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Project Planning Process and Performance of Technical Vocational Educational and Training Institution's Construction in Kenya

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Abstract: **This study aimed to investigate the influence of project planning process on the Performance of TVET Institution's Construction in Kenya. This study adopted descriptive design with a target population of of 146.Data collection instrument was questionnaire. The quantitative data was then analysed using SPSS version 26 and presented through tables using a linear regression model. From the findings, project planning process (β = 0.315) was found to be positively significant toperformance of TVET Institution's construction, Kenya. The study recommends that, project requirements, stakeholders', participation, resource schedule and procurement procedures are critical during project planning process.**

Keywords: **Project Planning process, TVET institutions, performance.**

1. INTRODUCTION

According to PMI (2021),project planning process is a discipline that specifies the responsible people to the action, the process, the times and the resources involved for a particular job in the mind and the author asserts that the project planning phase forms the basis for the next phase which is the execution process.The planning process is most effective when it occurs throughout the life of the project(Mwakio,at el,2020).A good plan provides the following benefits: clearly documented project milestones and deliverables, a valid and realistic timescale, accurate cost estimates and detailed resource requirements(Mutwiri,2021).Key outputs are project scope statement, project management plan, WBS, project schedule, procurements plan, various project plans & stakeholder engagement. The key benefit of this process is to delineate the strategy and tactics as well as the course of action or path to successfully complete the project.While, several scholars,among them Alchammari.,at el(2021) and Ronoh(2020) ,has done a lot research on this area, and indicated that, there is significant and positive influence of project planning process on the performance of construction projects. Amisi&Kwasira(2023) indicated that, project planning process had an insignificant negative effect on performance of projects, while, Mwanza,at el.,(2020) showed that, project planning process had negative and significant influence of performance of projects.

In the concept of Project performance, different project managers use different techniques to measure performance. Some use project management software while others apply key performance indicators (KPIs) to determine if it is on track or not.Some of the common KPIs to measure project performance are project objectives, quality deliverables and Cost tracking and Project performance Bhuinyan,atel.,(2020).The out most goal of project performance is achieved through attaining project's overall performance in terms of time, cost and quality; meeting project's multiple deliverables such as health and

safety, risk management, claim management and absence of conflict and stakeholders' satisfaction related to project team, end-user, suppliers and meeting owner's requirements(Mbugua.,atel,2021).

Project performance ensures that enterprises maximize on profitability, minimize the consequences of risky and uncertain events in terms of achieving the project's objectives and seizes the chances of the risky events from arising (Unegbu, 2020).Pascal(2020) urged that, building projects are naturally complex due to the involvement of numerous parties from the project owner, professionals, consultants, contractors, stakeholders, suppliers and regulators. To ensure the project performance criteria is met, the project objectives, time, cost stakeholders' expectations and quality requirements should be clearly and explicitly stated in contract documents. In the context of this study, the criteria of project performance for the project will be cost, time, quality and acceptance of deliverables, which are basic elements of project performance Mbugua., at el.,(2021) Project performance measure for this study will be defined in terms of cost, time, quality, acceptance of the deliverables and meeting TVET construction projects stakeholders' expectations in Kenya.

Performance of construction projects is based on Key Performance Indicators (KPIs) for success such as environmental impact; schedule performance and adequate communication among all project participants Mbugua., at el.,(2021).There is convergent with previous studies on construction projects, however depending on the nature of projects, public or private projects, the performance criteria vary.However, based on reviewed literature both public and private sector stakeholder's performance of the project is considered as a source of concern, as a result of different stakeholders in the construction of projects with divergent views in terms of their objectives, hence various stakeholders view project performance differently and a project that seem successful to the client may be unsuccessful venture for contractors or end users.

Statement of the Problem

The construction sector in Kenya, added 847 billion Kenyan shillings (KSh) to Kenya's Gross Domestic Product (GDP) in 2021.The annual value increased compared to 2020, keeping an upward trend since 2018, KNBS (2021).The performance of most projects in Kenya fails to meet the expected goal based on time and cost indicators.On average, 35-60% of projects initiated in Kenya face cost overruns while time overrun is most severe with 35-73% projects overrunning their schedule, with problematic issue of plurality of performance measurement regimes in the construction industry(Ong`ondo,at el,2019).Project failures results to slow economic growth loss of foreign aid/grants; tougher donor regulations; and lack of confidence in state from financial institutions (Eja&Ramegowda,2020) and loss of public funds and stakeholder's dissatisfaction in Kenya.

The performances of TVET Institution's construction in Kenya, just like other construction projects (Mongina&Moronge, 2021) have challenges due to in effective project planning process. According to KNBS (2017) and Auditor General Reports (2017), and MOE (2021) report, indicated three out five (60%) TVET institution's construction in Kenya had several challenges in their planning process, including community engagement, land acquisition and site, resourse allocation and procurement procedures. Hence, the performance of performance of TVET Institution's construction has implications to the Kenya Vision 2030 as envisaged in the TVET sector to ensure equitableness and access to TVET, resulting to increased and sustained enrolment ratio of 20% of the population by the year 2030

Obalemo, (2021) and Musau (2020).indicated that, project planning process influence the performance projects.However, these findings were based on water, roads and power projects and outside the context, concept and geographical areas of the current study which posits a knowledge research gaps. This study aimed to fill the previous research gap by establishing the influence of project planning process on performance of TVET institution's constructionon performance of TVET Institution's construction in Kenya.

Research Objectives.The main objective of this study was to establish the influence of project management processon performance of TVET Institution's construction in Kenya.

Research Hypothesis: H_{01}: Influence of Project planning process on the performance of construction of TVET institutions in Kenya is not significant.

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2. CONCEPTUAL FRAMEWORK

Figure 2.1 shows the conceptual framework, which depicts the relationship between, project planning process and performance of construction of TVET institutions in Kenya.

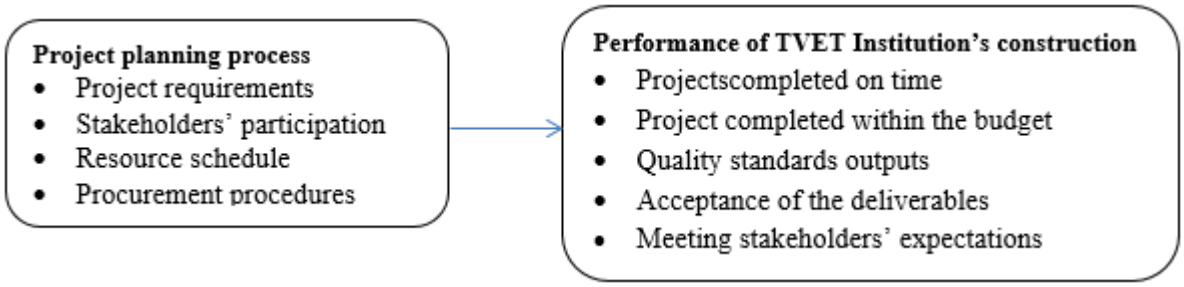

Fig: 1. Conceptual Framework

3. METHODOLOGY

This study adopted descriptive design with a target population of of 146, sample size of 107 constructions TVET Institutions. To generate data for the study, a cross-sectional survey design was used collect primary data using questionnaires and quantitative data was analysed using SPSS version 26. A linear regression model was utilized to show the relationship between the dependent and independent variables

4. RESULTS AND DISCUSSIONS

Table 1: Model summary

R	R **Square**	**Adjusted R Square**	**Std. Error of theEstimate**
.250	.062	.058	**6.111**

a Predictors: (Constant), Planning

Results from table 1indicates that, the correlation coefficient,R^2 was 6.2% of the variance in Performance of construction of TVET institution's in Kenya was explained by planning process. This findings of R^2=0.62, relates to findings of Obalemo,(2021) study R^2, the correlation coefficient which has a value of 0.682 of project planning process explained the variance in project success. The implication is that 93.8% of the change in Performance of TVET Institution's construction in Kenya can be attributed to others factors

Table 2: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	517.044	1	517.044	13.843	.000[b]
Residual	7768.651	209	37.349		
Total	8285.695	209			

From table2, the results showed that, the regression model was statistically significant with F=13.842, p <.005), with goodness of fit of the model. Given the results of the regression model, the null hypothesis was rejected. Thus, the influence of project planning process on the performance of TVET Institution's construction in Kenya was statistically significant

Table 3: Beta Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
(Constant)	22.151	1.811		12.230	.000
Planning	.315	.085	.250	3.721	.000

a Dependent Variable: Performance

From results in table 3.for for model, the predictor of Performance of TVET Institution's construction in Kenya was planning process (β = 22.151, $p < 0.05$), was significant predictor. The results resonates with other scholars such as Langat&Nyang'au(2020),Obalemo,(2021) and Mongina&Moronge(2021).

Based on the above results, the predictive model for Performance of TVET Institution's construction in Kenya becomes, Performance=22.151+.315planningprocess.

5. CONCLUSIONS AND RECOMMENDATIONS

From the results, the study concluded that there was significant positive influence of project planning process on the performance of TVET Institution's construction in Kenya. Based on conclusion, the study recommends that, there should be clear and articulated project scope and deliverables, develop a robust project schedule: site analysis, Estimate resources and budget, establish communication and stakeholder engagement plan and procurement strategy during planning.

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