taga (1989) undertook a comparative study of United States (US) and Japanese companies and found that Japanese companies use a longer payback period as the cut off than do US companies. In terms of post-audits review, a UK study by Neale and Holmes (1988) indicated that 48% of large quoted UK companies adopted post-audit and a later study by the same in 1991 reported that this rate increased to 77%, with about half of the firms having adopted post-audits between 1986 and 1990.

3.2.2 Capital Budgeting Techniques Used in Kenya

Olum (1976) studied capital investment appraisal techniques employed by two corporations namely Industrial Corporation and Development Corporation (ICDC) and Kenya Tea Development Corporation (KTDC) and found that IRR was the technique of choice by the two corporations. Both corporations are mandated to undertake both commercial and non-commercial activities which assist Kenyans in their respective areas. The commercial wings of the corporations however, employ capital budgeting

appraisal techniques in accepting or rejecting of a project proposal submitted either by the applicants or developed by them. Hadgu (2005) studied capital budgeting practices of companies quoted at the Nairobi Stock Exchange, taking into account all the necessary steps /phases in the capital budgeting process. The study surveyed 33 companies quoted at the Nairobi stock exchange. It revealed that except the appraisal techniques, other stages of capital budgeting process are rarely considered. Minimal studies had been undertaken in non-profitable organizations and particularly educational institutions. For instance, a report to the Congress of US by the Comptroller General (1981) shown that as relates to non-profit making organizations:

- i) urgency is an important factor when allocating funds.
- ii) systematic biases are often found in projects estimates. For example, overestimation of benefits or/and underestimation of time required for the projects.
- iii) Tendency exists to cut capital budgeting projects first when there is a strong push to balance a budget or reduce a deficit

3.0 Methodology

Survey design was selected for the study. Hart (1972), Wiersma (1985) and Orodho (2004) state that a survey is a method of collecting information by interviewing or administering questionnaires to a sample of individuals and involves collecting data in order to test hypothesis or answer questions concerning the current status of the subjects of study. Survey design was appropriate for this study because it enabled the researcher to collect information concerning the current situation in the public secondary schools in Meru North District as regards Capital Budgeting Procedures and practices .The study method is a case study, and because of this, all secondary schools in MeruNorth District were used in the study. Primary data as well as secondary data were used. Primary data were obtained using a self-designed questionnaire from the principals of schools. The questionnaire focused on the capital budgeting process, evaluating how it has been followed. The secondary data were got from financial reports of individualschools. Out fifty two (52) secondary schools, only forty(40) of them responded. Data wasanalyzed using SPSS software and presented in this paper.

4.0 Results and Discussions

For the purpose of meeting research objectives the researcher felt a need to probe into the existing capital budgeting procedures and practices in the public schools.

5.1 Determinants of Capital Investment Opportunities:

The respondents were asked to identify the determinants of capital investment opportunities in their

institutions and table 5.1. Below summarizes their responses.

Table 5.1 determinants of capital investments opportunities

Frequency Percent Valid Percent Cumulative Percent

Valid

d

goals of schools 32 61.5 61.5 61.5

need for

expansion 9 17.3 17.3 78.8

others 11 21.2 21.2 100.0

Total 52 100.0 100.0

From the table, 5.1 sixty one point five percent (61.5%) of the respondents outlined goals of schools as a

major determinant, followed by need for expansion, seventeen point three percent (17.3%) and other

determinants, twenty one point two percent (21.2%).

5.2 Origin of Fixed Assets/ Investment Proposals

The respondents were asked to state the personalities/group of personalities who are the originators of

fixed assets/investment proposals. Table 5.2 summarizes the findings.

Table 5.2 The Origin of Fixed Assets/ Investment Proposal

Frequency Percent Valid Percent

Cumulative

Percent

Valid

d

principal 10 19.2 19.2 19.2

BOG 5 9.6 9.6 28.8

PTA 20 38.5 38.5 67.3

all the above 17 32.7 32.7 100.0

Total 52 100.0 100.0

From the table 5.2, Parent Teachers Association (PTA) as an origin took thirty eight percent (38.5%),

Board of Governors (BOG) and Principals as a joint origin, thirty two point seven percent (32.7%),

Principals, nineteen point two percent (19.2%) and BOG, nine point six percent (9.6%).

5.3 Listing of the State of Nature Affecting Outcome of the Project.

The respondents were asked to state whether they list the states of nature affecting the outcome of the

their projects. Table 5.3 summarizes the responses.

The table 5.3 State of Nature Affecting Outcome of the Project

Frequency Percent Valid Percent Cumulative Percent

Valid yes 38 73.1 73.1 73.1

no 5 9.6 9.6 82.7

other 9 17.3 17.3 100.0

Total 52 100.0 100.0

The table indicates that seventy three point one percent (73.1%), stated ‘Yes’, nine point six percent (9.6%) showed ‘No’ and seventeen point three percent (17.3%) were non-committal on what this meant.

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5.4 Carrying Analysis Relating to Quantitative / Financial Aspects of the Project.

The respondents were asked to state whether they carry out analysis relating to qualitative/financial aspects of the project. Table 5.4 summarizes the findings.

The table 5.4: Carrying Out Analysis Relating to Quantitative/ Financial Aspects of the Project

Frequency Percent Valid Percent Cumulative Percent

Valid yes 49 94.2 94.2 94.2

no 3 5.8 5.8 100.0

Total 52 100.0 100.0

The table 4.8 indicates that ninety four point two percent (94.2%) of them indicated that they carry out analysis, and five point eight percent (5.8%) indicated that they did not carry out an analysis.

5.5 Techniques Used.

Frequency Percent Valid Percent Cumulative Percent

Valid payback 13 25.0 25.0 25.0

Break time 11 21.2 21.2 46.2

discounted cash

flow 12 23.1 23.1 69.2

intuitive

management 16 30.8 30.8 100.0

Total 52 100.0 100.0

The respondents were requested to state the capital budgeting appraisal technique they used when

analyzing quantitative/financial aspects of the project. Table 5.5 summarizes the results.

The table 5.5: techniques used. The table indicates that the Intuitive management is the mostly applied

technique taking thirty point eight percent (30.8%), payback second with twenty five percent (25%),

discounted cash flow, third with twenty three point one percent (23.1%) and last was break-time with

twenty one point two percent (21.2%)

5.6 Preference over the Techniques.

The respondents were requested to state reasons as to why they preferred a specific technique to the

others and the answers are summarized in the table 5.6 shown below.

Table 5.6: Preference over the Techniques

Technique Reason

Intuitive management -simple,
-no mathematics attached.

Payback -simple to apply as it is easily an estimation by accounts clerks/bursars.

Discounted cash-flow -accounts clerks/bursars with Certified Public Accountant (CPA) 11, have knowledge on business finance, hence need to try it.

Break time -complex, demand consideration of many variables.

From the table it can be seen that intuitive management is taken to be simple and demands little knowledge of advanced mathematics. Second in simplicity is pay-back appraisal technique.

Discounted

cash-flow and break -time technique are taken to be complex and only for venturing accounts clerks.

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5.7 Carrying Out Analysis Relating to Qualitative / Non-Financial Aspects of the Project.

The respondents were requested to outline if they carry-out analysis relating to qualitative/non-financial

aspects of the project and table 5.7 summarizes the results.

Table 5.7: Analysis Relating to Qualitative/Non-Financial Aspects of the Project.

Frequency Percent Valid Percent Cumulative Percent

Valid yes 42 80.8 80.8 80.8

no 7 13.5 13.5 94.2

other 3 5.8 5.8 100.0

Total 52 100.0 100.0

The table indicates that eighty percent (80%) said ‘Yes’, thirteen point five percent (13.5%) said ‘No’

and five point eight percent (5.8%) showed non-committal about what is meant by qualitative /nonfinancial

analysis

5.8 Diversion of Funds to Other Unplanned Projects

The respondents were required to state whether the funds are finally allocated to their intended use and

Table 5.8 summarizes the responses.

Table 5.8: Diversion of Funds to Other Unplanned Projects

Frequency Percent Valid Percent Cumulative Percent

Valid yes 24 46.2 46.2 46.2

no 28 53.8 53.8 100.0

Total 52 100.0 100.0

The table indicates that forty six point two percent (46.2%) agreed that there is diversion while fifty

three point eight percent (53.8%) outlined that there is no diversion of funds.

5.9 Stalled Projects

The respondents were requested to indicate the presence of stalled projects in their schools and table 5.9

summarize the responses

Table 5:9 Presence of Stalled Projects in School

Frequency Percent Valid Percent Cumulative Percent

Valid yes 13 25.0 25.0 25.0

no 39 75.0 75.0 100.0

Total 52 100.0 100.0

From the table, seventy five percent (75%) showed absence of idle projects while twenty five percent

(25%) validated the presence of stalled project.

5.10 Idle Projects

The respondents were requested to indicate the presence of idle projects in their schools. Table 5.10

summarizes the responses.

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Table 5.10: Presence of Idle Projects in School

Frequency Percent Valid Percent Cumulative Percent

Valid yes 10 19.2 19.2 19.2

no 42 80.8 80.8 100.0

Total 52 100.0 100.0

Table 5.10 indicates that nineteen point two percent (19.2%) agreed on the presence of idle projects and

eighty point eight percent (80.8%) outlined the absence of idle projects.

5.10 Testing the Hypotheses: The study tested four null hypotheses

Ho1: There is no relationship between gender of the respondents and the technique used in appraising investment project.

Chi-Square Test -table 1

Two (2) cells (33.3%) have expected count less than 5. The minimum expected count is 3.17.

Figure 5.1: Sex of Participants vs Techniques used

sex of the participants
male female
Co
un
t
20
10
0
techniques used
payback and breaktime
discounted cash flow
intuitive management

The chi-square analysis showed a value of 0.478 at 2 degrees of freedom. This value was less than P value of 0.787. Therefore, the null hypothesis was

accepted although 2 cells had expected count less than 5. Thus there is no relationship between gender and techniques used.

Ho2: There is no relationship between experience of Principals (respondents) and technique used.

Chi-Square Tests-table 2

Value df Asymp. Sig. (2-sided)

Pearson Chi-

Square 3.571(a) 2 .168

Likelihood Ratio 3.635 2 .162

Linear-by-Linear

Association 3.352 1 .067

N of Valid Cases 52

Value Df Asymp. Sig. (2-sided)

Pearson Chi-Square .478(a) 2 .787

Likelihood Ratio .470 2 .791

Linear-by-Linear

Association .124 1 .725

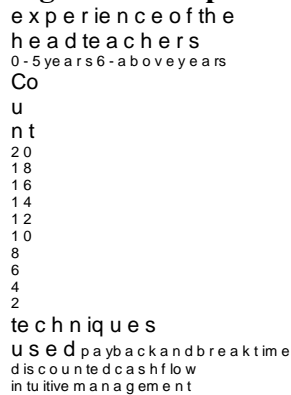
N of Valid Cases 52

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One (1) cell (16.7%) have expected count less than 5. The minimum expected count is 4.23.

Figure 5.2: Experience of Head Teacher’s vs Technique Used



The chi-square analysis showed a value of 3.571 at 2 degrees of freedom. This value was more than that of P

-value of 0.168. Therefore, the null hypothesis was rejected. There is a relationship between experience

of principals and technique used

Ho3: there is no relationship between professional level of qualification of the principals (participants) and technique used

Chi-Square Tests-table 3

Value df Asymp. Sig. (2-sided)

Pearson Chi-Square 4.907(a) 2 .086

Likelihood Ratio 6.217 2 .045

Linear-by-Linear

Association 1.153 1 .283

N of Valid Cases 52

Three (3) cell (50.0%) have expected count less than 5. The minimum expected count is 1.27.

Figure 5.3: level of profession qualification vs technique used



The chi-square analysis showed a value of 4.907 at 2 degrees of freedom 2 this value was more than P value of 0.086. All in

all 3 cells showed unexpected count less than 5 hence it's not all that possible to reject or accept the null hypothesis. A larger

sample of participants should be considered in future studies.

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Ho4: There is no relationship between academic qualification of BOGs' Chairpersons and techniques used.

Chi-Square Tests-table 4

Value Df Asymp. Sig. (2-sided)

Pearson Chi-

Square 2.046(a) 2 .359

Likelihood Ratio 2.174 2 .337

Linear-by-Linear

Association 1.700 1 .192

N of Valid Cases 52

One (1) cell (16.7%) has expected count less than 5. The minimum expected count is 3.38.

Figure 5.4: Academic Qualification of BOG Chairpersons vs Technique Used

academic qualifications of bog chairman

below graduate and above graduate level

Co

u

nt

16

14

12

10

8

6

4

2

0

techniques used

payback and breakeven

discounted cash flow

intuitive management

The chi-square analysis showed a value of 2.046 at 2 degrees of freedom. This figure value was

more

than P values of 0.359. Therefore the null hypotheses was rejected. There is a relationship

between level

of academic / qualification of the Chairpersons and the technique used. BOG Chairpersons who

are

graduates and above are many in each type of technique than BOG Chairpersons who hold

diploma and

below level of academic qualification.

5.0 Summary and Conclusion

5.1 Summary

The researcher analyzed the information gathered from the participants with the view of fulfilling the

research objectives and answering research questions. The study revealed that in most schools, capital

budgeting process is not a "one man show". This is supported by the percentage of respondents who

outlined that the originators of investment proposals were the BOG or a joint of BOG, PTA and a principal. Listing of the states of nature affecting the outcome of the project is a major step in the

process. The study has revealed that nine point six percent (9.6%) of the respondents did not list the

possible states of nature. Moreover, seventeen point three percent (17.3%) indicated that they don't

understand the idea of what the states of nature entails.

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Among the appraisal techniques, the study has indicated that intuitive management, which is highly nonmathematical, was highly applied than other techniques. Application of pay-back technique was second in preference. Little attention was being given to the modern appraisal techniques, in particular discounted cash flow. Diversion of funds to other unplanned projects was reported to be practiced by forty six point two percent (46.2%). Presence of idle project was registered by nineteen point two percent (19.2%) of the participants and presence of stalled projects by twenty five percent (25%). In search for schedule for fixed assets from principals, the researcher was made aware that public schools as government units apply cash- basis of accounting, and hence not obliged to prepare annual balance sheets.

Only five schools out of 52 schools which could provide the researcher with the fixed assets register. To

quote District Auditor: -

“The school heads are never serious with the preparations of books of accounts or keeping fixed asset register”

5.2 Conclusion

According to the findings, the following conclusion emerging from objectives of this study was made:-

The initial stages of capital budgeting process are being followed in schools, but minimal implementation follows. This is supported by:- proportion of participants who showed that they normally divert funds, presence of stalled and idle projects in schools and an indication that modern appraisal techniques of capital budgeting are not highly applied, which is seen from the proportion of participants using each of the techniques.

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