PROJECT MANAGEMENT PRACTICES AND IMPLEMENTATION OF GOVERNMENT PROJECTS IN MACHAKOS COUNTY, KENYA

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Abstract
Government projects have changed from a simple activity to complex integrated activities which must be smartly implemented to ensure they don’t fail on operation. Despite many project implemented by Machakos County, most of them have not been effectively and efficiently implemented, others are struggling to remain relevant and the remaining have been abandoned or failed. The raised concern in the project implementation ought to be studied and find out where the project managers in Machakos fail and especially how they practice project management. The specific objectives were to establish the role of project planning, stakeholder participation, technology, monitoring and evaluation and how they influence the implementation of government projects in Machakos County Government. A population of 128 projects implemented by the County Government of Machakos was targeted. The researcher instrument was questionnaire used for primary data and information collection from the population. The study found out that coefficient of correlation R was 0.857 an indication of strong positive correlation between the variables. The study conclude that project planning, stakeholder participation, monitoring and evaluation and technology significantly influenced implementation of government funded projects in Machakos County. The study recommends that the project team should establish a project plan which should be followed with aid of a project tool. The plan should specify the project goals and objective set in line with the county mission and vision statement. The project plan should further establish all resources required for the project and identify the risk and opportunities in the project. The study also recommends that the project managers should define all the project process and create communication matrix in the project planning. There is need to involve and consult stakeholders in all stages of the project implementation by the project manager. The project ownership and sustainability by the stakeholders should be promoted. Project Monitoring and Evaluation should be carried out at least twice a month by the project manager with involvement of all key players in the project and by use of monitoring and evaluation tool. Communication, reporting and feedback on monitoring and evaluation process should be established, enabled and facilitated to all stakeholders. The study also recommends training on the project managers to gain knowledge and competency on project software applications.

Keywords: project management practices, Project Planning, Stakeholders Participation, Monitoring and Evaluation, Technology, Project implementation.

Background of the Study
A project is a stand-out game plan of encouraged activities, with an indisputable start and finishing centres, endeavoured by an individual or gathering to meet specific objectives inside
described time, cost and execution parameters (Project Management Institute, 2013). A productive project must stay inside the money related recompense, meet the timetables set and convey a thing that consents to the quality models developed by the client. Additionally, the deliverable must be made inside a given length if it is to be regarded productive as indicated by individuals when all is said in done (Education for All Global Monitoring Report 2010). These elements infer that usage of government subsidized projects is an unpredictable endeavour for any project supervisor.

A report by KARI (2012) shows that the Constitution of Kenya which was promulgated in August 2010 set the phase for major institutional changes and reforms; both governmental and NGOs. Also included in the devolution was the relevant development projects to the deserving needy people in the villages, slums and the marginalized areas in the country like Pokot, Wajir, Mandera etc. Therefore, it is possible to improve efficiency and effectiveness of internal projects within the County government and to relocate government services from central government offices to County closer to the citizens

Bungoma County managed to repair, maintain and develop major road links in the year 2013/2014. The refurbishment of the Meru stadium by the Meru county government is major examples of some works done by devolved units in projects development. According to the Jamhuri Magazine report (2017), some of the project implemented by the Machakos county Government are; refurbishment of the Kenyatta Stadium in Machakos Town, construction and development of Machakos on a 2,200 acres, construction of People’s Park which sit on a 35-Acre near Maruba Dam in Machakos Town, Establishment of field Amphitheatre at the people’s park, establishment of the Food Security subsidy programme. The Government bought 40 tractors for plowing and giving farmers free seed and subsidized fertilizer,

**Project Implementation**

Fruitful project implementation is tied in with changing over a key arrangement without hesitation and executing what should be done to accomplish the focused on vital objectives and goals. As indicated by Brown and Hyer (2010), compelling project implementation and fruitful projects can be resolved based on time planned, cost and the financial plan lastly the nature of the works done. These three elements are additionally the Key Performance Indicators (KPIs) of a project implementation.

**Project Management Practices**

Project management practices refer to the science of planning, designing, and managing activities and help the project team to overcome the challenges throughout the project lifecycle processes (Ibbs, 2002). According to Barriere (2003), project management practices have become a management tool which is applied to achieve optimal performance in project implementation. Some of the project management practices include; project planning, procurement, project monitoring, risk management, Peoples participations, budget monitoring,
Project completion and commissioning, Technology used, User Training, and post-project monitoring.

Project planning which entails defining the activities, scheduling, sequencing tasks, quantities and quality analysis, mobilizing all the resources that ought to be utilized as a part of a period staged way. Project Plan contains detailed breakdown of exercises, undertakings, process and procedure of project implementation. (Malala, 2011)

Procurement involves the strategy used to decide how goods, services and works will be identified, delivered and realized in an organization. (Meredith & Mantel, 2012). Procurement supports the organization missions by securing the good and services required. Institution and government have been keen to ensure there is effective procurement system and all procurement policies have been implemented. Provisions on electronic procurement or rules governing privately financed projects have received attention by project management and have been applied to ensure successful project implementation.

People’s participation which calls for community or the public involvement especially groups with interest with the implemented project. The level of people participation and the partnership bolster decides if a project winds up, built up, how rapidly and effectively it merges, and how it reacts and adjusts to address evolving issues

Project monitoring is an arrangement for observing and assessment which is drilled in project administration to strengthen powerful activities, suggestion, and trigger restorative activities. Project Monitoring and assessment show project consistence with models and all other required parameters in project implementation.

Technology and Innovation stays exceptionally basic in project administration because of increment in project many-sided quality and shortage of lab or and human capital with the important specialized aptitudes. (Crawford et al., 2006). As per Birkhead, et al., (2000) there have been critical needs for the improvement utilization of innovation where programming is utilized amid execution of project due to reforms of nature, new developments, overwhelming documentation and the unwinding of exchange directions, which have brought about an exceptionally focused commercial center. Project administration is a key advantage for governments and associations and they should ensure training on new technology is done and encourage the work team to work through coordinating PM instruments and strategies into training (Besner and Hobbs, 2006).

Risk management is a management practice which out to be exhausted in any project management. Route course and mitigation measures should be established and addressed by the organization and project management team. The accomplishment of a project would typically be estimated by the degree to which the foreordained targets set by the Client are achieved; the achievements come with risk which should be addressed.

Government Projects Funded by Machakos County Government
The County government through its ministries for trade, education, transport, tourism, water, and sanitation have come up with several projects that aim at improving the lives of the Machakos residents. These projects are funded from different financiers; National Government, County Government, World Bank and other international bodies involved in development.

The implementation of the government funded projects is purely carried out by the county administration headed by the Governor and head of various departments. Most of the projects are set to be implemented in the 40 Wards forming the County and therefore the ward administrators are tasked with implementation and the key responsibilities in the project supervision. Such projects include establishment of the Food Security subsidy programme, the project to buy 40 tractors for ploughing distributing free seed and subsidized fertilizer to the farmers, digging of water boreholes in the villages.

In addition other projects are proposed to be implemented in the sub county. Such cited project include the building of level five hospitals in each sub county, water reservoirs major towns, solid waste management, livestock and food security development programs, bursary allocation programmes among others. The cited projects managed at the county level include construction of education Centres/institution like the Machakos Youth Polytechnic, roads construction projects like the Makutano Junction-Machakos road, tourism projects like the Machakos people’s park which sit on 35-acre of land near Muruba Dam and Machakos Convention Center, the building of hospitals, water reservoirs, solid waste management among others (GOK, 2016).

**Statement of the Problem**

In Kenya, since the year 2013, the county governments have carried out various projects in their respective counties reporting up to 32% successful implementation of the projects, (World Bank 2016). A report prepared by the Kenya National Bureau of Statistics (2017) provides detailed information on development indicators in agriculture, environment and natural resources, manufacturing, Transport, building and construction in the county. The statistics indicated that the alignment of the development projects and the key Social –Economic indicators has happened in Machakos county but the implementation of the projects has not been successful. According to the report the economic market is not competitive in Machakos County since the projects supporting the market and enabling easy doing of business has not been successfully implemented. The boreholes digging being one of the major development projects implemented by the Machakos County where a total number of 69 boreholes have been constructed, the failure rate of 20% have been recorded (Department of geology University of Nairobi, 2017). The boreholes fail to produce water or the water produced is not viable. The report raise questions on the project implementation processes and the project teams. Despite many development projects implemented by Machakos County government (County Integrated Development Plan, 2014), 29% of the projects are successful implementation as reported by World Bank report on devolution in Kenya (2016. The study focuses on the following specific objectives.

i. To evaluate the influence of project planning on the implementation of government projects in Machakos County.
ii. To determine the influence of stakeholders’ participation in the implementation of government projects in Machakos County.

iii. To find out the effects of monitoring and evaluation on the implementation of government projects in Machakos County.

iv. To study the effect of technology on the implementation of government projects in Machakos County.

Literature Review
The literature review highlights various studies and their findings done by different scholars on project planning, stakeholder participation, technology and monitoring and evaluation on how they affect project implementation. The literature review assisted the researcher to understand the topics of study.

Theoretical Review
The study is pinned on three theories; Institutional Theory, social-economic theory and resources based theory

Institutional Theory
The institutional theory opens the developed perception to understand organizations and how the ecosystem surrounding the organizations affects and interacts with its operations. Institutional theory discusses how institutions and government adapt to forces from the projects being implemented and particularly how the government reacts in order to maintain legitimacy. Monitoring and evaluation may suggest changes and forces where the government adaptation to the changes is critical. The frequency of re-evaluation to find out the effect of proposed changes the project team is responding to any environmental changes and the context of the government. This hypothesis is critical with regards to the implementation of feasible projects in associations that serve general society.

Project planning is also linked with the theory since all internal and external issues should be considered in plan. Risk and opportunities should be considered and all depend on how the organization will look its environment. This is a matter of organizational planning and project planning on its activities and the degree to which the internal and external environment in an organization is supportive of any changes (Brammer & Walker, 2012). Project planning decides on how organization structure will relate with project implementation.

Socio-Economic Theory
Sutinen and Kuperan (2012) propounded the socio-economic theory of consistence by coordinating economic theory with hypotheses from brain research and sociology to represent moral commitment and social impact as determined by the stakeholder's participation and individuals’ decisions on compliance. Economic performance is influenced by psychological and social aspects and therefore the theory explains the three aspects interact and affect each other. Public participation leads to social and economic empowerment and therefore the society owned the government projects by supporting the decision made.
Wilmshurst and Frost (2000) additionally include that the association is capable to unveil its practices to the partners, particularly to people in general and legitimize its reality inside the limits of society. This hypothesis, which centres on the relationship and communication between an association or the government and the general public, gives an adequate and prevalent focal point for understanding government project framework. How society interacts and participates in public and government projects affect the service delivery to the society as well as project implementations.

**Resource-Based Theory**
The RBT is a strategic management theory that is broadly utilized as a part of project management. It looks at how assets can drive upper hand while doing the project arranging (Killen et al., 2012). Resources are commitments to the age procedure, for instance, capital, equipment, and human, aptitudes of individual laborers, licenses, finance, and gifted project chiefs. Resources are either obvious or vague in nature. Project planning specifies the resources to be applied. The plan ensures the right tool is used for the correct project. Optimal use of resources is the key in the theory. The study links use of technology and monitoring and evaluation tools as way of optimizing the resources.

**Empirical Review**

**Project Planning and Project Implementation**
As indicated by Malala, (2011) study on effecting of project planning and procurement in public project implementation, breakdown of works and administrations required; process, a calendar of the arranged procedure, implementation and culmination dates for every one of the procedures should be well planned since project planning is essential and significant in project implementation. The study recommended that all public organizations and governments should strengthen mechanisms and planning tools and ensure there is no gap when implementing projects.

According to Kariungi (2014), on a study to determine timely completion of projects in Kenya, the project arranging advantages must be accomplished with solid responsibility and information. The researcher found the standardization of all process to enable timely completion of projects can be achieved by use of project planning tool. The planning tools enhance capacity handling and should be employed in project implementation. The study recommended that during project planning the vital elements of planning should be addressed.

**Stakeholder Participation and Project Implementation**
The project administrator is required to recognize project stakeholders and decide on their necessities and desires for the project executed (Bright, 2010). The Author shows that effective correspondence between stakeholders would guarantee the project is actualized effectively and every single key player is on the same page and the stakeholder desires are met. The study recommend that each project manager to should establish the key stakeholders in the project and involve them in all stages in implementation. The community need should be evaluated in line
with the available resources thus the project manager will be able to decide on the type of project to solve the challenging facing the people. Community involvement promotes project ownership and assumption of responsibility (Mulwa 2008)

**Monitoring and Evaluation and Project Implementation**

A study by Naidoo, (2011) on role monitoring and evaluation to promote good governance found that deliverables such as project plan, policies communication matrix and feedback are very significant in good governance and successful project implementation. The stakeholders rely on information submitted from M & E process to reveal project accountability and decision making. The study suggest more routing to the particular connection amongst observing and assessment in connection to effective project administration practices and implementation.

Harold (2013) found how knowledge on M & E improves project performance since the project team is able to know when the project is meeting the desired output hence make correct decision on implementation. Keeping the project on truck where the project purpose and scope is maintained then Key execution pointers (KPIs) ought to be observed amid the existence cycle of the project.

**Technology and Project Implementation**

Leung Xha (2014) indicated importance of providing project act supervision. Good project management requires functional supervisory systems which applies the current technology. According to a study conducted by Robina (2014) on determining and evaluating the reasons for limited use of Project Management Tools and Techniques (PMTT), the study found there is the inability of PMTT to match with the requirements of the projects implemented. He also noted that PMTT used in different project phases, project success is contributed by few of them. The contributing measure of each phase and activities is determined. If PMTT is applied on phases where they contribute negatively to success measures then the technology would be counterproductive and the project manager should be notified.

This study focused on PMTT user comprehensive knowledge and impact of their usage where PMTT adoption based on popularity or perceived importance by the County Government would be studied. The formal and structured procedures in government operations provide a guideline on how project managers select and influence use of PMTT. The simple and proven techniques provided by project managers to implement project work would be studied. The research would also focus on knowledge and barrier established in use of PMTT effectively in projects by managers.

**Research Methodology**

The target population comprised of 128 government projects in Machakos County which are managed at different levels of county administration. After stratifying the population, Simple random sampling was used to calculate the sample size and therefore each project implemented in Machakos County was given a calculable, non-zero
probability and an equal chance of being selected. According to Mugenda and Mugenda (2003), a sample of 25-40% is statistically significant to come up with a conclusion for a given study. The study, therefore, used 40% of the target population to sample 52 respondents who gave information on the research findings. Data was collected using a semi-structured questionnaire. The instrument was developed to contain the items that are aligned towards the achievement of the objectives of the study.

The primary data collection was sorted for ease of manipulation and analysis. The data was then edited, coded and classified with the aid of the Statistical Package for the Social Sciences (SPSS). Descriptive statistics was applied to describe or summarize the data collected to enable a researcher to come up with a meaningfully distribution of measurements and values from the samples selected using mean indices and standard deviation statistics. From the above statistics, frequency distributions and percentages tables were generated showing the distribution of scores in a sample for a specific variable. The analysis gave a record of the number of times a score or a response occurs (Mugenda and Mugenda, 2003). For each variable, the researchers tabulated the findings and calculate the frequencies and percentages then make interpretations from the research findings. A regression model was used to test the effect of project management practices on implementation of government project at Machakos County Government. This helped the researcher evaluate and explore the strength of relationships between the dependent and the four independent variables of the study. Multiple linear regressions was employed to predict the outcome. The general form of multiple Regression:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \]

### Research Findings

#### Descriptive Statistics

Data was collected on five key areas; Project Implementation, Project planning, Stakeholders participation, Monitoring and Evaluation and Technology to establish their effect on project implementation in Machakos County based on certain statement on scale of 1-5 where strongly agree – 5, Agree – 4, Neutral – 3, Disagree – 2, Strongly Disagree -1

#### Project Implementation

Respondents were asked to indicate their level of agreement on implementation of projects in Machakos County, Kenya. The findings are as shown in Table 4.1.

<table>
<thead>
<tr>
<th>Statement on Project Implementation</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Implementation is based on the scope, objectives of the project</td>
<td>1.975</td>
<td>.716</td>
</tr>
<tr>
<td>Project scope is fully addressed</td>
<td>2.069</td>
<td>1.819</td>
</tr>
<tr>
<td>Project implementation follows schedule and timelines</td>
<td>1.975</td>
<td>0.953</td>
</tr>
<tr>
<td>Project implementation is on-budget</td>
<td>1.953</td>
<td>.918</td>
</tr>
</tbody>
</table>
Project implementation has achieved set goals and Objectives 2.860 1.028  
The project is used to the beneficiaries 1.860 .917  
Project implementation meet the specified implementation standards 1.977 .848  

The study established that majority of the respondents strongly felt that Project Implementation was not based on the scope, objectives of the project as supported by a mean of 1.975 with standard deviation of 0.716. Majority of the respondents also felt that Project scope was not fully addressed as supported by a mean of 2.069 with standard deviation of 1.819. Respondents had a strong opinion that project implementation did not follow schedule and timelines as supported by a mean of 1.975 with standard deviation of 0.953. There was an indication of Project implemented out budget plan as supported by a mean of 1.953 with standard deviation of 0.918.

**Project Planning and Project Implementation**

<table>
<thead>
<tr>
<th>Statement on Project Planning</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project planning specifies project goals and objective.</td>
<td>3.968</td>
<td>.994</td>
</tr>
<tr>
<td>Project Planning is identifying, determination and understanding of both internal and external dependencies.</td>
<td>3.815</td>
<td>.818</td>
</tr>
<tr>
<td>Project planning enables the County executives to monitor progress towards attaining the goal.</td>
<td>3.682</td>
<td>.873</td>
</tr>
<tr>
<td>Project planning gives the organization a clear communications matrix.</td>
<td>3.421</td>
<td>.587</td>
</tr>
<tr>
<td>The key implementation targets for each process are outlined during project planning.</td>
<td>3.947</td>
<td>.816</td>
</tr>
<tr>
<td>Project planning highlights roles, responsibility and liability to the project team.</td>
<td>3.368</td>
<td>.974</td>
</tr>
<tr>
<td>Project planning establishes all requirements of the project.</td>
<td>3.867</td>
<td>.877</td>
</tr>
<tr>
<td>Project planning facilitates project reporting and review arrangements.</td>
<td>3.694</td>
<td>.912</td>
</tr>
<tr>
<td>Project planning identifies and treats project risks.</td>
<td>3.916</td>
<td>.817</td>
</tr>
</tbody>
</table>

On project planning, the study established that most of the respondents felt that project plan specified project goals and objective and provided the key implementation targets for each process. The respondent were for the opinion that because of the insufficient project planning the project managers could not identified and treats project risks, they did not determine, identify and understand both internal and external dependencies. Majority of the respondents agreed that the project team did not establish all the resources required in the project, they also didn’t facilitate project reporting and review arrangements. Project planning enabled the County executives to monitor progress towards attaining the goal. This is supported by Kariungi (2014) who established that the project arranging advantages must be accomplished with solid responsibility and information on the project directors and other project partners.

**Stakeholders Participation and Project Implementation**
Table 4.3: Stakeholders Participation

<table>
<thead>
<tr>
<th>Statement on stakeholders Participation.</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects take care of user’s needs in all outcomes.</td>
<td>1.894</td>
<td>.817</td>
</tr>
<tr>
<td>Project beneficiaries are involved in project decision making and project design.</td>
<td>2.069</td>
<td>1.078</td>
</tr>
<tr>
<td>The project allows users to take responsibility during the system initiation, design, and implementation process.</td>
<td>2.046</td>
<td>.918</td>
</tr>
<tr>
<td>Stakeholders Participation makes all persons involved to be accountable for the results of specific activities and the implementation process.</td>
<td>1.953</td>
<td>1.043</td>
</tr>
<tr>
<td>Stakeholder’s participation promotes users ownership of the project.</td>
<td>3.794</td>
<td>.972</td>
</tr>
<tr>
<td>Stakeholders Participation offers opportunities for users to, directly and indirectly, benefit from project implementation.</td>
<td>2.116</td>
<td>.865</td>
</tr>
<tr>
<td>Stakeholders Participation facilitates users to agree any correction measure during implementation.</td>
<td>2.186</td>
<td>.913</td>
</tr>
</tbody>
</table>

The study pointed out that majority of the respondents could not state how the projects implemented took care of user’s needs in all outcomes and how the stakeholder’s participation promoted shared ownership of the project. Respondents agreed that stakeholders Participation facilitates users to influence any changes proposed during implementation and therefore there is benefit from project implementation. The response received indicated that, the project beneficiaries were not involved in project decision making and project design. Majority of the respondents agreed that the project team did not allow users to take responsibility during the system initiation, design, and implementation process hence they were not accountable for the results of specific activities and process. This is supported by Kaufman and Alfonso (1997) who states that successful stakeholder intrigue may provoke social and individual reinforcing, money related progression, and socio-political change.

Monitoring and Evaluation and Project Implementation

Table 4.4: Monitoring and Evaluation

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and evaluation was practiced in the county.</td>
<td>2.023</td>
<td>1.021</td>
</tr>
<tr>
<td>Monitoring and evaluation enable the project manager to track the project performance.</td>
<td>3.842</td>
<td>.983</td>
</tr>
<tr>
<td>Monitoring and evaluation enable the County to have a communications matrix on the project.</td>
<td>3.615</td>
<td>.874</td>
</tr>
<tr>
<td>Monitoring and evaluation facilitate project reporting and review arrangements.</td>
<td>2.395</td>
<td>.948</td>
</tr>
<tr>
<td>Monitoring and evaluation establish feedback to the stakeholders.</td>
<td>3.714</td>
<td>.872</td>
</tr>
</tbody>
</table>

The study established that, majority of the project managers understood project monitoring and evaluation but they did not practise because the county government did not provide monitoring and evaluation tool. The respondent agreed they could not track the project performance,
facilitated project reporting and review arrangements. Majority of the project managers did not established feedback to the stakeholder sand communication was not effective because Monitoring and evaluation was not carried out at the right time and the right Tool.

**Technology and Project Implementation**

Table 4.5: Technology

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of technology is integrated with all project process</td>
<td>1.906</td>
<td>.917</td>
</tr>
<tr>
<td>Technology facilitates project documentation.</td>
<td>1.976</td>
<td>.828</td>
</tr>
<tr>
<td>Technology enables the County to have a communications matrix.</td>
<td>3.587</td>
<td>.618</td>
</tr>
<tr>
<td>Technology enables Monitoring and Evaluation of the Project.</td>
<td>3.852</td>
<td>.984</td>
</tr>
<tr>
<td>Technology establishes feedback to the County Government.</td>
<td>3.421</td>
<td>1.081</td>
</tr>
</tbody>
</table>

The study found out that project managers were for the opinion that technology enables monitoring and evaluation of the project, facilitates project documentation and helps the County to create communications matrix. Majority of the respondents had a strong feeling that there was ineffective use of technology in the county. Activities integrated with all project process was not done appropriately and therefore there was minimal feedback established to the County executive. This is supported by Besner and Hobbs (2006) who established that project management is a strategic resource for associations and ought to work through coordinating PM devices and procedures into training.

**Regression Analysis**

*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>.857a</td>
<td>.734</td>
<td>.696</td>
<td>2.06772</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Stakeholder Participation, Monitoring and Evaluation, Project planning, Technology

The findings show that coefficient of correlation R was 0.857 and indication of strong positive correlation between the variables. The adjusted coefficient of determination $R^2$ was 0.696 which indicates that 69.6%, of the changes in dependent variable, Project Implementation can be explained by four independent variables; Stakeholder Participation, Monitoring and Evaluation, Project planning and Technology. The remaining 30.4% can be explained by other factors affecting the implementation of projects that were not included in the study.

**Analysis of Variance**
The probability value was 0.00<0.05 an indication that at least one independent variable significantly influenced implementation of projects in Machakos County, Kenya. This implies that the overall regression model was significant.

Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>19.613</td>
<td>.497</td>
</tr>
<tr>
<td>Project Planning</td>
<td>.297</td>
<td>.497</td>
</tr>
<tr>
<td>Stakeholder Participation</td>
<td>.308</td>
<td>.392</td>
</tr>
<tr>
<td>Monitoring and Evaluation of Projects</td>
<td>.240</td>
<td>.263</td>
</tr>
<tr>
<td>Technology</td>
<td>.849</td>
<td>.442</td>
</tr>
</tbody>
</table>

\[ Y = 19.613 + 0.297(X_1) + 0.308(X_2) + 0.240(X_3) + 0.849(X_4) \]

Where: \( Y = \) Project Implementation, \( X_1 = \) Project Planning, \( X_2 = \) Stakeholder Participation

\( X_3 = \) Monitoring and Evaluation of Projects, \( X_4 = \) Technology

The findings established that holding other factors constant, implementation of projects in Machakos County, Kenya would be at 19.613.

A unit increase in project planning holding other factors constant, implementation of projects would be at 0.297. Project planning had a p value of 0.00<0.05 which implies that, project planning is significance determinant of project implementation.

Project planning is important because it demonstrates leadership and direction of the project. The strategic goals are delivered in a right way against the business opportunities According to Brown and Hyer (2010), Project planning explains the aspects of forecasting techniques which help in to predict costs and cash flows. The author also found that project planning is key information of organization structure and relate it with functions of project implementation.
Proper expectations of quality and timelines are set ensuring all the risks are well managed and mitigated to avoid them becoming an obstacle in the implementation. Project planning gives the right people to be involved on the right activity and processes and the processes follow the project lifecycle. It ensures a project’s progress is tracked and reported properly. Project planning is important because someone needs to be able to understand if everyone’s doing what they should and it learns from the successes and failures of the past.

A unit increase in stakeholder participation while holding other factors constant, implementation of projects would be at 0.308. Stakeholders participation had a p value of 0.002<0.05 which implies that, stakeholders participation is significance determinant of project implementation.

The project administrator is required to recognize project stakeholders and decide on their necessities and desires for the project executed (Bright, 2010). The Author shows that effective correspondence between stakeholders would guarantee the project is actualized effectively and every single key player is on the same page and the stakeholder desires are met. Stakeholder’s participation promotes the user’s needs and project ownership. There is accountability since all participants expect to benefit from the projects. Nerd (2010) states that project sponsors are essential stakeholders who are responsible and have a great deal of enthusiasm for keeping the project on the plan.

A unit increase in monitoring and evaluation of projects while holding other factors constant, implementation of projects would be at 0.240. Monitoring and Evaluation had a p value of 0.019<0.05 which implies that, Monitoring and Evaluation is a significance determinant of project implementation.

Monitoring the progress and activities of any project work are some of the key management styles used to manage the work by organizations (Georgieva & Allan, 2008). Good monitoring team has good stakeholders’ representation. The author also indicates that an M&E team which embraces teamwork demonstrate strength, understanding and an ingredient for better project performance. Well done project monitoring and evaluation where the right tools are employed then the project success is assured. The team is able to identify and correct any mistakes. There is always a good flow of processes since the communication and feedback is facilitated by Monitoring and evaluation.

A unit increase in technology while holding other factors constant, implementation of projects would be at 0.849. Use of Technology had a p value of 0.00<0.05 which implies that, use of Technology is a significance determinant of project implementation.

Besner & Hobbs, (2006) Successful execution of the projects requires the project management team and indeed the project manager is supported by a set of tools. These tools can be purposely designed for project management work which makes the work of the project managers easy and helps the team to realize standardized work. Skills and competencies are required for the project
team to apply the tools and software’s efficiently and effectively considering the project complexity and increasing challenges for any successful results. Tracking the project process and documentation is supported by technology enabling the implementation of the project following the schedules and the timelines with few or no mistakes. This is supported by Murphy and Led with (2006) who established that project manager should analyze the context of the project, interested parties and risk and opportunities and the data should be well presented and monitored by the use of software to ensure accuracy.

Conclusions
On project planning, the study concludes that, there was lack of project plan and therefore the project goals and objective were not specified. Minimal measures were taken in establishing all the resources required in the project, facilitating project reporting and review arrangements. Since there was no project planning and tools the County executives could not monitor progress towards attaining the county goal and distributed roles with clear lines of responsibility and liability to the project team. The project managers did not identified and treats project risks. In addition they could not determine and understand both internal and external dependencies. The study conclude that failure to establishes project planning considering the above stated items, lead to unsuccessful implementation of the project.

On stakeholder’s involvement, the study concludes that projects managers did not take care of user’s needs in all outcomes, the shared ownership of the projects and facilitating users to influence any correction measure during implementation was not promoted. The opportunities for the users and stakeholders to benefit from project implementation and assume some measure of responsibility during the system initiation was not offered and therefore the stakeholders could not be held accountable for the results of specific activities and process implemented hence most of the project implementation were unsuccessful.

In regard to monitoring and evaluation, the study concludes that monitoring and evaluation was practiced in the county projects and project managers should apply monitoring and evaluation tools. Most of the project managers did not have enough skills and competency to apply the tools and therefore it was difficult to track the project performance and facilitated project reporting and review arrangements. The study further conclude that most of the projects fails because there was no clear established feedback to the stakeholders and clear defined communications matrix on the project. These lead to repeated mistakes which could be addressed during monitoring and evaluation of the project implementation.

In view to technology, the study concludes that use of technology was faced by the challenge of low skills and competences on the tools and software’s. The project team were not able to document and integrate the project activities and therefore they could not establish clear feedback to other stakeholders. These caused delay in the project implementation where timelines were not met and the completed projects had repeated mistakes.
Recommendations
The study recommends that there should be a project plan established by the project managers which should be followed with aid of a project tool. The plan should specify the project goals and objective set in line with the organization mission and vision statement. The project plan should further establish all resources required for the project and identify the risk and opportunities in the project. The study also recommends that the project managers should define all the project process and create communication matrix in the project planning.

The study recommends further that all stakeholders should be involved and consulted by the project management team in all stages of the project implementation. Stakeholders should participate in project decision making, project design and project monitoring and evaluation process. The project manager should promote the project ownership and sustainability by the stakeholders.

The Project team should carry out Project Monitoring and Evaluation at least twice a month with involvement of all key players in the project and by use of monitoring and evaluation tool. The team should promote, enable and facilitate Communication, reporting and feedback on monitoring and evaluation processes to the stakeholders.

The study recommends that the project manager should emphasise use of software tool to integrate complex process and facilitate the documentation of the project implementation process. For purpose of effective tracking process, communication and giving feedback on project implementation information technology systems must be applied. The study also recommends training the project managers to gain knowledge and competency on project software applications.

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