

## **The Efficacy of Performance Contracting on Innovations in Public Technical Universities**

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**Abstract:** Performance contracting is a management tool for measuring performance against freely negotiated targets. It ensures accountability and efficiency in public organizations. Public technical universities are mandated to teach, conduct research and undertake community outreach through innovation. Due to high enrolments and inadequate resources, Public Technical Universities are viewed as offering low quality education devoid of research and innovation, hence incapable of driving vision 2030 and National development agenda. With this in mind, does embracing Performance contracting and conforming to CUE guidelines 2014 stimulate innovation in public technical universities? The purpose of this study, therefore, is to investigate the efficacy of performance contracting on innovations in public technical universities. The study is guided by Goal setting theory developed by Locke and Latham in 1979. The study utilizes the philosophical and methodological positivism paradigm and specifically employed explanatory survey research design. The target population comprised Technical University of Kenya and the Technical University of Mombasa. Responded totaled 20000 and a sample size of 377 was obtained as determined by the Krejcie table for sample size. Primary data was collected by use of a questionnaire whose reliability and validity was affirmed by Cronbach Alpha co-efficient and pretesting respectively. Data collected from the field was analyzed by use of multiple regression and Factor analysis. Data was analysed as per the study objectives and presented in tables. The study established that Performance contact target setting, implementation, monitoring and evaluation had statical influence on innovation. The study therefore recommends that Performance contracting should be strengthened in public technical Universities. Similarly Public technical Universities should strictly conform to the CUE Guidelines and Standards 2014 as they were capable of increasing innovation and improving performance of public technical Universities..

**Key words:** Performance, Contracting, Innovations, Public, Technical, Universities

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### **I. INTRODUCTION**

Performance Contracting (PC) is a branch of management science referred to as management control systems and is a contractual agreement to execute a service according to agreed-upon terms, within an established time period, and with a stipulated use of resources and performance standards (OPM,2012). Performance Contracting is one element of broader public sector reform aimed at improving efficiency and effectiveness, while reducing total costs (Domberger, 1998).A Performance Contract constitutes a range of management instruments used to define responsibilities and expectations between parties to achieve mutually agreed results. It is a useful tool for articulating clearer definitions of objectives and supporting innovative management, monitoring and control methods and at the same time imparting managerial and operational autonomy to public service managers. It is therefore a management tool for ensuring accountability for results by public officials, because it measures the extent to which they achieve targeted results (Greer et al. 1999).

Employers view Performance Contracting as a useful vehicle for articulating clearer definitions of objectives and supporting new management monitoring and control methods, while at the same time leaving day-to-day management to the managers themselves (Mwiti et al, 2013). Many organizations have, in recent times, faced turbulent and rapid changing external condition. These have translated into complex, chaotic, multifaceted, fluid and interlinked stream of initiatives affecting work and organizational design, resource allocation, systems and procedures in a continuous attempt to improve performance (Huczynski & Buchanan, 2004).

As a response to this, organizations have embraced Results Based Management (RBM) approach in order to survive the organizational turbulence occasioned by externalities. RBM calls for a major change in perspective where managers are required to define expected results, set targets, measure performance regularly and objectively, gather and interpret information, make reviews and improve efficiency and effectiveness. The

integration of strategic management and Results Based Management has necessitated the introduction of Performance Contracting as a mechanism to ensure effective implementation of strategies to realize desired performance. Performance based contracting has been identified by both the private and public sectors as an effective way of providing and acquiring quality goods and services within available budgetary resources, (Kobia & Mohammed, 2006)

GOK (2007) summarizes the objectives of Performance contracting as improved service delivery; improved efficiency in resource utilization, institutionalization of performance oriented culture in the public service, measurement and evaluation of performance; linking rewards and sanctions to measurable performance; retention or elimination of reliance of public agencies on exchequers funding; instilling accountability for results at all levels and enhancing performance. Performance Contracting falls under performance management whose major focus is the establishment of a shared understanding about what is to be achieved, how it is to be achieved as well as an approach to managing people in a way that increases the probability of achieving success within an agreed framework of planned goals, standards, individual and team competence requirements (Armstrong & Baron, 1998).

Performance Contract started in France in the 1970's as quest for better performance of public enterprises. In Asia, the Performance Contract has been used in Bangladesh, China, India, Korea, Pakistan and Sri Lanka. In Africa, Performance Contracting have been implemented in Benin, Burundi, Cameroon, Cape Verde, Congo, Cote d'Ivoire, Gabon, Gambia, Ghana, Madagascar, Mali, Mauritania, Morocco, Niger, Senegal, Togo, Tunisia and Zaire. In Latin America, they have been used in Argentina, Brazil, Bolivia, Chile, Colombia, Mexico, Uruguay and Venezuela (Kobia & Mohammed, 2006). The outcomes of performance contract have been varied. Experience from The New Zealand indicate that performance contract has been concerned not only with structures and systems, but also with roles, responsibilities and relationship in pursuit of performance improvement, improving the system as an evolutionary process, and the environment within which public sector management takes place.

This has enabled the performance system show pleasing results and assist managers of organization improve their performance (Smith, 1999). In China, the targets were set, support resources provided and both parties were committed to implementation that yielded economic growth. (Shirvley & Xu, 1988). These studies focus performance on economic measures. In Swaziland, public sector was confirmed as financial and administrative burden to the government. Performance contracting was adopted. However it failed to achieve the stated objectives. This was due the widespread use of consultants from developed countries to develop plans and determine mechanisms for monitoring (Musa, 2001).

The underlying assumption driving the Performance Contracting concept is that once performance can be measured and performance shortfalls identified (including non-performance), actions can be taken to address the shortfall (Jones & Thompson, 2007). Measurement of such performance is possible only when specific target have been set and measuring parameters developed. The current study seeks to establish if performance contract has stimulated performance of public universities, through increased innovations.

Improved performance of Universities that yield an increase in customer satisfaction index, improve service delivery and address societal challenges would stand out and immensely contribute to national development.

In an effort to achieve the objectives and targets of ERS and to manage performance challenges in the public service, the government adopted Performance contracting (PC) in public service as a strategy for improving service delivery to Kenyans. Performance contracting was first introduced in Kenya, in the management of state corporations in 1989 as a way of responding to the needs of the taxpayers. This was against the backdrop of the government's key priorities of implementing and institutionalizing public sector reforms that would lead to an efficient, effective, ethical delivery of services to the citizens (Mwiti et al, 2013). A Parastatal Reform Strategy paper, approved by the cabinet in 1991 was the first official recognition of the concept of performance contracting as part of the policies that were recommended to streamline and improve the performance of state corporations. These policies included liquidation of non-strategic parastatals, contracting out commercial activities to private sector, and permitting private sector competition for existing state monopolies. Further improvements were seen in the creation of an enabling environment for all strategic parastatals including removal of all conflicting objectives.

The enactment of the Universities Act No. 42 of 2012 repealed the individual Universities Acts that gave universities their legal existence. The new act required that all universities are given charters. Public universities, which fall under state corporations, are funded by the exchequer and their core mandate is research, education, training and extension (outreach) that leads to innovation which informs development. This underpins the fact that education and research have been identified as key to poverty reduction and national development. Public universities are therefore expected to fulfill their mandate in an efficient manner.

To achieve this, Performance Contracting has been adopted by public universities. Performance Contracting is seen as a tool for improving public budgeting, promoting a better reporting system and modernizing public management while enhancing efficiency in resource use and effectiveness in service

delivery (Greiling, 2006). Yet again to inform development, confront societal challenges and drive Vision 2030, public universities in Kenya are required to be innovative. Such innovations should transform universities into active pace-setters in matters development and dealing with problems of modern society.

Innovation can be described as the process of translating an idea or invention into good as a service that creates value. For it to be innovation an idea must be replicable and fulfill a certain purpose. In application, innovation entails a thrust of information, imagination and initiative in creating better utility of resources and encompasses all process by which new ideas are created and converted into useful products. Innovation can be seen in the various types thus product, process, market and organizational innovation.

Innovation is identified a major input and determinant of productivity and growth. Generation of new services and goods in addition to improvements in methods of production and other aspects of management practices allow organizations to improve efficiency. Muresan and Gogu (2010) note that the basic challenges the academic environment face in the current knowledge economies is to create synergy between political policies, government and labour market dynamics. A knowledge based economy is a product of dynamic interaction between life-long learning, research and innovation and technological infrastructure. It is thus factual that technology and research are key factors in innovations. This brings public universities into focus since they are required to be citadel of innovations.

## **II. THEORETICAL REVIEW**

This study was be guided by Goal Setting Theory (GST) developed by Latham and Locke in 1979. The theory states that motivation and performance are higher when individuals and organization set specific goals, when goals are difficult but accepted and when there is feedback on performance (Armstrong, 2005). Goals have a pervasive influence on employee behaviour and performance in organizations and management practice (Locke & Latham, 2002). Based on a number of studies, a goal setting is important since individuals who are provided with specific, difficult but attainable goals perform better than those given easy, non specific or no goals at all. At the same time, however, the individuals must have sufficient ability, accept the goals and receive feedback related to performance (Latham, 2003). Such feedback should be in tantem with the set goals.

In Performance Contracting, the targets are freely negotiated based on the set criterion, and the following principles can be identified: the manager ensures consistency of the goals to determined organizational objectives; the manager establishes performance goals in line with organization strategic plan; benchmarks or performance indicators are determined; periodic evaluations are undertaken as previously agreed and information shared between employees and managers for feedback. Marsden (2004) notes that Goal Setting Theory places little attention on rewards as the employees are believed to be motivated by clearly defined goals, participative and appropriate work. This idea fits well into Performance contracting process which envisages sanctions and rewards in relation to performance. Motivation is higher when goal setting is an all-inclusive process, allowing interaction and consensus across the organogram.

Studies that have been undertaken to evaluate the relationship between goal-setting and performance indicate that indeed goal setting energizes behavior, creates ownership and clarity of vision hence leading to improved performance of employees and enterprises. A public University viewed as an academic enterprise, sets goals that are informed by its mandate that is education, research and innovation. Such goals are operationalized through academic and non-academic department, directorates and its employees. The success of the enterprise shall thus be determined by how well the goals were formulated, implemented, monitored, evaluated and feedback provided as envisaged in the performance contracting process. Despite the relevance of the goal-setting theory to the study, Musiega (2014) notes that its limitation as a theory can be identified when the organizational goals are in conflict with managerial goals and very difficult and complex goals end up stimulating risk behaviour. The limitations are also evident if the employee lacks skills and competencies to perform actions essential for the goal, then the goal-setting can fail and lead to poor performance, and attendant frustration.

Goal Setting Theory (GST) informs the present study on the premise that Public Universities as state corporations are bound to set their goals, identify requisite resources, assign task and responsibilities and conduct reviews periodically for feedback. Ultimately, this gives information on how PC has helped Public Universities improve their performance, which is anchored on research and innovations.

Again the PC process that includes negotiation, vetting and evaluation of goal set by public agencies, would enable universities set realistic and tenable goals based on their unique scenario and strategic plans. The strength of the goal setting theory is also based on its focus on measurable outcomes envisaged in the set goals. University rankings and standings, locally, regionally and globally are based on identifiable, measurable outputs, in which case, innovation is given its due place.

### **The Concept of Performance Contracting**

Performance management is defined as a strategic and integrated approach to delivering sustained success of an organization through improving the performance of the people who work in the organization and developing their capabilities (Mohammed, 2009). Good performance of an organization is a product of a high

quality workforce that utilizes their skill, knowledge and power to realize the organization objectives. Kumar (1994) define Performance Contract as a memorandum of understating (MOU). Kumar (ibid) asserts that the MOU is rooted in an evaluation system which not only looks at performance comprehensively but also ensures improvement of the same by making the autonomy and accountability aspect clearer and more transparent. Performance Contracting is a branch of management control systems and part of strategic management. It is considered as a binding agreement between two or more parties for performing, or refrains from performing some stipulated act over a specified period of time (Wafula, 2013).Such acts are expected to yield better performance of the organization.

Performance Contract is a central element of New Public Management (NPM) aiming at liberal management where a manager of a public sector institution is relieved of unnecessary cumbersome rules and regulations which hinders quick decision making (Gianakis, 2002) as Wafula cites of Obong'o, (2009) paper. OECD (1999) describes Performance Contract as a range of management instruments used to define responsibilities and expectations between parties to achieve mutually agreed results. This definition underscores the aspect of mutuality in the Performance Contracting process. This leads to commitment to the agreed goals. The Kenya Government Policy Paper on Performance Contracting (2005) explains that Performance Contracts belong to a branch of management science referred to as management control systems and is a freely negotiated performance agreement between government acting as the owner of the agency and the agency.

The concept is grounded on the aspect of performance which Armstrong (2006) view as achievement of qualified and quantified objectives and targets for which work is directed. The contract involves two parties who are in an agreement; the parties clearly specify their mutual performance obligation, intention and responsibilities within the terms of the contract, which is signed on periodic basis (Mohammed, 2009).Organizational mandate and specified objectives inform the performance obligations.

#### **Performance contract target setting**

USAID (2008) view a performance target as one that specify timed anticipated, desired on promised level of performance output based on deliberately determined indicators. They may project a minimum level of performance. Sometimes, they indicate aspirations for improvement. Oracle (2012) note that performance contract target setting is considered high priority and undertaken with consistence in the entire organization can result in the business to achieve results against its strategy.

Better results are even achieved when there is a organized process which breaks up the strategies and cascades them in measurable elements of the targets for the entire work force to make sense of them.`

Gallup (2009) explains that target setting is as important to employees as it is to the managers. This is because they all contribute albeit differently, to the growth and productivity of the organization, as they determine high performance.

Identifying need of an organization and setting performance targets has the capacity to engineer positivity, clarity of functions, mobilization of appropriate resources and simple straight forward basis for evaluation of performance. High productivity is likely to be realized where employees and process owners identify themselves with performance targets, occurring in familiar setups.

Performance contracting targets are constructed after the budgeting process has been undertaken and government agencies and institutions provided with information on the allocated and available resources` (Trivedi 2007).

Such targets are generated by the institutions and are freely deliberated upon and agreed Akaranga (2008). Yet it's worthwhile noting that the allocation of financial resources to institutions is one thing while timely disbursement is another. The delay and non-disbursement oftenely adversely affect the target setting process.

The fact that this target are freely negotiated makes them more acceptable to the employees who are then motivated to perform since such targets are drawn and informed by the strategic plans, and objectives that are anchored on the core mandate of this institutions. The relevance of this, therefore, is that for public universities, their targets worlds reflect their core mandate of teaching, research and community service. Performance contracting has enabled public universities became innovative and find ways of generating own funds and avoiding total reliance on the central government. (The republic of Kenya, 2010 B)

One problem with performance contract target setting process is inadequate involvement of employees. Whenever this happens, then employees feel alienated and view this target as part of management scheme to witch-hunt and punish employees.

#### **Implementation of Performance Contracting**

Performance contracting constitutes a range of management instrument used to define responsibilities and expectations between parties to achieve mutually agreed results. It is useful tool for a determining clearer definition of objectives and supporting innovative management, monitor and control of methods and at the same time imparting managerial and operational autonomy to public service managers (Magugui, Kogei, Yano,

Chepkemoi, Chebet 2013). Performance Contracting bestows bigger responsibilities to managers, who are then held accountable for results, as they are required to implement, monitor and report as a way of feedback. The Performance Contract was introduced as a management tool for measuring performance against negotiated performance targets (Kobia and Mohammed, 2006). The element of negotiation makes the process acceptable, creates ownership and allows for monitoring.

Performance Contracting tool is emerging as a very efficient and effective tool which brings to the fore various aspects of an organization, some of which are often ignored despite their significance for organization success. Corporate planning and the ordering of annual work plans, adequately supported by budgeting provision and delineation of tasks in addition to levels of responsibility for performance as well as measurement is an effective tool for management of public resources (Obong'o, 2009).

This article brings to the fore the fact that work plans are critical for performance. However, economic constraints have often driven governments into effecting budgetary cut-backs without due warning, thus throwing in disarray most of the projections in the work plans. Simiyu (2012) reports that Performance Contracting started in France in the 1960s. The World Bank found 565 PCs in 32 developing countries in 1994, where they were used for large utilities and other monopolies and another 103,000 in China where they were used for manufacturing industry for state owned enterprises.

Desirable vision fits the times and circumstances and it is from them that missions and strategic objectives are formulated. Vision setting precedes mission determination.

Then, there is the setting of the strategic plans which clearly define where the firm is, where it wants to be and how this is to be achieved (Ngigi, 2014). Such plans also outline the requisite resources, how and when they will be made available. This signifies the importance of budgeting and resource mobilization. Musiega (2014) observes that performance contracting is multi-faceted in its implementation it involves internal processes, of an organizational structures, monitoring and evaluation and provision of feedback.

The author explains that issues that anchor implementation of PC are citizens service delivery charter; public/private partnerships; customer satisfaction; quality of service delivery and ranking of institutions by excellence in performance using a composite score.

The government of Kenya introduced PC in the public service as one of the tools to improve service delivery. Since its inception in 2004, when only a few state corporations were participating, PC is now being implemented in a majority of the Ministries, Departments, and Agencies (MDAs).

The decision to implement and extent coverage to all MDAs was a result of the benefit that were beginning to manifest in participating institutions through improved administrative and financial performance as well as improved service delivery (Mbua and Sarisar, 2014). The expected outcomes of the introduction of the PC include improved service delivery, improved efficiency in resource utilization, institutionalization of a performance oriented culture in the public service, measurement and evaluation of performance, linking rewards and sanctions to measurable performance, retention or elimination of reliance of public agencies on exchequer funding, instilling accountability for results at all levels and enhancing performance. (Gok, 2007).

This statistics indicate continued implementation support and participation in PC by state agencies. Public universities were brought on board to start implementation of PC in the financial year 2008/2009. For effective implementation of Performance Contracting in public service, a Performance Contract Steering Committee (PCSC) was established in August 2003 and gazetted on 8th April 2005 with a mandate to spearhead the process.

In the implementation of performance contract the steering committee is assisted by an Ad-hoc Negotiation and Evaluation Task Forces whose members are drawn from outside the public service to increase the team's objectivity. The ad-hoc task forces are responsible for negotiating and evaluating Performance contract of Ministries/Departments, State corporations and Local authorities on behalf of the Principal secretary, Secretary to the cabinet and Head of public service. The steering committee also developed tools and instruments for evaluating and implementing the performance contract (Obong'o 2009). These tools facilitate uniformity in evaluation process for organizations in the same sector. Evaluation is very critical to PC implementation process as it yields the scores that make ranking in view of performance possible. This evaluation and subsequent ranking is in strict conformance to the negotiated and agreed targets. Hope (2013) notes that the process of evaluating how Kenya's public entities have performed is undertaken in three stages.

First, there is a self-evaluation by each institution, utilizing the evaluation methodology in the Performance Contracting guidelines. The second stage is the primary evaluation where a group of experts undertake an exhaustive assessment of institutional performance in the Performance Contract year. This yields a composite score that indicates the overall performance of an institution. Hope notes further that the score is adjusted for factor beyond the control of the manager during the contract period to determine the performance of the manager.

Such factors include natural disaster or changes occasioned by government policy, as it may be, from time to time. OPM/PCD (2010) indicate that the final stage is the quality control, also called moderation stage where a team of independent experts attempt to ensure that the evaluation have been completed within the

guidelines and that all relevant tools and instruments have been uniformly applied. At this stage, any contentious issues disagreements and unclear issues are addressed and the institution ranked as per their performance and the final evaluation report prepared, and copies sent to relevant parties. These ensure a uniform and co-ordinated process of implementation of performance contracting.

Initially, there were a series of sensitization workshops targeting Principal Secretaries, Chairpersons as well as Chief Executive officers of state corporations and Local authorities. However, there were no specific guidelines on how to implement PC in public Universities, given the unique mandate, organization and structure. The present study seeks to fill this gap by giving insight on how public Universities have implemented performance contracting.

### **III. METHODOLOGY**

The target population comprised 2 public technical universities in Kenya. Technical University of Kenya and Technical University of Mombasa are the focus of the study. Simple random sampling was used for this study. The reason for selecting this sampling technique is that all the elements in the universe had equal chance of being selected.

#### **Statistical Analysis**

To establish the main characteristics of the study variables, descriptive statistics, factor analysis using Principal component method with varimax rotation and Pearson correlations analysis was done and relevant tests conducted. Field data was checked for completeness before analysis to ensure that all sections of the questionnaire is filled. Data collected from the study was analyzed using descriptive and inferential statistics. Specifically, Multiple regression and Factor analysis were used. This perspective was important to the present study that looks at the relationship between performance contracting and innovations against the intervening variables that is CUE Guidelines and Standards 2014.

To establish the statistical significance of the respective hypotheses, analysis of variance (ANOVA) or F-tests as well as simple linear regression analysis and moderated multiple regression were conducted as appropriate at 95 percent confidence level ( $\alpha = 0.05$ ). This technique is appropriate to this study as it sought to establish the efficacy of Performance Contracting in stimulating innovations which is measured by product, process, marketing and organizational innovation.

### **IV. RESULTS**

#### **Relationship between Target Setting and Innovations**

To assess the influence of target setting on innovations in public technical universities, the study had set the following null hypotheses:

$H_{01}$ : There is no statistically significant relationship between target setting and innovations in public technical universities

Simple regression analysis was employed to test the hypotheses. Simple regression analysis is applied to analyze the relationship between a single dependent variable and independent variable (Hair et al., 2014). Simple regression analysis was therefore selected as it is viewed as an appropriate method for this study given the two simple dependent and independent variables. The regression analysis results are shown in Table 1.

The F-statistics produced ( $F = 568.674$ ) was significant at 5 per cent level (Sig.  $F < 0.05$ ), thus confirming the fitness for the model. Therefore, there is a statistically significant relationship between target setting and innovation. The coefficient of determination  $R^2$  was 65.6 per cent. Thus, target setting can significantly account for 65.6 per cent in innovation.

Based on Table 1, it indicated that the extent to which target setting affect innovation is target setting ( $\beta = 0.649$ ,  $p\text{-value} < 0.05$ ), Hence,  $H_{01}$  is rejected since the  $\beta_i \neq 0$  and the  $p\text{-value}$  is less than  $\alpha$ .

#### **Simple Regression Results on Relationship between target setting and innovation**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816 <sup>a</sup>	.666	.665	.40481

a. Predictors: (Constant), IMPLEMENTATION

b. Dependent Variable: INNOVATION

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.433	1	97.433	594.584	.000 <sup>a</sup>
	Residual	48.833	298	.164		
	Total	146.266	299			

a. Predictors: (Constant), IMPLEMENTATION

b. Dependent Variable: INNOVATION

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.103	.073		15.117	.000
	IMPLEMENTATION	.587	.024	.816	24.384	.000

a. Dependent Variable: INNOVATION

Source: Research Data (2016)

**Relationship between Implementation and Innovations**

To assess the influence of implementation on innovations in public technical universities, the study had set the following null hypothesis:

H<sub>02</sub>: There is no significant relationship between implementation and innovations in public technical universities

Simple regression analysis was employed to test the hypotheses. Simple regression analysis is applied to analyze the relationship between a single dependent variable and independent variable (Hair et al., 2014). Simple regression analysis was therefore selected as it is viewed as an appropriate method for this study. The regression analysis results are shown in Table 2.

The F-statistics produced (F = 594.584) was significant at 5 per cent level (Sig. F < 0.05), thus confirming the fitness for the model. Therefore, there is a statistically significant relationship between implementation and innovation. The coefficient of determination R<sup>2</sup> was 66.6 per cent. Thus, implementation can significantly account for 66.6 per cent in innovation.

Based on Table 2, it indicated that the extent to which implementation affect innovation is implementation (β= 0.587, p-value< 0.05), Hence, H<sub>02</sub> is rejected since the β<sub>i</sub> ≠ 0 and the p-value is less than α.

**Simple Regression Results on Relationship between implementation and innovation**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816 <sup>a</sup>	.666	.665	.40481

a. Predictors: (Constant), IMPLEMENTATION

b. Dependent Variable: INNOVATION

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.433	1	97.433	594.584	.000 <sup>a</sup>
	Residual	48.833	298	.164		
	Total	146.266	299			

a. Predictors: (Constant), IMPLEMENTATION

b. Dependent Variable: INNOVATION

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.103	.073		15.117	.000
	IMPLEMENTATION	.587	.024	.816	24.384	.000

a. Dependent Variable: INNOVATION

Source: Research Data (2016)

**Relationship between Monitoring and Innovations**

To assess the influence of monitoring on innovations in public technical universities, the study had set the following null hypothesis:

H<sub>03</sub>: There is no significant relationship between monitoring and innovations in public technical universities

Simple regression analysis was employed to test the hypotheses. Simple regression analysis is applied to analyze the relationship between a single dependent variable and independent variable (Hair et al., 2014). Simple regression analysis was therefore selected as it is viewed as an appropriate method for this study. The regression analysis results are shown in Table 3.

The F-statistics produced (F = 594.389) was significant at 5 per cent level (Sig. F < 0.05), thus confirming the fitness for the model. Therefore, there is a statistically significant relationship between monitoring and innovation. The coefficient of determination R<sup>2</sup> was 56.6 per cent. Thus, monitoring can significantly account for 56.6 per cent in innovation. Based on Table 3, it indicated that the extent to which monitoring affect innovation is monitoring (β= 0.529, p-value< 0.05), Hence, H<sub>03</sub> is rejected since the β<sub>i</sub> ≠ 0 and the p-value is less than α.

**Simple Regression Results on Relationship between monitoring and innovation**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.753 <sup>a</sup>	.566	.565	.46140

a. Predictors: (Constant), MONITORING

b. Dependent Variable: INNOVATION

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.824	1	82.824	389.042	.000 <sup>a</sup>
	Residual	63.442	298	.213		
	Total	146.266	299			

a. Predictors: (Constant), MONITORING

b. Dependent Variable: INNOVATION

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.351	.078		17.397	.000
	MONITORING	.529	.027	.753	19.724	.000

a. Dependent Variable: INNOVATION

Source: Research Data (2016)

**Relationship between Evaluation and Innovations**

To assess the influence of evaluation on innovations in public technical universities, the study had set the following null hypothesis:



Ho<sub>4</sub>: There is no significant relationship between evaluation and innovations in public technical universities

Simple regression analysis was employed to test the hypotheses. Simple regression analysis is applied to analyze the relationship between a single dependent variable and independent variable (Hair et al., 2014). Simple regression analysis was therefore selected as it is viewed as an appropriate method for this study. The regression analysis results are shown in Table 4.

The F-statistics produced (F = 360.766) was significant at 5 per cent level (Sig. F < 0.05), thus confirming the fitness for the model. Therefore, there is a statistically significant relationship between evaluation and innovation. The coefficient of determination R<sup>2</sup> was 54.8 per cent. Thus, evaluation can significantly account for 54.8 per cent in innovation. Based on Table 4, it indicated that the extent to which evaluation affect innovation is evaluation ( $\beta = 0.734$ , p-value < 0.05), Hence, H<sub>04</sub> is rejected since the  $\beta_i \neq 0$  and the p-value is less than  $\alpha$ .

**Simple Regression Results on Relationship between evaluation and innovation**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.740 <sup>a</sup>	.548	.546	.47120

a. Predictors: (Constant), EVALUATE

b. Dependent Variable: INNOVATION

**ANOVA<sup>b</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	80.101	1	80.101	360.766	.000 <sup>a</sup>
	Residual	66.165	298	.222		
	Total	146.266	299			

a. Predictors: (Constant), EVALUATE

b. Dependent Variable: INNOVATION

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.643	.116		5.528	.000
	EVALUATE	.734	.039	.740	18.994	.000

a. Dependent Variable: INNOVATION

Source: Research Data (2016)

**V. CONCLUSION**

**Performance contracting**

**Target setting**

From the finding the study concludes that technical universities sign and implement performance contracting as required by the government. Targets were set, implemented, monitored and evaluated to envisaged, it increase efficiency in service delivery. this conclusion rests well with Obongo (2009) who found out that performance contracting was a systematic process aimed at increasing efficiency and value for money in public organizations.

The study concludes that technical universities set targets that are clear and achievable, that are based on quality objectives as determined by strategic plans. This conclusion is in line with Simiyu (2012) who found out that targets were set based on organizations objectives which are drawn from strategic plans. These targets are also supported by the mission of technical universities which espouse the spirit of innovation.

However it further concluded that technical universities capacity to meet the targets is not absolute. This conclusion is similar to Nganyi (2015) finding that the performance contracting process was not effectively coordinated, due to lack of capacity in performance monitoring and evaluation.

### **Implementation**

Based on the finding it is concluded that technical universities sign performance contracts and implement them on annual basis. All departments are involved in the implementation process and the responsibility for implementation is clear. This conclusion fits in to Mello (2015) who noted that effective management system requires employees to work together as set performance expectations and parameters.

On the other hand, finding supports the conclusion that technical universities do not have adequate resources to carry out implementation and achieve targets in efficient manner. This conclusion is also evident in the finding by Musiega(2014) who found out that employees lacked skills to implement performance contract effectively. Similarly, Shisia (2014) found that service delivery in public universities is affected by in adequate funding.

### **Monitoring**

From the finding it is concluded that proper control strategies are employed to monitor progress of performance contract implementation. Technical universities also hold regular meetings to assess their progress. This conclusion is in conformance to Ministry of devolution (2015) who requires that quarterly reports on progress after an evaluation are submitted. Greiling(2006) also found out that performance contracting enabled better reporting systems.

Yet again, it can be concluded from the findings that all sections and functional heads of departments were not involved in the monitoring; hence feedback on the challenges was not provided to the implementers. Similarly discrepancies were rarely resolved before proceeding to the next stage. It on thus be concluded that the monitoring was not adequately undertaken. This conclusion was in tandem with Kinyanjui (2015) finding that respondents lacked monitoring and evaluation skills.

### **Evaluation**

From the analyzed data, it can be concluded that technical universities have vibrant performance contract secretariat that evaluates departments. Such evaluation reports show the source of discrepancies. However, feedback is not often provided to individuals employees on how they are performing. This finding is in contrast with Robertson et al (1992) who notes that feedback from evaluation enables employees know their performance.

Departments did not carry out self- evaluation probably because the job was done by the performance contracting secretariat. This is contrary to Hope (2013) whose study found out that performance contract evaluation is done at 3 stages namely self-evaluation. Primary evaluation and moderation stage.

Again it was concluded that in technical universities evaluation reports are not necessarily used to set new targets. Targets are set based on the provided matrix and the core mandate of the institution.

## **RECOMMENDATION**

Performance contracting should be utilized as a management tool to increase efficient operation in technical universities. Commission of University education guidelines and standards should be infused in performance contracting matrix to increase conformity and provide for annual and regular evaluation

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