

INFLUENCE OF PROJECT COMMUNICATION MANAGEMENT ON SUCCESS OF DIGITAL LITERACY PROGRAMME IN WESTERN KENYA

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ABSTRACT

Cases of project failure and poor management practices continue to be reported despite many studies having been done highlighting areas that have been weighed and found wanting. The study focused on assessing whether project communication management influences success of Digital Literacy Programme in Western Kenya. The study adopted a descriptive survey, correlational and cross-sectional survey design. The study population comprised of 31,460 members of Board of Management under Ministry of Education in Western Kenya counties of Kakamega, Bungoma, Busia and Vihiga. Stratified random sampling design was used to select 380 respondents from the four counties. Primary data was collected using self-administered questionnaires. Data analysis was done using Statistical Package of Social Science (SPSS) version 20. The composite mean for communication management of the public primary schools' board of management in Western Kenya was 3.7480 and standard deviation of 0.84520. This is an indication that the board of management agreed that there was communication management in public primary schools. Communication management and project success of Digital Literacy Programme had a correlation of $r = 0.345$ with a $p\text{-value} = 0.000 < 0.05$ indicating that there was a statistically significant moderate positive relationship between the variables. The R-squared value for the study was 0.119 which indicates that 11.9% of the variability in the success of digital literacy program could be accounted for by communication management. The ANOVA results was: $F(1, 347) = 46.937$, $P = 0.000 < 0.05$, indicating that Project Communication Management influenced the Success of Digital Literacy Programme in Western Kenya. The study concluded that communication management practice is important for the success of Digital Literacy Programme in public primary schools; the study therefore recommends the continuous application of communication management practices by board of management in public primary schools to enhance the success of projects.

Key Words: *Project Communication Management, Success of Digital Literacy Programme*

INTRODUCTION

There is substantial research supporting the value of institutionalizing project management in organizations. However, its effective implementation in many organizations especially in the public remains elusive. Ajmal, Malik and Saber (2017) concur with the above assertions noting that identifying practices that contribute to successful project management is still a challenge with term “project success” also subject to different opinions. In this regard, Fernandes, Ward and Arauj (2014) note that although there is sufficient literature on the merits of effective project management and how to improve project management practice, organizations need guidance on the key project management initiatives they should put more efforts on.

According Besner and Hobbs (2013) project management is practiced in many different contexts, each with its management problems. Project management practices is crucial today despite the different contexts of application, as it leads to better development of projects, management of resources within time, cost, and quality constraints. Further there is need for organizations to confirm the strategic alignments of their projects with the organization goals before the application of best practices (Ferreira, Tereso, Riberio, Fernandes & Lourerio, 2013; Fraz, Asim, Saad, Mohsin, Syed & Safia, 2016; Fitsilis & Chalatsis, 2014).

Some of the practices considered important following a review of literature reveals the aspects of project management knowledge areas to be adopted; project planning, human resource management, cost management, scope management, communication management, stakeholder management, procurement management, change management, risk management and integration management (Ferreira *et al.*, 2013; Fraz, Asim, & Safia, 2016). Fitsilis and Chalatsis (2014) posit that it is important to examine the question of standardizing of project management processes and practices as a way of improving project management capability. Ofori (2013) emphasizes the need to pay attention to details of the project lifecycle, while also involving key stakeholders and proper documentation to ensure success and quality of projects.

STATEMENT OF THE PROBLEM

Digital Literacy Programme (DLP) is one of the key flagships programmes highlighted by the government meant to prepare young people for todays and future realities (Information and Communication Technology Authority, 2019). But with limited access to ICT tools, poor internet access and limited access to power or rampant power outages in public schools (10% coverage), lack of attention to integration of ICT in teacher preparation programmes limiting its use, insufficient capacity building among teachers and inadequate stakeholders participation coupled with disagreements, the country’s digital education appears to be facing a major challenge. Whereas project success is modeled on critical success factors such as cost, time, scope and quality, this alone may not be a guarantee to projects success, a situation that would better if adoption of best practice is institutionalized and the rudiments of project management clearly understood within institutions (Bodicha, 2015). Despite numerous studies in the project management discipline, Project Communication management seems to be less understood or institutions fail to implement lessons learned. As such, this study argues that adoption of best communication management practices has been less effective hence little impact on success of projects, where pertinent questions continue to be asked concerning management of project communication.

OBJECTIVE OF THE STUDY

To assess the influence of Project Communication Management on success of Digital Literacy Programme in Western Kenya.

RESEARCH HYPOTHESIS

H₀₁: Project Communication Management has no significant influence on success of Digital Literacy Programme in Western Kenya.

LITERATURE REVIEW

Effective communication in project management is dependent on ability of various stakeholders involved in the project being able to understand language and communication context. This may entail employing different communication techniques, subject intended, purpose of communication and the parties targeted in the communication (Rodriguez, 2017). According to Rodriguez, whose views are accommodated in this study, accommodation communication theory plays a role in the intergroup and interpersonal cues of communication and how dominance and power may influence the communication pattern among different project stakeholders. Project team members are expected to adapt to their communication by adopting communication methods that facilitate effective communication to message recipients and feedback too. Communication methods between say project managers of different projects, customers, stakeholders and sponsors should suit the recipient. Communication is the heart of implemented projects, where project managers spend 90% of their time communicating with project participants and it's critical that barriers occurring during this significant process of transferring project information are carefully planned and managed (Taleb, Ismail, Wahab, Mardiah, Rani & Amat, 2017).

The project communication management processes identified from reviewed literature under consideration are communication planning, managing communication and controlling communication (PMI, 2013; Perumal & Bakar, 2011; Culo & Skendrovic, 2010).

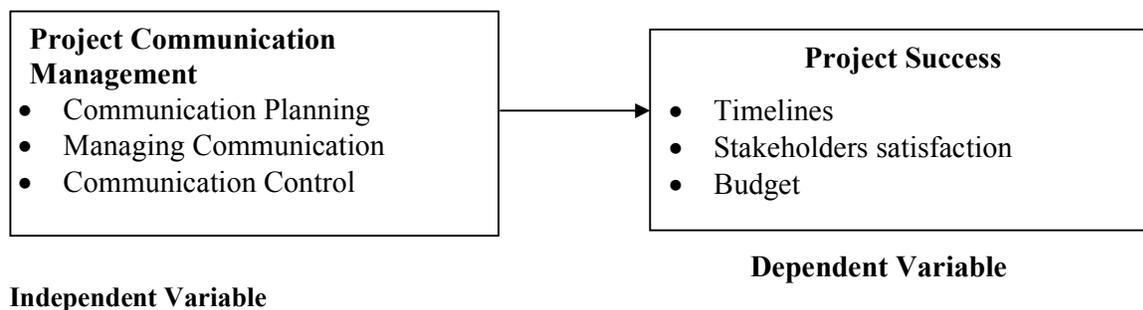


Figure 1.1: Conceptual Framework

Project Communication Management

According to PMI (2013), Project communication management includes the process required to ensure timely and appropriate generation, collection, dissemination, storage and ultimate disposition of project information. The project communication management processes provide the critical link among people and information that are necessary for successful communication. Everyone involved in the project should understand how communication affect the project (PMI, 2013) and project manager responsible for managing communication with the project team and their stakeholders. This research adds value to researches made on project communication management by focusing on the process.

According to the PMBOK guide (2014) Communication management plan and organizational process assets are two major inputs for management of stakeholders. Further the PMBOK guide summarizes the project communication management processes into managing communications plan (identifying stakeholders and developing an appropriate plan for communication needs for them), managing communications (timely and appropriate collection, creation, distribution, storage, and retrieval of project information) and monitoring communications (meeting project information and stakeholders' needs).

Project Success

The term projects success continues to generate a lot of debate with no consensus regarding the criteria to evaluate success among project management practitioners and academicians (Gomes & Romão, 2016; Hussein, Ahmad & Zidane, 2015; Collins & Baccharini, 2004). According to Hussein *et al.* (2015) over the last two decades, there has been a lot of research on the concept of project success criteria. The benchmark for measuring project success varies among different stakeholders and perhaps it's the reason as to why stakeholders' differences remain a challenge in project management (Hammond, 2018). The authors note that the current research within this field could be grouped into the following three areas: an assessment of project success at or after project completion, the importance of defining project success criteria up-front in the project for managing the project and the potential threats and challenges influencing the initial definition of project success criteria.

According to Davis (2016), time and cost were considered as resources and quality as customer satisfaction in contrast to using them as separate entities. Therefore, the four universal dimensions of success from an empirical study were; project efficiency, impact on customers, business and direct success and strategic potential (preparing for the future). Customer satisfaction was the most important criterion for measuring project success. To this end, project success definition becomes broader with the additional dimensions like client satisfaction, realization of customer objectives, end-user's satisfaction, and the satisfaction of other groups of stakeholders (Gomes & Romão, 2016).

MATERIALS AND RESEARCH METHODS

The study adopted a combination of descriptive survey, cross-sectional survey and correlational design. The target population for this study was 31,460 Board members of public primary schools in four counties of Western Kenya namely Kakamega, Bungoma, Busia and Vihiga. The sampling frame was obtained from the Board of Management which is tasked with running of schools on the behalf of the Ministry of Education. Using the table developed by Krejcie and Morgan the sample size for a population size of 31,460 is 380. The research instruments for data collection in this study were by use of a self-administered structured questionnaire. The ungrouped data from the field was taken through several processes in preparation for analysis. These processes were identifying and managing impossible values and handling missing data. Descriptive analysis involved determining the means, standard deviation and averages of the responses. To interpret the 5-point Likert scales, factor analysis based on principal components analysis with varimax rotation for specific items of both the dependent variables and independent variables was conducted. Multiple regression analysis was employed to test the study hypotheses by testing the statistical significance of the independent variables (Communication management) on the dependent variable (Project Success). Pearson Correlation analysis was used to determine the strength and direction of the relationship between independent variable and the dependent variable. Multiple Regression analysis was used to examine how changes in the independent variables influenced changes in the dependent variable. To test individual hypothesis, the study used the following regression model;

H₀₁: Communication Management has no significant influence on success of Digital Literacy Programme in Western Kenya.

Project Success = $f(\text{Communication management} + \text{random error})$,

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

RESEARCH RESULTS

Descriptive Statistics

Majority of the respondents agreed that the project schedule achieved original timeline as set out in the project plan as indicated by 51%. Similarly, 53% of the respondents agreed that the project received a clean bill from the auditors and other stakeholders on implementation. Also, 43% and 85% respectively agreed that the project used efficiently the resources as per the budget plan and that the project satisfied the stakeholders 'needs as intended. In terms of achievements and level of satisfaction, majority of the respondents, 44% agreed that the level of achievements and the quality attained in the projects were of high standards. Apparently, the average level of project success according to the sampled Board of Management of Western Kenya was at 84.7% mean response (mean=4.2326, std. dev. =0.52553) rated high. This implies that the level of project success of majority of the public primary schools in Western Kenya seems not to be insignificantly small though not all of them seem to perform well. Also most of the respondents seems to have agreed with the following sentiments; that the project manager effectively and efficiently communicates with stakeholders in a timely manner, that selected people for the project clearly understand the

project objectives, benefits, and risks, that the project manager uses a variety of communication methods to share information among stakeholders such as emails, notes, letters, face to face, that a failure in communication can have a negative impact on the project and, agreed that there are official standardized methods to guide communication among the project team members as indicated by 72%, 72%, 52%, 56% and 60% of the respondents respectively. Also, 67% of the respondents strongly agreed that all project team members' sign off minutes of meetings held noting all deliberations discussed while 42% agreed that project team members have a feedback mechanism for all communication done. Averagely, the level of Communication Management of the public primary schools' board of management in Western Kenya was at 75.03% mean response (mean=3.7480, std. dev. =0.84520). This is an indication that the way in which the dissemination of any sensitive information across the Board of Management and the schools is generally done, was satisfying but not enough hence a possible factor in the success of Digital Literacy Project in Western Kenya.

Correlation Analysis

Correlation analysis was used to determine the strength and direction of the relationship between the Project Communication Management and success of Digital Literacy Programme and implying the relationship was positive, and significant (p-value=0.001) implying that project management practices are positively and significantly related with project success. Project Communication Management and Project success ($r= 0.345$, p-value = $0.000 < 0.05$) indicating that there was a statistically significant moderate positive correlation between Communication Management and the project success.

Table 1.1: Correlation Summary Matrix

		Project Success	Project Communication Management
Project Success	Pearson Correlation	1	
	P-value		
	N	350	
Communication Management	Pearson Correlation	.345**	1
	P-value	.000	
	N	349	349

** . Correlation is significant at the 0.01 level (2-tailed).

Basing on results in table 1.1, Project Communications Management was found to be significantly correlated with Project Success given that communication with the project team and clients was considered an important factor for project success as well as being one of the people competencies that are being done well by the successful project managers

Inferential Statistics

The study sought a Simple Linear Regression between Communication Management and Project (Digital Literacy Programme) success in Western Kenya by assessing the influence of Communication Management on success of Digital Literacy Programme in Western Kenya.

The findings were as shown below in Table 1.1 where the ANOVA test results were $F(1, 347) = 46.937$, $P = 0.000 < 0.05$; an indication that the Simple Linear Regression model was a good fit to our dataset. The model (Project Communication Management) was able to explain 11.7% of the variation in the Project Success of Digital Literacy Programme in Western Kenya as indicated by the Adjusted R Square = 0.117 as shown in the model summary of Table 1.2.

Table 1.2: Linear Regression Analysis between Project Communication Management and Success of Digital Literacy Programme in Western Kenya

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.345 ^a	.119	.117	0.52117		
a. Predictors: (Constant), Communication Management						
b. Dependent Variable: Project Success						
ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1 Regression	12.749	1	12.749	46.937	.000 ^b	
Residual	94.251	347	0.272			
Total	107.000	348				
a. Dependent Variable: Project Success						
b. Predictors: (Constant), Project Communication Management						
Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	β	Std. Error	Beta			
1 (Constant)	3.248	0.127			25.523	.000
Communication Management	0.227	0.033	0.345		6.851	.000
a. Dependent Variable: Project Success						

Basing on the results indicated in Table 1.2 below, the regression Coefficient results showed that $\beta = 0.227$, $t = 6.851$, $p = 0.000 < 0.05$; therefore, Project Communication Management had a statistically significant influence on the Success of Digital Literacy Programme in Western Kenya. Effective communication planning, robust communication control and proper management of communication is essential for success of Digital Literacy Programme in Western Kenya. It is important to project personnel conversant with project objectives, benefits and risks.

This finding is in commensuration with previous researches (Alotaibi, 2019; Fraz *et al.*, 2016; Mavuso & Agumba, 2016; Aiyewalehinmi, 2013; Kleim, 2013; Gouder, 2010 & Meid, 2015). Communication Management had a positive standardized beta coefficient = 0.348 as shown in the coefficients results of Table 1.2; this indicates that the Success of Digital Literacy Programme is predicated to improve by 0.348 when the Project Communication Management variable goes up by one. To predict the Success of Digital Literacy Programme in Western Kenya when given the level of Project Communication Management, the study suggests the use of the following model;

$$\text{Project Success} = 3.248 + 0.227 \text{ Project Communication Management}$$

DISCUSSION OF FINDINGS

The study established that project communication management plays a significant role towards achievement of project success. Averagely, the level of communication management of the public primary schools' boards of management in Western Kenya. This implies that most of the sampled public primary schools' boards of management were effective in terms of planning, managing and controlling the project communications. The study revealed that communication management had a strong positive correlation with project success. The regression analysis results indicated that communication management had a significant positive causal and effect relationship with success of Digital Literacy Programme in Western Kenya. An improvement in communication management is likely to result to improvement of Digital Literacy Programme in Western Kenya. The study confirmed that the mains constructs of communication management attributed to changes observed in success of Digital Literacy Programme in Western Kenya were effective communication planning, managing communications and communication control.

CONCLUSIONS

The relationship was confirmed through correlation and regression analysis which revealed that there was a positive significant linear relationship between communication management and success of Digital Literacy Programme. . The study concluded that communication management practice is important for the success of Digital Literacy Programme in public primary schools.

RECOMMENDATIONS

The study recommends the continuous application of communication management practices by board of management in public primary schools to enhance the success of projects. The continuous use of project communication management practices ensures effective communication processes are followed thereby ensuring all stakeholders are able to easily track project progress and make decisions easily. Such processes include having a standardized communication plan (aimed at identifying stakeholders and developing an appropriate plan for communication needs for them), managing communications (timely and appropriate collection, creation, distribution, storage, and retrieval of project information) and monitoring communications (meeting project information and

stakeholders' needs while taking feedback too). Communication in project execution is the key to keeping team members, managers, and stakeholders informed and on track to pursue project objectives, as well as to identify issues or risks, and other challenges or misunderstandings that might be threatening project success.

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