

## **Influence of Management Commitment On Implementation of ELearning Projects in Public Universities in Kenya**

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### **ABSTRACT**

The objective of the study is to evaluate the influence of management commitment on implementation of eLearning projects in public universities in Kenya. The study adopted a descriptive cross-sectional survey. The study population composed 486 members of staff in different managerial levels currently working at 22 public universities in Kenya and involved in the implementation of eLearning projects. The sample size of the study was arrived at using the scientific formula: Stratified proportionate random sampling technique was used to select the sample of 219 respondents. Primary data was collected using pre-determined questionnaires. The study used both primary and secondary data. The researcher first conducted a pilot study in order to test validity of the questionnaire to be used. Quantitative data collected was analyzed by the use of descriptive statistics using Statistical Package for Social Sciences. Content analysis was used to test data that was qualitative in nature or aspect of the data collected from the open-ended questions. This study was investigating the influence management commitment has on implementation of eLearning projects in public universities in Kenya. Inferential statistics through multiple regression analysis was used. A correlation matrix was developed to analyze the relationships between the independent variables as this assisted in developing a prediction multiple models. The Findings are presented through statistical tools such as frequency distribution tables, pie charts, and bar graphs and in prose form for easy understanding. The study recommended that for eLearning to be efficient and effective, a great deal of care and attention needs to go into its implementation. The study suggested a comparative study be carried out on the adoption and utilization of eLearning in different universities particularly in Kenya.

**Key words;** management commitment, implementation, eLearning project.

### **Background of the Study**

ELearning is becoming an increasingly popular emerging new approach to teaching and learning in most institutions of higher learning worldwide. As Li and Hart (2016) and Lin (2016) pointed out, eLearning is becoming more and more popular with learners as they can combine their learning experience together with the advancement of information technology. ICT technologies provide a distinct advantage to eLearning by revolutionizing every aspect of the learning. Consistently, the project management literature has found that top management support positively contribute to eLearning project success (Besner & Hobbs, 2010; McManus, 2004). These studies have shown that top management support is considered to be among project management critical

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success factors (CSFs). This means that the more top management processes are practiced in organizations, the higher the level of project success is. However, with executive limited time and resources, it is also important to identify the most effective support processes for different project scenarios (McManus, 2014).

Top management support and commitment are critical to achieve success in the eLearning project implementation. According to Green (2015) top management includes the CEO and their direct subordinates all those who are responsible for corporate policy. Top management support is needed throughout the implementation of the project (Easteves & Pastor, 2013). Top management support refers to both the nature and amount of support the project manager can expect from management both for himself as leader and for the project. As noted by Schultz and Slevin (2010), management support for projects, or indeed for any implementation, has long been considered of great importance in distinguishing between their ultimate success or failure. Beck (2012) sees project management as not only dependent on top management for authority, direction and support, but as ultimately the conduit for implementing top management's plans, or goals, for the organization

A study by Zwikael (2008) supports the high importance of top management involvement in projects and stressed that different top management support processes should be implemented in any industry and culture. Accordingly, this statement is aligned with a project management belief that there is no 'one size' for managing projects (Dvir, 2006). There is different extent of use of various project management processes across different industries (Pennypacker & Grant, 2003). Various project scenarios (for example, different industries, cultures and level of project complexity) have dissimilar needs. As a result, different management styles may be applicable for each project scenario. With relation to top management support, this means that unique top management support processes may be best used in different project scenarios as exclusive practices may be most effective for different project scenarios.

Implementation of eLearning in universities should be viewed as part of the wider educational reform. For eLearning to be efficient and effective, a great deal of care and attention needs to go into its implementation. According to Cox (2010), if eLearning is to be successfully adopted in a school, teachers and head teachers need to be involved in the decision making processes. Leadership and support from senior management are identified as critical factors for successful implementation (Birch & Burnett, 2009; Browne *et al.*, 2010). Gunawardena (2015) points out that for eLearning to succeed in the developing world, it needs to build on another important pillar: the existence of infrastructure, along with connectivity. Developing countries in Africa still face a lot of challenges while implementing eLearning which requires advanced level of technological infrastructure and heavy investment of resources especially at the initial stages.

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Most of the public universities in Africa rely on government exchequer for funding which has been dwindling in the recent years. According to Zake (2009), poverty is one of the most important barriers, especially due to the fact that ICT is important and therefore relatively more expensive in Africa than in developed countries. Therefore, most of the public universities have opted for blended learning as a starting point since it's a cheaper option in terms of implementation and requirements. Research shows that teachers and learners prefer the blended learning approach, which mixes the traditional face-to-face teaching with online collaboration (Motteram, 2016).

In Kenya, some of the factors affecting eLearning project implementation are project manager's competence; top management support; project manager's coordinating and leadership skill; monitoring and feedback by the participants; decision making; coordination among project participants; owners' competence; social condition, economical condition and climatic condition. Coordination among project participants was as the most significant of all the factors having maximum influence on cost performance of eLearning of projects (Iyer & Jha, 2015). Public Universities that are planning to implement eLearning in their institutions should be prepared to respond to the challenges that are likely to arise in the course of implementation. Kenyan public universities are being compelled by the government within the framework of Kenya Vision 2030 to introduce eLearning and blended learning as an alternative delivery system to increase accessibility to higher education in Kenya (NESC, 2007). Kenya Vision 2030 is the nation's new development blueprint for 2008 to 2030 which aims at making Kenya a newly industrializing, "middle income country providing high quality life for all its citizens by the year 2030". Full implementation of eLearning at university levels is considered as a long term strategy in Kenya Vision 2030. Implementation of eLearning alongside other strategies for education in Kenya Vision 2030 is anticipated to address the strategic areas, namely, access, quality, equity, technology and innovation. The vision for the education sector for 2030 is to have globally competitive quality education, training and research for sustainable development (NESC, 2007).

### **Statement of the Problem**

Implementation of eLearning in universities should be viewed as part of educational reform. For eLearning to be efficient and effective, a great deal of care and attention needs to go into its implementation. According to Cox (2010), if eLearning is to be successfully adopted in a school, teachers and head teachers need to be involved in the decision-making processes. Leadership and support from senior management are identified as critical factors for successful implementation (Birch & Burnett, 2009; Browne *et al.*, 2010). Gunawardena (2005) points out that for eLearning to succeed in the developing world, it needs to build on another important pillar: the existence of infrastructure, along with connectivity. Developing countries like Kenya still face a lot of challenges while implementing eLearning, which requires advanced level of technological infrastructure and heavy investment of resources especially at the initial stages. Most of the

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Kenyan public universities rely on government exchequer for funding which has been dwindling in the recent years.

There are 22 public universities in Kenya, each one of them having several campuses and/or constituent university colleges distributed in different parts of the country (Commission for University Education, 2014). The national ICT policy for Kenya lays the framework for eLearning considered crucial to its development and utilization (Waema, 2005; Kariuki, 2009). Similarly, according to Kenya's Ministry of Education Policy Framework for Education and Training (2012), ICT is identified as a major vehicle for teaching and learning. The policy framework therefore has identified open and distance learning (ODL) and eLearning among the priority areas. One of the strategies is to establish an Open University of Kenya and expand ODL and eLearning in existing universities by leveraging ICT to take advantage of ICT infrastructure within the country.

eLearning initiatives have been introduced in most of the public universities in Kenya though on a limited scale, most of them being at the early stages. Most of the public universities are using eLearning in blended mode due to implementation challenges. Among the universities that have started implementation of eLearning include University of Nairobi, Kenyatta University, Moi University, Jomo Kenyatta University of Agriculture and Technology, Egerton University and The Co-operative University of Kenya. However, according to E-Readiness Survey of Kenyan Universities (2013) Report, only 11% of students in Kenyan universities are taking their courses using eLearning in blended mode (Kashorda & Waema, 2014). Among the key strategies of the Kenya Vision 2030 on education is introducing eLearning and blended learning as a way of improving both access and quality of education in Kenyan Universities (NESC, 2007).

The review of literature related to implementation of eLearning focused on challenges related to implementation of eLearning. For instance, Ssekakubo, Suleman and Marsden (2011) point out that majority of eLearning initiatives implemented in Sub-Saharan countries tend to fail, partially or totally due to various barriers to eLearning in developing countries. The absence of inadequacy of infrastructure is a barrier to access among students in developing countries. Touray, Salminen and Mursu (2013) identified 43 ICT barriers in developing countries that were grouped into eight possible critical success factors, namely socio-cultural, infrastructural, political and leadership, legal and regulatory, economical, educational and skills, security and safety and technical. In Saudi Arabia, according to Al-Ghaith, Sanzogni and Sandhu (2010), the quality of the Internet was an important factor influencing the adoption and usage of e-learning. There are few research studies done to establish the influence that management commitment has on implementation of eLearning projects in public universities in Kenya. As such it is important for public universities in Kenya to know how management commitment influence implementation of eLearning projects in public

universities in Kenya. This study therefore, sought to establish the influence of management commitment on implementation of eLearning projects in public universities in Kenya.

### **Objectives of the Study**

The general objective of this study was to evaluate the influence of management commitment on implementation of eLearning projects in public universities in Kenya.

### **Research Question**

What is the influence of project manager commitment on implementation of eLearning projects in public universities in Kenya?

### **Significance of the Study**

Private sector firms, parastatals and NGOs would find the study findings useful in an effort to popularize eLearning implementation in their organizations. Trainings firms could have a field day as the study exposes opportunities in the eLearning market. Such firms would thus approach institutions with challenges in successful implementation of eLearning courses and offer preparation services to students and also technical training in the use of online courseware

### **Theoretical Framework**

#### **Contract Theory**

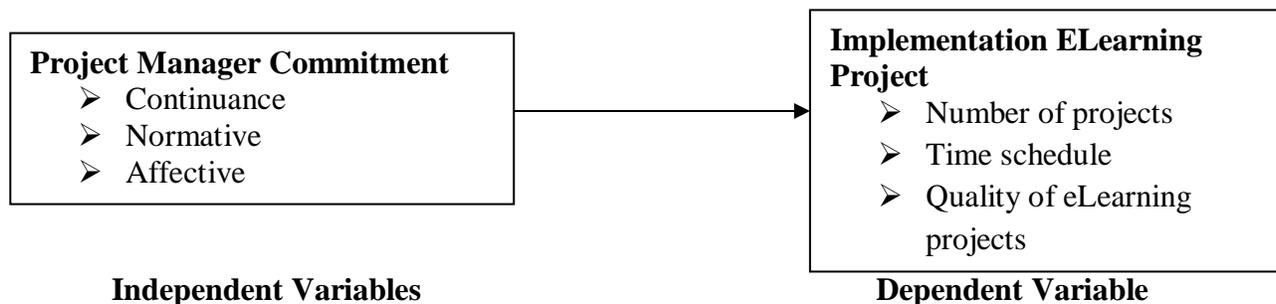
According to Tirole (2006), the theory focuses on the need for communication between an agent and a principal, so that there is a clear understanding of both the needs of the principal and the ability of the agent to meet those needs in a competent manner. Based on this theory, it can be said that the Top management of the public universities are the Principals and the project manager is the agent. The agent implements the organization's projects on behalf of the principal who is required to provide all the necessary structures and infrastructure for project success. The theory stressed that the agent demonstrates stewardship and professionalism in utilization of the project resources (Tirole, 2006).

Contract theory is also interwoven with the concept of moral hazard. Essentially, both the agent and the principal are exhibiting a certain degree of trust. The agent, or prospective employee, trusts that the working conditions, rate of pay, job responsibilities, and additional benefits are as presented by the employer. In turn, the employer or principal is trusting that the credentials presented by the agent are valid and sufficiently complete to merit the creation of a contract of employment. When all economic actors in the process function with a high level of competency, the resulting arrangement is likely to be mutually satisfying and sustainable.

This theory can best be used to advance the influence of universities top management commitment in relation to management strategies. The orientation of top managers in the public universities as illustrated by the vision and mission of the organization and the project objectives depicts the responsibility and accountability between the two parties (top management and project manager). The contract theory aims to establish a mutual state that would allow eLearning project implementation to sail successfully.

### Conceptual Framework

A conceptual framework will be utilized to pictorially depict the concepts being researched and to illustrate the direction of the research content. A conceptual framework illustrates the concepts on which the methods are employed and the direction of the relationships between these concepts (Mintzberg, 2011). As such it illustrates the propositions/hypotheses on which the findings are compared and reported. Thus, the conceptual framework is an important part of the research conceptualization (Silverthorne, 2011).



**Figure 1: Conceptual Framework**

### Management Commitment

Under this variable study assessed three sub constructs; namely; human resource, financial resource and material resource required at every level of project cycle and the amount of top management support required to marshal their availability. There are five cycles in project management: Initiation, Planning, Execution, Monitoring and Control and Closure (PMBOK Guide, 2010). Accordingly knowing the type of resources needed during each of these processes helped channel the correct type of top management to support the resource delivery. While project managers must provide transparent and efficient planning, monitoring and controlling of resources in order to achieve the project goals, top management must have an overview of the company as a whole (Martinsuo & Lehtonen, 2006). The use of an integral information system that efficiently supports all aspects of multi-project oriented organization is thus essential.

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As with other information systems (Neumann, 2011), management commitment is critical to eLearning implementation (Morison, 2003). Macpherson *et al.* (2004) mention top management's consistency and vocal support as a key to success. Masie (2001) notes that "The role of the manager as an overt champion of the learner's development must be extended to eLearning offerings." Management commitment is one of the most important factors reported. The top management commitment was mentioned as important due to the organization wide change required. The direct management commitment importance is due to their ability to influence employees. Direct managers are more familiar with employees. They are able to guide and direct. They can assist employee in finding the right time to learn and by that support acceptance of the new technology and the process.

The functional organization is the classical organization and consists of purchasing, HRM, production, sales, finance department, etc. If a company starts such a project, this structure is unsuitable unless some changes are introduced. Employees from different departments are required to undertake additional project tasks, while the project's management is assigned to a person within the functional organization. All project activities, including management, represent additional tasks. The advantage of this solution is that nothing changes within the existing organizational structure by the introduction of such projects. The main disadvantage is that team members always give priority to their usual or functional duties. We can argue that this solution is appropriate in the case of starting a few projects.

The project manager has total responsibility and accountability for the project's success. The functional departments, on the other hand, have the functional responsibility to maintain technical excellence in the project. A line manager whose prime responsibility is to ensure that a unified technical base is maintained and that all available information can be exchanged for each project heads each functional unit. Line managers must also keep their people aware of the latest technical developments in the industry (Kerzner, 2003). Project managers negotiate with line managers for the accomplishment of deliverables rather than for specific talent. Project managers can request specific talent, but the final decision on staffing belongs to the line manager. Line managers trust their employees enough to empower those employees to make decisions related to their specific functional area without continuously having to run back to their line manager. If a line manager is unable to keep a promise he/she has made regarding a project, then the project manager must do everything possible to help the line manager develop alternative plans.

### **Implementation of ELearning Project**

According to Kloppenborg and Opfer (2012) cost, time, and performance are the basic measures of project success implementation. That is, a project is often considered successfully implemented if it finishes within its budget estimate, finishes within its scheduled time frame, and performs as

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designed (Scott-Young and Samson, 2010). Scholars in project management have developed project success measures and these includes; client's or intended user's satisfaction, employee development and satisfaction (Shenhar *et al.*, 2011); time, cost, quality, performance, safety, and operational benefit (Lim & Mohamed, 2010); profitability metrics (Scott-Young & Samson, 2011). However for the purpose of the study, implementation of eLearning projects will be evaluated in terms of percentage cost vis-a-vis budget, percentage schedule time frame and percentage beneficiary's acceptance.

Proper planning in regards to tasks, project leaders, cost and other implementation elements make up the basis for adequate execution and control. Collect and align all the objectives from the related departments with the project's objectives. Aligning these objectives and expectations is usually a highly strategic process, as each department would likely have its own specific objectives. For example, finance may be hoping to reach very specific objectives in terms of investment, return on investment, savings in training programs, etc. The functional areas or departments may have expectations about time investment and training schedules; reports from users trained on highly specific data or formats who may require a tailored report system; access from several devices or areas with access and bandwidth restrictions; shared equipment; users with special schedules; team separation into areas, roles, etc. Similarly, the human resources department may have objectives concerning program design, promotion or career plans, certifications, etc. The IT department may have objectives concerning the use of department resources, use of equipment, safety requirements, budget, licensing, hardware architecture, bandwidth consumption, etc. (Guitierrez, 2016).

### **Research Methodology**

A research design is the plan for selecting the sources and types of information to be used to answer the research question. The study will adopt a descriptive cross-sectional survey. This research design is thus most appropriate since the objective of the study is to investigate the influence of management commitment on implementation of eLearning projects in public universities in Kenya.

The target population for this study was employee of 30 public universities in Kenya, who are involved in the implementation of eLearning projects. For purpose of this study the target population was stratified through top management level, middle level managers and low level management. The study population for this study was employee of 30 public universities in Kenya. The study population composed of 486 members of staff in different managerial levels currently working at the 30 public universities in Kenya, involved in the implementation of eLearning projects. Sampling frame was the list of 486 respondent working with 30 public universities in Kenya, from where the respondents will be selected. Stratified random sampling technique was

used to select the sample. From each stratum, the study used simple random sampling to select a sample 100, which represent 45.61%.

**Table 1: Sample Size**

Level	Frequency	Proportion	Sample Size
Top Management	50	45.06%	15
Middle Level Management	130	45.06%	30
Low-Level Management	200	45.06%	55
<b>Total</b>	<b>380</b>	<b>45.06%</b>	<b>100</b>

Primary data was collected using questionnaires. Both open and closed ended questions were used to collect primary data. The study utilized data from both primary and secondary sources. The main primary source was the questionnaire administered to the respondents. A total of one hundred questionnaires were self-administered to the respondents using an online survey tool and the drop and pick later method.

Quantitative data collected was analysed by the use of descriptive statistics using Statistical Package for Social Sciences (SPSS) computer software version 2.0 which allows the researcher to follow clear set of quantitative data analysis procedures that lead to increased data validity and reliability and demonstrates the relationship between the research variables. Content analysis was used to test data that is qualitative in nature or aspect of the data collected from the open ended questions. Content analysis is a research technique used to make replicable and valid inferences by interpreting and coding textual material. Inferential statistics through multiple regression analysis was also used. A correlation matrix was developed to analyze the relationships between the independent variables as this would assist in developing a prediction multiple models. Quantitative data was presented through statistical tools such as frequency distribution tables, pie charts, bar graphs and in prose form for easy understanding. The researcher then interpreted the research findings from the evidence presented by the data collected. Conclusions will be based on the findings. Finally guided by the objectives of the study, the researcher made recommendations.

### Research Findings and Discussion

The study targeted 100 respondents working with 30 public universities in Kenya. From Table 4.1, 97 of the respondents filled and returned the questionnaire, forming a response rate of 97%.

**Table 2: Response rate**

Response	Frequency	Percent
Returned	97	97
Unreturned	3	3

<b>Total</b>	100	100
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**Influence of Management Commitment on Implementation of eLearning projects**

**Management Commitment**

Respondents were requested to provide their opinion on the on the management commitment based on a scale of 1 to 5 where: 1 - Strongly Disagree; 2 – Disagree; 3 – Neutral; 4 – Agree; and 5 - Strongly Agree. From the findings as shown in Table 3, the respondents agreed that implementation of this project provides a sense of identification as shown by a mean of 4.721, they enjoy implementation of the eLearning project in this organization as shown by a mean of 4.702, they believe in the implementation of eLearning project in this organization as shown by a mean of 4.694, they are happy to implement the eLearning due to the values attached to it as shown by a mean of 4.664, they are willing to put a lot of effort in the implementation of eLearning project in this organization as shown by a mean of 4.631, they feel positive about working on eLearning project in this organization as shown by a mean of 4.650, they are obliged to implement eLearning project in this organization as shown by a mean of 4.640, and they care about the successful implementation of eLearning projects as shown by a mean of 4.610.

These findings concur with (Kerzner, 2003) who stated that the project manager has total responsibility and accountability for the project’s success. The functional departments, on the other hand, have the functional responsibility to maintain technical excellence in the project. A line manager, whose prime responsibility is to ensure that a unified technical base is maintained, and that all available information can be exchanged for each project, heads each functional unit. Line managers must also keep their people aware of the latest technical developments in the industry.

**Table 3: Management commitment**

	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree	Mean	Std. Dev.
Am happy to implement the eLearning due to the values attached to it	1	0	0	28	68	4.664	1.510
Implementation of this project provides a sense of identification	0	0	0	25	71	4.721	1.590
I enjoy implementation of the eLearning project in this organization	0	0	0	27	69	4.702	1.551

I feel positive about working on eLearning project in this organization	1	1	0	30	66	4.650	1.478
Am willing to put a lot of effort in the implementation of eLearning project in this organization	1	1	1	29	65	4.631	1.461
I belief in the implementation of eLearning project in this organization.	1	0	0	26	70	4.694	1.560
Am obliged to implement eLearning project in this organization	1	1	0	30	66	4.640	1.472
I care about the successful implementation of eLearning projects	0	1	1	33	62	4.610	1.405

The findings reveal, as shown in table 4, that management commitment and implementation of eLearning projects are statistically and significantly related. The association was statistically significant because the p-value (0.000) was less than the level of significance (0.05). In addition, the calculated  $X^2$  (163.33) was greater than the critical  $X^2$ , which is 36.5651. This implies that the commitment by management has a significant effect on the successful implementation of eLearning projects.

**Table 4: Chi-Square Tests between Management Commitment and Implementation of eLearning projects**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	67.456 <sup>a</sup>	13	.000
Likelihood Ratio	46.822	13	.000
Linear-by-Linear Association	31.946	1	.000
<b>N of Valid Cases</b>	<b>27</b>		
$X^2=163.33$			
$df=4$			
$p=0.000$			
Critical $X^2 = 36.5651$			

From the findings, as shown in Table 5, there was a strong positive correlation between management commitment and implementation of eLearning projects in public universities as shown by  $r = 0.891$ , statistically significant  $p = 0.000$ .

**Correlation between Management Commitment and Implementation**

**Table 5: Correlation**

		Implementation	Management Commitment
Implementation	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	97	
Management Commitment	Pearson Correlation	.891**	1
	Sig. (2-tailed)	.000	
	N	97	97

**Regression between Management Commitment and Implementation**

The Model Summary Table 6 presents an R square result of .408 or 40.8% an indication that there was variation of 40.8% on implementation of e learning projects due to changes in management commitment. The remaining 59.2% of the variation in the dependent variable is unexplained by this one predictor model but by other factors not included in the model

**Table 6: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.639 <sup>a</sup>	0.408	0.402	0.04701

a. Predictors: (Constant), Management Commitment

The F calculated was greater than F critical (14.744 > 3.941). This shows that management commitment significantly influences the implementation of eLearning projects in public universities in Kenya.

**Table 7: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.977	1	0.977	14.744	.001 <sup>b</sup>
	Residual	6.295	95	0.066		
	Total	7.272	96			

$Y = 2.798 + 0.642X_1$  ..... *Equation 2*

From the regression equation, it was revealed that holding management commitment to a constant zero, effects of implementation would be 2.798.

Management commitment is statistically significant to implementation of eLearning projects as shown by ( $\beta = 0.642, P = 0.00$ ). This shows that management commitment had significant positive relationship with implementation of eLearning projects in public universities in Kenya. This implies that a unit increase in management commitment will result to increase in implementation of eLearning projects in public universities in Kenya.

**Table 8: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	2.798	.198		8.082	.000
	Management commitment	0.642	0.253	0.597	1.982	0.00

**Summary of Findings**

The study found out that implementation of this project provides a sense of identification, individuals enjoy implementation of the eLearning project in their organization, they believe in the implementation of eLearning project in this organization, they are happy to implement the eLearning due to the values attached to it, they are willing to put a lot of effort in the implementation of eLearning project in this organization, they feel positive about working on eLearning project in this organization, they are obliged to implement eLearning project in this organization, and they care about the successful implementation of eLearning projects.

The project manager has total responsibility and accountability for the project’s success. The functional departments, on the other hand, have the functional responsibility to maintain technical excellence in the project. A line manager whose prime responsibility is to ensure that a unified technical base is maintained and that all available information can be exchanged for each project heads each functional unit. Line managers must also keep their people aware of the latest technical developments in the industry.

**Conclusions**

The study found that management commitment is statistically significant to implementation of eLearning projects in public universities in Kenya. The study further revealed that management commitment had significant positive relationship with implementation of eLearning projects in public universities in Kenya. The study concludes that Management Commitment is positively related to implementation of eLearning projects in public universities in Kenya.

### **Recommendations**

The study found that Kenyan public universities have faced several challenges during recommends implementation of eLearning. The study recommends recommended public universities to address the challenges of implementation of eLearning include: Expansion of ICT and eLearning infrastructure, prioritization of ICT and eLearning in budgetary allocation, Internet service providers to Kenyan universities, Formulation of appropriate and operational eLearning policies and Comprehensive training of lecturers on eLearning skills.

### **Suggestion for further research**

The objective of this study was to investigate the influence of top management support on implementation of eLearning projects in public universities in Kenya. Further a comparative research can be carried out on the adoption and utilisation of eLearning in different universities particularly in Kenya both private and public.

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