Industrial Engineering Letters
ISSN 2224-6096 (Paper) ISSN 2225-0581 (online)
Vol.4, No.1, 2014

An Evaluation of Strategy Implementation on Organizational Performance: Case of Public Technical, Vocational, Education Training (TVET) Institutions In Kiambu County, Kenya

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ABSTRACT
Since the early years of Kenya`s independence, TVET system of education has been recognised by the Government as the major sector that produces skilled workforce which are absorbed in the industries and life support skills for self employment. However, for the effective performance of this education system, Government strategies must have a viable roadmap for implementation as strategy implementation remains a dominant means of success in all organizations. The Purpose of this study was to evaluate the effects of strategy implementation on the performance of public Technical Vocational Educational Training (TVET) institutions in Kiambu County, Kenya. The aim was to identify factors that impact on strategy implementation and hence affect the performance of these institutions. The research objectives elaborated the networks of association among independent variables (which are human resources, institutional management, financial allocations, curriculum, materials and facilities among others), that were assumed to have sufficient relationships with the dependent variable which is organizational performance. Theoretical framework focuses on the Fiedler`s situational contingency theory. The total population of the study comprised of 200 employees from public TVET institutions in Kiambu County: 30 managers, 30 assistant managers, 60 supervisors and 80 teachers or instructors. The study derived a sample size of sixty (60), arrived at by calculating 30% of the study population. The study`s sampling technique that was used was purposive sampling. The survey used both qualitative and quantitative methods of data collection methods and the Likert scale of self administered closed and open ended questionnaire was used. The questionnaire was tested before a refined one was administered to the respondents. The data was edited, coded, classified and then tabulated. The tabulated data was analysed quantitatively by calculating percentages and then was presented in the form of pie charts and bar graphs. Mean and standard deviation were also used in this analysis. Descriptive data was analysed qualitatively and the results were provided in the form of explanatory notes. Regression analysis was also done to determine the relationship between the relationship between the dependent and the independent variables. This was done using the statistical package for social studies software (SPSS).The study concluded that Technical and Vocational Education and Training in Kiambu County is an education sector ridden with challenges which include inadequate funding, lack of modern training equipment, lack of training materials, use of outdated technology, lack of exposure to new methods of training and poor image. The researcher therefore recommended that the government should adequately finance public technical and vocational training institutions to improve their performance, introduce the newest methods and technology for teaching and learning for both students and teachers, introduce performance standards and regularly evaluate the accomplishment of these standards. It is also recommended that the government should come up with way of supervising the implementation process of all its strategies for TVET to ensure effectiveness.
Key Words: Strategy Implementation, Organization performance, TVET Kiambu, Kenya

1.0 Background of the Study

Technical, Vocational, Education and Training (TVET) was defined at the second International Congress on Technical and Vocational Education, held in the Republic of Korea in 1999, as: “Those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life” *(UNESCO,* 1999). The Bonn resolution of October 2004 emphasized on the importance of technical and vocational education and training by noting that TVET is the “master key” for alleviation of poverty, promotion of peace and conservation of environment in order to improve the quality of human life and promotion of sustainable development (UNESCO, 2004).

A developing country like Kenya needs to improve productivity throughout the economy if they are to grow economically in this era of rapid economic and technological changes. This requires a high level of competence of a country`s skilled workforce, which is very important to the attainment of millennium development goals. A

country`s workforce with technical skills enhances quality and efficiency of production in various sectors of the economy, and they train and supervise other workers with lesser skills. According to Nyerere (2009) supervisor`s can only be trained through technical and vocational education since mainstream education system produces managers. Ngerechi (2000) indicates that public technical education requires a lot of financial support and can only be successful with government support.

Countries like Italy, Brazil, China, Sweden, Australia and Japan have given more recognition to TVET through adequate funding and centralized management. For example in Australia all TVET training is regulated by the National Skills Framework (NSF), a body that sets out the national training requirements to ensure quality and national consistency in terms of qualifications and the delivery of training (UNESCO-UNEVOC, 2012).
In America vocational and academic education are integrated and the education system leads to both academic and occupational competencies (US department of education, 1992), and early this year the US President proposed new spending on education with a big proportion to improve vocation and technical education (Simon, 2012).
Most countries in the Southeast of Asia like the Philippines, Brunei, Malaysia, and Thailand, are positioning TVET in the mainstream education system and setting it as a priority in their education agenda (Paryono, 2005).
Countries including Germany, Spain, and Italy among others, signed a memorandum in Berlin on 11 December 2012 on concrete measures for introducing a vocational education system based on Germany's model whose goal is to have 80 per cent of all young people in the EU employed by 2020 (Schavan, 2012)

TVET systems differ from country to country in Africa and are delivered at different levels in different types of institutions (African union, Ethiopia, 2007). In Kenya however, from 1960s through to 1990s TVET in public institutions has been delivered through village/ youth polytechnics, technical secondary schools, district technical training institutes and national polytechnics. However according to Mureithi (2009), the image of TVET in Kenya has been changing over years for the worst and in 2000s it is viewed negatively by both parents and students as an education system for those who have failed in regular academic education. She also indicates that the management of government TVET institutions is also wanting with various TVET trainings scattered in various ministries with no central authority to spear head TVET activities.
Strategies for TVET are reflected in policy documents developed by the Government of Kenya over the last ten (10) years which include; 1.Poverty Reduction Strategy Plan (PRSP) of September 2002; 2. Economic Recovery Strategy Programme (ERS) of 2003; 3. The 2003-2007 Kenya Education Sector Support Programme (KESSP) and 4.Tthe Vision 2030 of 2008. All these documents emphasize the importance of technical education in development. The TVET strategies are also entrenched in the 2010 constitution of Kenya (Republic of Kenya 2010 e article 55) to support intention by the government to improve performance in public TVET institutions specifically by: The establishment of a National Training Authority to over-see TVET development and co-ordination, the development of a National Skills and Training Strategy, giving incentives to strengthen involvement of industry in financing skills training, promotion of centres of excellence to nurture creativity and innovation, setting up Technical, Vocational, Education and Training Authority (TVETA) to coordinate the TVET sector, financing institutions to achieve maximum impact and to have strategic leadership in TVET sector provided by the TVETA.

1.1 Statement of the Problem

Technical, Vocational, Education and Training (TVET) is an important part of education which is an avenue to empower the youth to be self-reliant, to have employable skills and to boost economic development. However the government of Kenya has put emphasis on the mainstream education neglecting the TVET institutions (the village/youth polytechnics, the technical secondary schools and the technical training institutes). As a result the performance of these institutions has fallen tremendously with most of them having been converted to offer academic courses and others converted into campuses for public universities to offer academic related courses. Due to lack of employable skills, unemployment among the Kenyan youth has become a serious development issue as indicated in the government`s sessional paper No. 7 of 2005. Also the youth policy of 2006 of the Ministry of Youth Affairs appreciates that the technical and vocational training institutes in Kenya lack essential facilities and technology to equip youth with skills for employment. Vision 2030 proposes among other things that technical training institutes be used to enhance technical capabilities. The problem is that the much needed technical and vocational skills in Kenya are dying just as the TVET education sector is dying, leading to lack of employable skills among young people, and therefore exposing them to high levels of uncertainty. Unemployed youth have become a generation without hope due to lack of employable skills and an army of idle people are a threat to security and a problem to families and society. Youth without employable skills also presents an obstacle to achieving the vision 2030 and the millennium development goals (MDGs) in Kenya.

2.0 LITERATURE REVIEW

2.1 Introduction

This study emphasised how TVET strategy implementation has affected performance in technical and vocational training institutions in Kiambu County. The research therefore, undertook to understand and describe the dependent variable which is organization performance, or to predict it. Through the analysis of this variable, it was possible to find solution to the research problem. Organization performance is as a result of multiple activities including funding, skills, technology, and good management. The purpose in this chapter was to review literature on the government strategies on TVET public institutions.

2.2 Strategic planning and Implementation

According to Henry Mintzberg (1994), strategy is a plan which integrates goals, policies and operation chain of activities in an organization. Organizational performance is a measure of how well an organization is achieving its goals: The actual output (results) as measured against its intended goals and objectives. Factors affecting strategy implementation in this research are based on Ricky Griffin`s view (1997), where he identifies that organization structure, human resource, leadership, and technology and information system as effective factors which influence implementation of strategies**.**

2.3 Financing of Public TVET Institutions

Successful strategy implementation enhances organisations to produce excellent performance (Porter, 1980). This process requires finances to support strategic goals and objectives by turning strategies and plans into actions (Alexander, 1991). The strategy by the government of Kenya to finance TVET institutions was passed in sessional paper No. 1 of 2005. This strategy was to ensure that all public technical training institutions were funded and equipped by 2008 to improve performance of TVET system. However this strategy was never implemented until January 2013 when TVET funding board was established (Kenya Gazette supplement No. 44). Due to lack of implementation of this strategy public TVET institutions continue to operate with little funds mostly from school fees collections, and therefore they underperform due to lack of good facilities (buildings, equipment and learning material) which are expected to lead to better performance of these institutions (UNESCO, 2012). In Kenya, funding towards public TVET institutions is ad hoc and arbitral with minimal budgetary allocations. One major constraint that TVET is facing in Kenya is limited budget and this has lowered the performance of the TVET institutions (Bonyo, 2012).

2.4 Management of Public TVET Institutions

Top management of any organization is concerned with defining of the mission statement and goals of that organization. It establishes an organisation`s long term direction, specific performance objectives and oversees execution of all strategic plans (Arthur A. Thomson Jr. Strickland, 1987). In Kenya, top management body has been missing for TVET institutions and management for these institutions have always been scattered in various government ministries without any central authority to spearhead operations (Mulei, 2012). Sessional paper No. 6 of 1988 highlighted the need for a national legalized TVET umbrella body to oversee the management and leadership of TVET institutions, but records indicate that this recommendation was not implemented (Ngerechi, 2003). Again a national symposium held in November 2003 reviewed the then TVET status and recommended establishment of a national training authority to oversee TVET development and coordination. This was to be done within the 2003-2007, 5-year strategic plan (Nyerere, 2009). But yet, even this strategy was never implemented until September 2012 when the TVET bill was passed in parliament, and technical, vocational, education and training Authority (TVETA) was formed (Kenya gazette supplement No. 44). The lack of a top management to oversee implementation of strategies has negatively impacted on the performance of TVET institutions.

2.5 The Quality of Training and Performance:

In 2005 the government came up with a strategy to equip all public technical training institutions across the country by the year 2008. This strategy is outlined in the sessional paper No.1 of 2005. The strategy was not implemented according to Bonyo (2012). The public technical training institutions in Kenya lie in waste because the government comes up with strategies to improve them and yet the strategies are never implemented. The performance of most of these institutions is poor because they operate with minimal budgets, and therefore they operate without the necessary materials and equipment (Mureithi, 2009).

The government has a responsibility to fund all public TVET institutions, but it has proved to be difficult. Consequently, most of the TVET institutions remain neglected with obsolete equipment and lacking in training materials. This has reduced the effectiveness of education and training and therefore these institutions cannot

meet the required knowledge and skills objectives. Their performance as far as meeting their objectives is concerned is poor and the institutions infrastructures are in bad shape (Nyerere, 2009). Most of them have also been converted into institutions for public universities offering academic courses; which is a great blow to TVET education sector.

2.6 National Skills:

The TVET bill of 2008 recommended a strategy to develop national skills and training to boost the quality of output from TVET institutions and to equip TVET teachers with modern skills and materials for practical training (KESSP GoK, 2007). However, the lack of implementation of this policy has affected the quality of graduates from these institutions (World Bank, 2007). This is because TVET teachers are constantly faced with changes in technology within their teaching domain. Every TVET teacher needs to continuously upgrade and update their skills to ensure that their trainees meet the needs of the labour market TVET in Kenya especially in public institutions is faced with lack of qualified instructors. These teachers are faced with technological advancements and the use of new technology in their careers is inevitable. The challenge also includes ability to have appropriate infrastructures, upgrading existing materials and training resources available. There is need for proper tools, and equipment to keep up with the changing times and to improve performance (Ngrechi, 2003).
Fiedler`s situational contingency theory (1976) is applied in this study. Contingency theory is a behavioural theory that claims that there is no best way of making decisions. Instead the optimal course of action is contingent upon the external and internal conditions. The theory holds that universal solutions and principles cannot be applied to all organizations and therefore what managers do in practice is contingent upon given circumstances. It means that managers would carry out strategy implementation as a management process according to the perceived effectiveness of various techniques and according to particular situations.

Vroom (1988) argues that, contextual factors tend to limit chances of success for a strategy under implementation and therefore a match of approach to situation improves the prospect of success. Contingent factors arise because organizations operate in a turbulent environment and these factors must be aligned for long term survival of the organization. Contingency theory suggests that there is no optimal process for strategy implementation for all organizations. Strategy implementation is the process that turns plans into action assignments and ensures that such assignments are executed in a manner that accomplishes the stated objectives (Patrick and Dromgoole 2000). Harrison and Pallieter (2000) indicate that the value of strategic decisions will be realised only after effective implementation of the decision. This means that organizations cannot succeed if they do not implement strategies properly and effectively (Getz, Jones, and Loewe, 2009). Hrebiniak (2006) stresses the importance of strategy implementation by indicating that a firm`s poor performance generally stems from the poor execution of the strategy, rather than the strategy itself.

According to Thomson and Strickland (2003), strategy implementation can fail due to lack of effective top management because strategic management and leadership are key drivers to strategic implementation. Kaplan and Norton (2001) gives factors that hinders strategy implementation as lack of sufficient financial allocations towards the process and lack of human resource capabilities to execute the strategy. Miller (2000) indicates that 70% of strategies in organizations fail at the implementation stage due inadequate funding, poor management, and external factors in the external environment. In this study the factors that are studied as obstacles to successful implementation of TVET strategies include funding, management, training facilities, and environmental factors; which include government policies and learning environment.

2.7 Research Gap

As sited in the literature review, various authors have written widely and generally on problems facing Technical and Vocational, Education and Training (TVET) in Kenya. Although what they have written touches on the questions under review, none of them has carried out a study to evaluate the relationship between strategy implementation and performance of TVET institutions in Kiambu County. Therefore, this is a research gap that this study attempted to fill.

3.0 RESEARCH METHODOLOGY

3.1 Research Design

Research design is a work-plan for research and it comprises of the target population, the sampling techniques, sample size instruments of data collection and data analysis procedures. It is the conceptual structure within which research was conducted. A research design shows how the major parts of the research project work together to address the research questions (Orodtho, 2003). In this study, a case study research design was used

to narrow down a very broad field of research into a few easily researchable examples. A case study research is an empirical inquiry which investigates a contemporary phenomenon within its real –life context (Yin, 1984). A case study is appropriate in this study since the research questions are the "how" and the "what" type of questions.

3.2 Sampling Procedure

The sampling technique that was used was purposive sampling since it was only a particular kind of people who had the needed information**.** Purposive sampling is a type of non-probability sampling technique (Patton, 2012). Non-probability sampling focuses on sampling techniques where the units that are investigated are based on the judgement of the researcher. In this study samples were selected based on the subjective judgement of the researcher to suit her convenience in the matter of location and contact with the units.

This sampling method was used because the researcher needed to get information from individuals who had particular knowledge**.** This knowledge was to be required during qualitative and quantitative research. The particular knowledge that was being investigated was also to form the basis of the research, and therefore the researcher required to focus only on individuals with such specific knowledge as the units in the sample.

3.3 Target Population

The population of interest of this study included the employees of the public technical, vocational, educational and training institutions in Kiambu County. According to Ngechu (2006), a target population is a well defined or set of people, services or elements that are being investigated. Since it was not practical to involve all the available population it was necessary to define an accessible population. The total population of the study comprised of 200 employees from five public TVET institutions in Kiambu County: 30 managers, 30 assistant managers, 60 supervisors and 80 teachers. The study derived a sample size of sixty (60), arrived at by calculating 30% of the study population.

Table1: Target Population

Population Category	Target Population	Percentage
Institutional managers	30	15
Assistant managers	30	15
Supervisors	60	30
Teachers	80	40
Total	**200**	**100**

Source, Author (2013)

3.5 Sample Size

A sample is a subject of the target population which the researcher intends to generalize the findings (Cohen and Manion, 1994). The sample size was 30% of the total population which gave a sample of 60 respondents as indicated in the table 2.

Table 2: Sample Size

Category	Target Population	Sample Population	Percentage
Institutional managers	30	9	15
Deputy managers	30	9	15
Supervisors	60	18	30
Teachers	80	24	40
Total	**200**	**60**	**100**

Source: Author (2013)

3.6 Data Collection

The researcher used both qualitative and quantitative methods of data collection. The likert scale of 1-5 comprising of self administered closed and open ended questionnaires was used to measure various parameters which are believed to affect TVET`s strategy implementation. The questionnaire was tested before a refined one is administered to the respondents.

3.7 Data Analysis

The data that was collected through questionnaires was edited to get the relevant data from the study. The edited data was coded for easy classification in order to facilitate tabulation. The tabulated data was then analysed quantitatively by calculating various percentages where possible. Presentation of data was in form of pie charts and bar graphs where provided successful interpretation of findings. Descriptive data was analysed qualitatively and the results provided in the form of explanatory notes. The researcher used statistical package for social sciences to analyse the data (SPSS). This is the algebraic expression of the conceptual model and analytical model of a linear multiple regression equation of the form shown below was developed.

$Y=\alpha+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+e_1$…… (2)

Y=Organisation performance

X_1=Funding

X_2=Organisational management

X_3= Training materials/equipment

X_4= Training facilities

4.0 DATA PRESENTATION AND INTERPRATATION

4.1 Introduction

This chapter presents analysis, findings, presentation and interpretation of data and discussions of the study as set out in the research methodology. The study findings are presented to evaluate the relationship between the independent variable (strategy implementation) and the dependent variable (organizational performance) of public technical, vocational education and training (TVET) in Kiambu County Kenya. The data was gathered exclusively from questionnaires as the research instruments. The questionnaires were designed in line with the objectives of the study.

4.2: Performance of Public Technical and Vocational Education and Training Institutions in Kiambu County

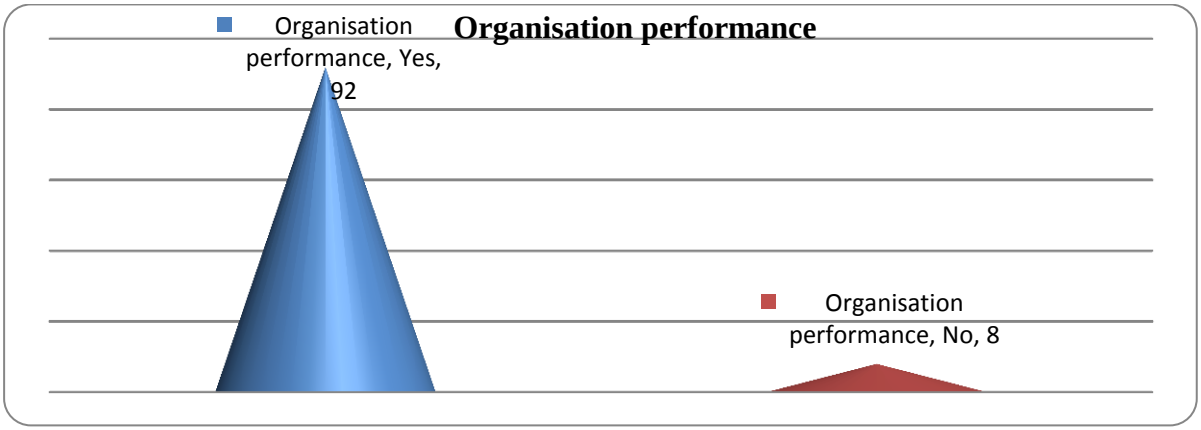
From the study, it was noted that management performance is not measured in public technical, vocational, education and training (TVET) institutions in Kiambu County. Out of all the 52 respondents, only 4 of them indicated that management performance is measured.

Table 3: Organizational performance table

Category	Frequency	Percentage
Yes	48	92
No	4	8
Total	**52**	**100**

Source: Author (2013)

Figure1: Organizational performance



4.3 Extent to which Public TVET Institutions in Kiambu County Improved Quality in the Last 5 Years by Acquiring New Equipment

Table 4: Improved training quality in the last 5 years

Category	Frequency	Percentage
Great extent	10	19
Moderate extent	16	31
Low extent	26	50
Not at all	0	0
Total	**52**	**100**

Source: Author (2013)

Results of responses from the above table show that in the last five years equipment to improve quality were acquired but only to a low extent in most institutions. 50% of the respondents said new equipment were purchased but in low extent, whereas 31% said new equipment were bought in their institutions for the last five years but to a moderate extent. 19% said that equipment was bought to a great extent in their institution and no respondent said no equipment was bought at all. Generally the researcher has found that in public TVET institutions in Kiambu county new equipment for training are rarely acquired.

4.4 Extent to Which Institutions Workshops is Relevant to Modern Technical and Vocational Training

Table5: Relevance of workshops and equipment

Category	Frequency	Percentage
Great extent	2	1%
Moderate extent	4	2%
Low extent	30	58%
Not at all	20	39%
Total	**56**	**100**

Source: Field data (2013)

It was found that majority of respondents (58%) agreed that the workshops of their technical and vocational training institutions were relevant to a low extent. 39% of respondents indicated that equipment in their

workshops were not relevant at all. From these results the researcher found that most of the TVET institutions in Kiambu County did not have relevant workshops and equipment to modern technical and vocational training.

4.5 Indicators of TVET Institutions Performance

Table 6: Indicators of TVET Institutions` performance

Indicator	N	Mean	Standard Deviation
Students dropping out of the programs	52	2.69	0.538
Parents or student complains concerning the quality of training	52	2.58	0.631
Teachers lacking training Materials	52	2.51	0.745

Source: Author (2013)

The extent to which students drop out of the programs in technical, vocational education and training institutions was determined as shown in the table above. On average respondents agreed that students drop out of TVET programs occasionally as depicted by the mean ranging from 2.69. Concerning parents or students` complains about the quality of training, responses had a mean of 2.58 while the mean for responses concerning teachers lacking training materials was 2.51. This implied that parents or students complain concerning the quality of training happens quite often. It also means that teachers occasionally lacked training materials.

4.6 Current Technical Training Efficiency

Table 7: Current Technical training efficiency

Category	Frequency	Percentage
Very good	1	2
Good	1	2
Barely acceptable	10	19
Poor	32	61
Very poor	8	16

Source: Field data (2013)

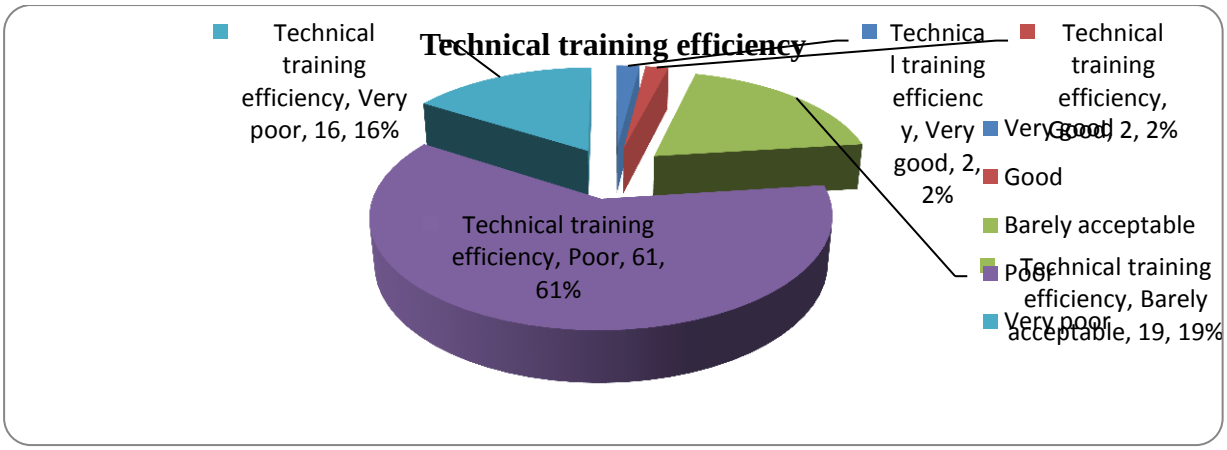


Figure2: Current technical training efficiency

As indicated above, the largest number of respondents rated the level of efficiency in technical and vocational training institutes in Kiambu County as either poor (61%) or very poor (16%). Only 1 respondent out of 52 rated

the technical training efficiency as either good or very good. According to this result, the researcher noted that the efficiency of TVET training in Kiambu County is generally poor.

4.7 Current Vocational Training Efficiency

Table8: Current Vocational training efficiency

Category	Frequency	Percentage
Very good	3	8
Good	12	23
Barely acceptable	20	37
Poor	15	28
Very poor	2	4
Total	**52**	**100**

Source: Author (2013)

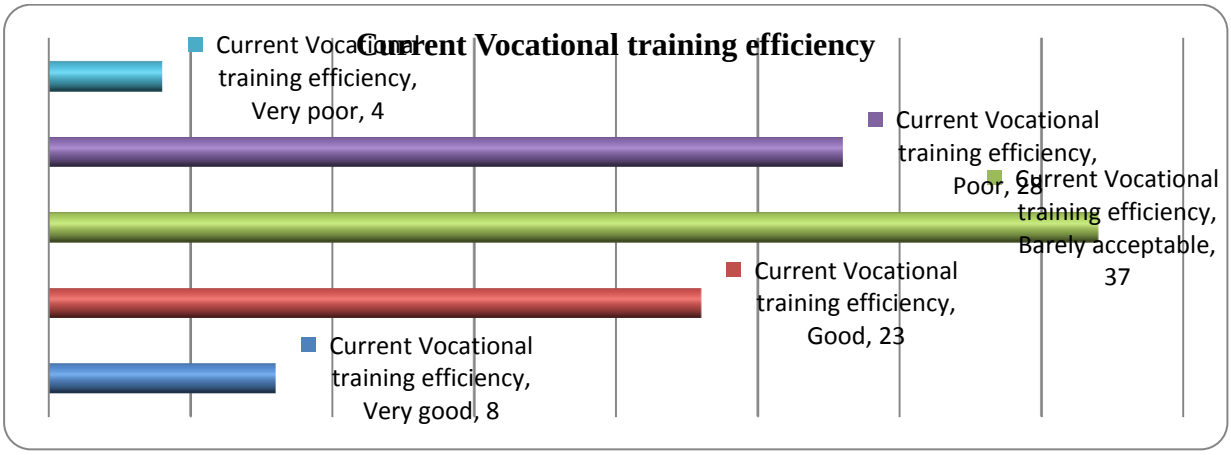


Figure3: Current Vocational training efficiency

An evaluation on the current vocational training efficiency revealed that 37% of the respondents felt that the efficiency is barely acceptable, 28% felt the efficiency is poor, 23% felt the efficiency for vocational training is good and only 8% felt it is very good. 4% indicated that vocational training efficiency is very poor. The researcher noted that the current vocational training efficiency in public TVET institutions in Kiambu County is wanting, since majority of the respondents felt it is either poor or unacceptable.

4.8 Motivating Factors for Performance of TVET

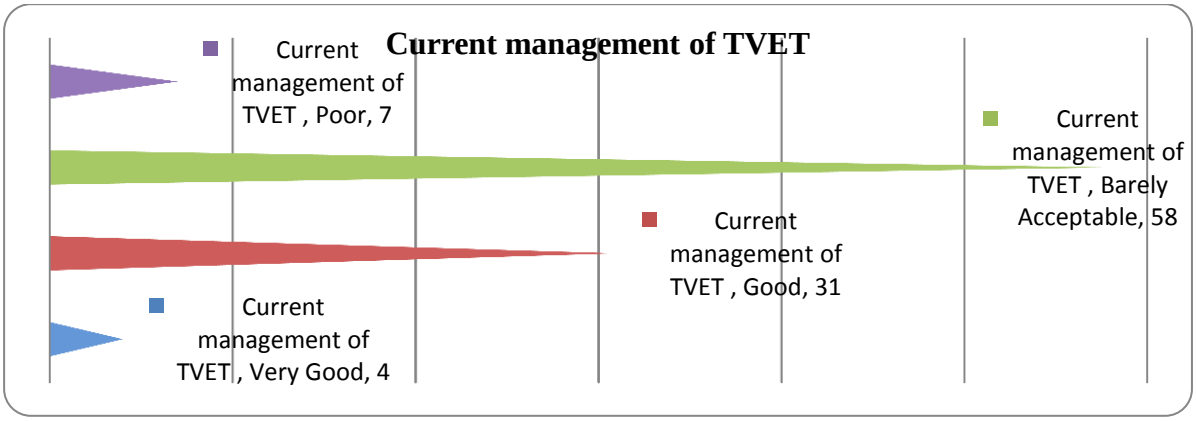
Table9: Current management of TVET system in Kiambu County

Category	Frequency	Percentage
Very Good	2	4
Good	16	31
Barely Acceptable	30	58
Poor	4	7
Total	**52**	**100**

Source: Field data (2013)

The results of the above table and the figure below indicate that most of the respondents (58%) said that the management of public TVET institutions in Kiambu County are barely acceptable. To the researcher this means that management of these institutions are not motivating to employees, and unmotivated workers cannot improve the performance of an institution.

Figure4: Current management of TVET system in Kiambu County



From the study it was noted that the respondents did not find the current management of TVET system in Kiambu County fully motivating. This is seen from the table and graph above which showed that majority of the respondents saw it as barely acceptable. From this the researcher noted that most employees at technical and vocational training institutes in Kiambu County gauge the management of their institutions as barely acceptable.

4.9 Challenges Facing TVET Institutions in Kiambu County

Table10: Challenges facing TVET institutions in Kiambu County

Challenge	N	Mean	Standard Deviation
Government funding towards public TVET Institutions in Kiambu County is arbitral	52	4.58	0.689
TVET Institutions in Kiambu County operate on a limited budget	52	4.04	0.730
TVET Institutions in Kiambu county lack modern facilities	52	4.35	0.828
Technology used in public TVET Institutions in Kiambu County are outdated	52	4.54	0.692
Training materials for both teachers and students are rarely adequate	52	4.19	0.823

Source: Author (2013)

The above table and the bar graph sought to establish the challenges faced by TVET institutions in Kiambu County. The average responses on the lack of funding, limited budgets, lack of modern training facilities, outdated technology and lack of training materials were 4.58, 4.04, 4.35, 4.54 and 4.19 respectively. By computing the respective standard deviations the researcher found out that the responses lay between 4 and 5.This implied that the listed challenges are common to TVET institutions in Kiambu County as most respondents either agreed or strongly agreed that there existed the above challenges in these institutions.

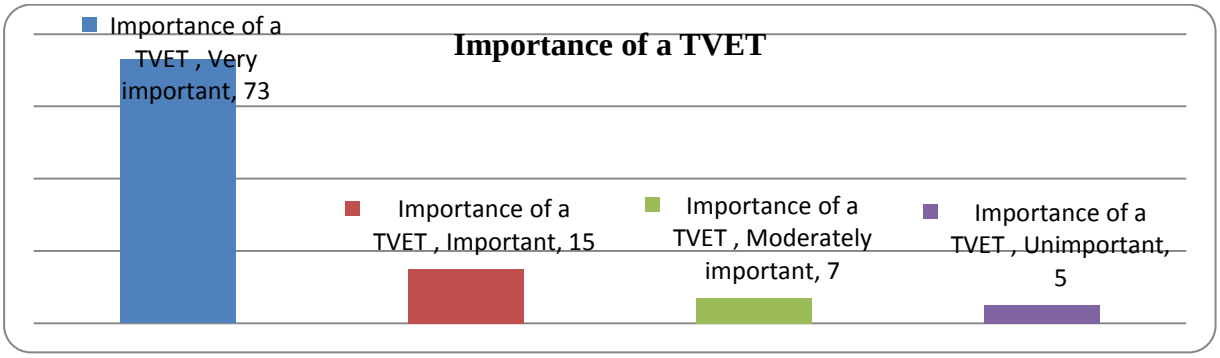
4.11 Importance of having a Central Governing Body for Public TVET Institutions

Table11: Importance of a TVET central governing body

Category	Frequency	Percentage
Very important	38	73
Important	8	15
Moderately important	4	7
Unimportant	2	5
Total	**52**	**100**

Source: Field data (2013)

Figure5: importance of having a central TVET governing body



From the above graph 73% of the respondents suggested it was very important to have a central TVET governing body while15% said it was important, 7% said it is moderately important and 5% said it is unimportant. From this the researcher concluded that it is important that the government fully supports and mandates a central governing body to oversee all TVET activities to enhance the image of the TVET public institutions.

4.12 Technological Factors Influencing TVET Institutions` Performance

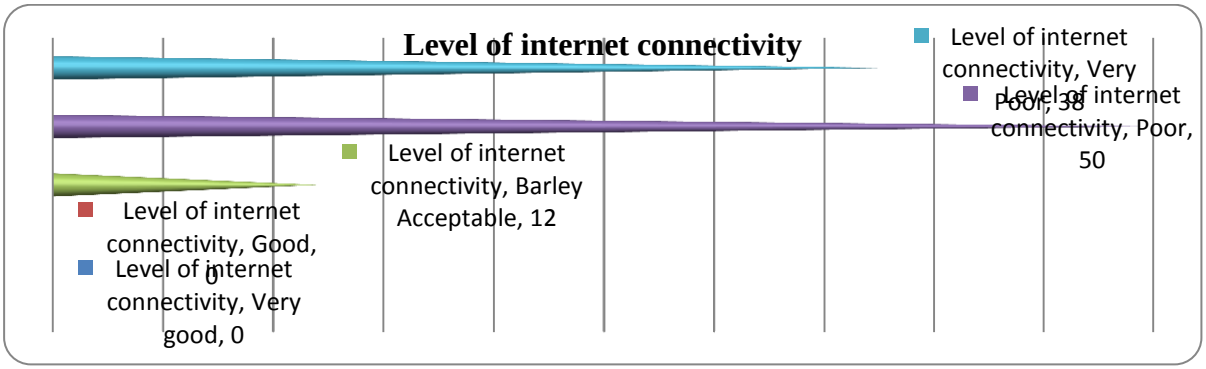
4.12.1 Level of internet connectivity

Table12: Level of internet connectivity

Category	Frequency	Percentage
Very good	0	0
Good	0	0
Barley Acceptable	6	12
Poor	26	50
Very Poor	20	38
Total	**52**	**100**

Source: Field data (2013)

Figure6: Level of internet connectivity



From the above table and pie chart, 50% of the respondents felt that internet connectivity in public TVET institutions in Kiambu County is poor, 38% felt that it is very poor and 12% said it is barely acceptable. However none of the respondents said that internet connectivity in their institutions is good and none felt it is very good either. From this finding it means a TVET institution in Kiambu County lacks technological exposure due to lack of internet connectivity in their institutions.

4.12.2 Effects of Lack of Technology on Staff and Students

Table13: Effects of lack of technology on staff and students

Effects	N	Mean	Standard Deviation
Lack of exposure to newest technology	52	3.69	0.821
Need for more learning on part of staff	52	3.54	0.795
Lack of the right teacher/instructor skills	52	3.31	0.605
Poor Technology awareness	52	3.23	0.575
Lack of marketable skills in graduating students	52	3.33	0.785

Source: Author (2013)

Generally the respondents felt that the teachers and students of public TVET institutions in Kiambu County have suffered effects due to lack of technology. They agreed to a great extent that there is lack of exposure to newest technology in the TVET institutions under study and that there is need for more learning on the part of the staff. The respondents agreed to a great extent that there is lack of the right teacher/instructor skill, and that there is poor technology awareness. They also agreed to a great extent that there is lack of marketable skills in graduating students. The researcher found out that there is a general need to overhaul the public technical and vocational training institutions in Kiambu County to make them efficient by embracing the new technologies in education and training.

4.12.3 Extent to which New Technology Improves Image of TVET Institutions

Table14: How technology improves image of TVET institutions

Category	Frequency	Percentage
Very good extent	28	53
Good extent	14	27
Moderate extent	10	20
Little extent	0	0
Very little extent	0	0
Total	**52**	**100**

Source: Field data (2013)

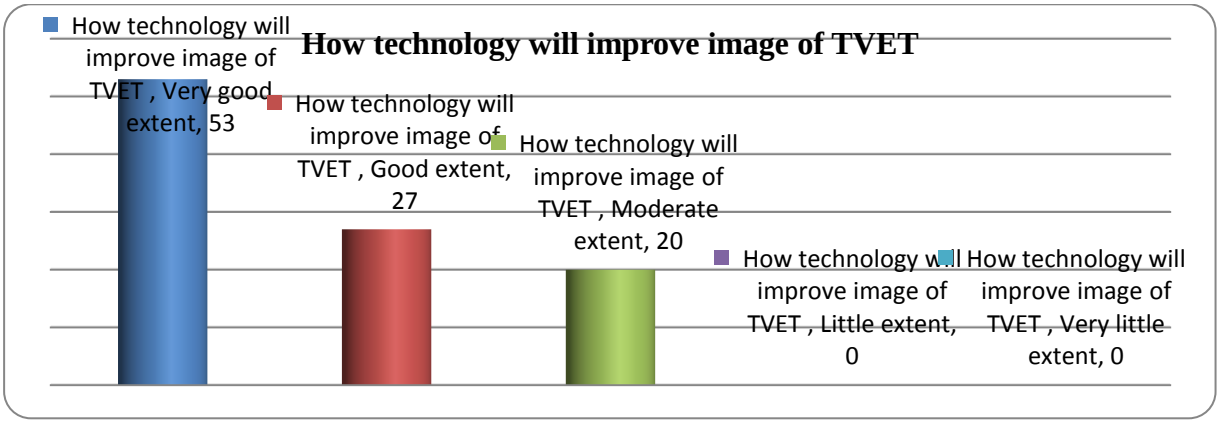


Figure 7: Extent to which new technologies can improve image of TVET

As can be seen from the table and the graph above, new technology if adopted can enhance the image of public TVET institutions. 53% of the respondents have indicated that if technical and vocational training institutes are equipped with new technology, their image will be enhanced to a very good extent. 27% said the image of the said institutions will be improved with improvement in technology to a good extent and 20% felt it would happen to a moderate extent. However no respondents indicated that improvement in technology will have little or very little effect on the image of the TVET institutions. Therefore the researcher has found out that equipping technical and vocational education and training institutions with modern technology will improve their image to a good extent.

4.13 Regression Analysis

Table 15: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.0.784[a]	.863	.824	.632

Adjusted R squared is coefficient of determination which tell us the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.824 an indication that there was variation of 82.4% on organisation performance due to changes in the independent variable which are funding, management, training materials and equipment and training facilities.

This shows that 82.4% changes in organisation performance could be accounted for by funding, management, training materials and equipment and training facilities at 95% confidence interval. R is the correlation

coefficient which shows the relationship between the study variable, from the findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.784.

Table 16: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.644	2	0.322	1.3529	.050[b]
	Residual	11.662	49	0.238		
	Total	12.306	51			

From the ANOVA statistics in table above, the processed data, which is the population parameters, had a significance level of 5% which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (p-value) is less than 5%. It also indicates that the model was statistically significant.

Table 17: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**t**	**Sig.**
1	Constant	2.321	.433		5.360	.032
	Funding	2.613	.063	.164	41.476	.036
	Management	1.316	.086	.237	15.302	.049
	Training materials and equipment	2.128	.230	.278	9.252	.050
	Training facilities.	1.963	.684	.036	2.870	.038

The established regression equation was

Y = 2.321+ 2.613 Funding + 1.316 Management + 2.128 Training materials and equipments + 1.963 Training facilities.

From the above regression equation it was revealed that holding funding, management, training materials, equipment and training facilities at 95% confidence interval to a constant zero , performance of the polytechnic would stand at 2.321, a unit increase in funding would lead to increase in the organisation performance by a factors of 2.613, unit increase in managerial strategies would lead to increase in organisation performance by factors of 1.316, unit increase in training materials and equipment lead to increase in organisation performance of the polytechnic by a factor of 2.128, further unit increase in training facilities would lead to increase in organisation performance of the polytechnic by a factors of 1.963.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary and Key Findings

The data obtained from the study indicated that strategy implementation impacts positively on the performance of public TVET institutions. Inversely lack of strategy implementation impacts negatively on the TVET institutions performance and this can be explained as that no matter how good a strategic plan is, if it is not well

implemented it is of no good to the organization: The impact of a good strategy can only be seen in the results of its implementation.

The findings of this research were that the Government's strategic plans for improvement of technical and vocational education and training have been formulated in the past years but they have never been implemented. For example the researcher has found that the government strategy of 2005 to equip all TVET institutions was not implemented in Kiambu County. This has left these institutions in a poor state without modern training equipment and training materials. The study found that most of the TVET institutions in the County have not acquired modern equipment for the last five years and the equipment currently used have no relevance to Modern technical and vocational training.

Management of the TVET institutions in Kiambu County is also wanting: The study has revealed that management performance is not measured in these institutions. This could mean that either standards of performance are not set or that performance is not an important variable in these institutions. The employees of these institutions do not find the current management of TVET system in Kiambu motivating. The research found that students occasionally drop out of TVET programs and that there are complaints by teachers and students concerning the quality of training. It was also observed that teachers occasionally lacked training materials. The level of efficiency in the technical and vocational education and training institutes was found to be generally poor.

Consequently, technical and vocational training in Kiambu County has lost its relevance and the TVET institutions have gained a negative image due to their poor state and several challenges faced by the institutions. Some of these challenges include lack of sufficient government funding, lack of modern facilities, outdated technology and lack of training materials for both teachers and students. Lack of technology was found to have impacted negatively on the students and teachers: They lack exposure to newest technology and therefore teachers need more learning (re-training) because they were found to lack the necessary skills. Both the teachers and students have poor technology awareness and the graduating students lack marketable skills.

5.2 Conclusion

Technical and Vocational Education and Training in Kiambu County is an education sector ridden with challenges which include inadequate funding, lack of modern training equipment, lack of training materials, use of outdated technology, lack of exposure to new methods of training and poor image. The government strategy to finance students and TVET institutions to improve performance has not worked in Kiambu County, and also the strategy to have the regulations, guidelines or coordination of activities by TVET Authority (TVETA) has not been effective in Kiambu County. Likewise, the researcher concluded that the government strategy of 2005 to have all TVET institutions equipped to improve performance was not implemented in Kiambu County. The performance of all public TVET institutions in the County is poor.

In the state of neglect that they are in, public TVET institutions in Kiambu County can neither equip the youth with employable skills nor empower them to be self reliant because they lack essential facilities and technology. From the research findings, the researcher concludes that TVET institutions in Kiambu County (the village polytechnics, the youth polytechnics and the technical training institutes) are not in a state as to impact youth with employable skills.

5.3 Recommendations

The research has identified the need to equip TVET institutions with modern equipment and technology to improve the quality of training and to improve their performance. The researcher therefore recommends that the government should: Finance public technical and vocational training institutions to improve their performance, introduce the newest methods and technology for teaching and learning for both students and teachers, introduce performance standards and regularly evaluate the accomplishment of these standards, and also introduce new effective methods for monitoring and evaluation of performance, facelift the facilities in these institutions to boost their image, motivate employees by paying them competitively and re-training them to equip them with modern skills, and avail all the necessary materials for training both for students and teachers. It is also recommended that the government have a way of supervising the implementation process of all its strategies for TVET to ensure effectiveness.

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