THE EFFECTS OF USERS PARTICIPATION ON THE INTERNAL CONTROL SYSTEMS ON PERFORMANCE OF PROJECTS IN LOCAL GOVERNMENT AUTHORITIES IN TANZANIA
Amani Mbogella

Abstract: There are differing viewpoints upon the participation of users of internal control system towards the development of internal control systems of the projects. One argument suggest that users of internal control systems should not be involved upon development of internal control systems since are implementers of the system. A counter argument is that if users of the internal controls are involved into development of internal control systems may easily violate the internal controls for their own benefits. The objective of the study mainly is to determine the relationship of internal control systems and project performance by employing the participation of users of the internal control systems.

This study adopted a cross sectional research design, where analysis constituted data of variables which were collected at one given point of time across a sampled population. The population consisted of 1,002 employees of the selected Councils (Ilala, Dodoma, Iringa, Singida and Chamwino Councils) who are responsible for projects implementation. Sample of 278 staff has been selected from the population of 1,002 based on statistical formula. Primary and secondary data were collected where by structured questionnaires, focused group discussion and interview methods were employed under the study.

The overall results, indicate that on average score (2.6710) of respondents disagreed that users of internal control systems (ICSs) are participated on the development of internal control systems. Participation of users statistically significance (p-value<0.01) and had positive influence on performance of project. This implies that a unit change in Participation users will increase project performance by the rate of 0.221.

The study also indicates that, users of internal control systems should fully be involved into development of the systems so as the systems to be effective. Once the system is effective the study shows that there is positive relationship between the effectiveness of internal control systems and the performance of the projects. In additional the result shows that users of the internal control systems are inadequately involved upon development of internal control systems, as a result the internal controls are weak and finally led to failure of the projects in local government authorities in Tanzania context.
1. Introduction

Engaging users participation on the development of project internal control system has a prominent importance towards improvement of performance of the projects, as effective ICSs has a positive associations with the performance of the projects.

Beyond the potential benefits of involving users in participation on the development of ICSs user’s participation also has the potential of reducing the cost of decision making processes. For instance more resources in terms of time and money may be required in addressing the challenges found during implementation of ICSs but if users of the system were proactive used during development of the project systems the cost may be reduced at large extent

In e-participation model, Kassen (2017) concluded that, the decision making, requires an active engagement and involvement of the citizens in the long-term scenario for its success. This statement was also supported by Zuiderwijk et al. (2015) when said that ‘‘Today most governments have adopted one or more participation technologies to interact with citizens for instance, open data technologies’. Hence the users of ICSs should be highly motivated to participate during the development of project systems

2. Related Literature Review

The literature suggests that citizen empowerment is one of the key ingredients for successful citizen participation overtime in consulting and decision –making processes (Kang, 2014; Macintosh, 2004; Omar, Weerakkody, & Sivarajah, 2017). However their studies do not show the specific areas upon which the citizen empowerment is required as empowering users to participate on the development of project systems implies allowing them to influence the decisions made by the project management

Schaupp et al. (2010) found evidence that once trust is lost, adoption of e-government and e-participation becomes very challenging. However the study did not show the challenges that may occur when there is weak or in adequate participation of participants in e-government

Cruz-Jesus et al. (2012) in his study said that lack of computer literacy or limited access to infrastructure and internet connection and accessibility may cause barriers to adoption of e-participation. This conclusion was also supported by (Janssen, Charalabidis, & Zuiderwijk, 2012; Martins, Gonçalves, & Branco, 2017; Oni, Oni, Mbarika, & Ayo, 2017)

In Poland Kollmann and Kayser (2010) propounded that the purpose governments all over the World have implemented citizenship sourcing initiatives to integrate users of the systems into decision making processes. A more participative decision-making process is associated with open-minded government and is assumed to benefit public service quality and interactive value creation. Furthermore Naranjo and Oliveira (2018) found that LGAs should design strategies for the promotion and diffusion of e-participation amongst the citizen during decision making process. In addition Vragov and Kumar (2013) found that the potential benefits of involving citizens in consultation and decision making reduces cost of democratic and decision making processes. Hence users of control systems if well involved during development of internal control systems may add value towards service quality in LGAs.
In Thailand, Kersting (2016) suggested that identifying and prioritizing the stakeholders who are the main users of internal control systems can improve accountability in the public sector. Macintosh (2004) and Omar (2017) concluded that empowering users on participation implies allowing to influence the decisions made by government. In additional Sanford and Rose (2007) found that citizen participation in digital governance lead to transparency, efficiency and quality of public service. Hence users of the systems in LGAs play a big role for effective internal controls implementation.

In Portugal, Allegretti and Antunes (2014) noted that the users of the website should be participated in providing insights and their experience of e-government service. Also Amir (2016) found that participation of users in the process of developing technology is beneficial for the reliability of developed technology. However Kim & Gupta (2014) noted that there is a lack of consensus regarding the involvement of users during system development. Therefore users of internal control systems cannot be seen as a separate challenge in LGAs but rather as an integrated part of the process of organizing, managing, and performing internal control systems.

In Kenya, Hammersley, Myer, and Shakespeare (2008) showed that the staff should be involved in the development of internal control systems to ensure the determinants do not negatively influence the system and ensure that controls are in place because once the staff know about the system then they can embrace the controls to ensure assets are safeguarded, there is division and segregation of duties, there is order in work, detection and prevention of errors is done, there is accuracy and completeness of work and the management policies are adhered. Moreover Tunji (2013) found that engaging citizens in consultation and decision making has a prominent importance to promote a more efficient and inclusive society. However Kersting, 2016 and Omar et al. (2017) concluded that the implementation of e-participation is still very challenging and vulnerable to failure due to the risk of low adoption rates of the part of citizen. Hence involvement of citizen’s in decision making processes adds value to the entity likewise on the involvement of users of the internal control systems during developing it in LGAs.

In Tanzania, Hongming and Yanan (2012) showed that the major challenge of gas implementation policy was poor community participation during development of natural gas policy in Tanzania. Lambert, Leuz, Verrecchia (2007). also found that the most challenge for local suppliers facing in oil and gas industry in Tanzania is the low participation of local suppliers in legal framework which is reflected through the laws, regulations and license agreements to ensure that, local suppliers receives the necessary attention to enforce national content ambitions on oil and gas industry. In additional, URT (2014) concluded that, it is necessary to critically investigate the key users of systems and related impacts for developing a sustainable management system.

Therefore, inadequate participation of user’s in the development of internal control systems pose challenges which finally affect the performance of the projects in LGAs. This study investigate the effects of participation of users of the internal control systems on performance of projects in local government authorities in Tanzania.

Statement of the Problem
The participation of users of internal control system towards the development of control systems in project implementation is inevitable so as to maximize the performance of the projects particularly in the Local government authorities.

In recent years, the government of Tanzania has taken various initiatives to ensure projects are performing at greater extent. Some of initiatives taken by the government include, Adoption of integrated systems of project payments; Appointment of project coordinators for each implemented project; Establishment of procurement Act, 2011; Establishment of Procurement Regulations of 2013 and its amendments of 2016. 

However, regardless of efforts taken by the government still there is numerous challenges that face the performance of the projects. Some of these challenges may be limited project qualified human resources; Unutilized project funds; Inadequate supervision of the projects and inadequate working facilities for the projects. Furthermore, non-participation of users of the project systems may be a critical factor to be considered. These challenges if not appropriate addressed may impose detrimental effect on the performance of the projects. Therefore this article examine the effects of participation of users of the internal control systems on performance of projects in local government authorities in Tanzania.

Research Objectives
i. To examine the participation of users of ICSs participate in planning stage of Internal Control systems of the projects
ii. To assess the participation of users of ICSs in designing stage of Internal Control Systems of the projects
iii. To evaluate the participation of users of ICSs in testing stage of Internal Control Systems of the projects

3. Research Methodology
This part provides the research design, population, sampling procedures, validity and reliability of the study instruments and the procedures for data analysis

Research Design
This study adopted a cross sectional research design, where analysis constituted data of variables which were collected at one given point of time across a sampled population. Survey research design was used for this study, here a researcher administered a survey to a sampled population to describe the attitudes, opinions, behavior or characteristics of the population.

Study Population
The population consist all employees of the selected LGAs who are responsible for projects implementation. According to the council’s report (2019) staffs who are responsible for project implementation are about 1,002

Sample Size
The sample has been derived from a sample frame of 1002 staffs from the selected LGAs. The proportional sampling has been used due to the fact that the target population is greater than 1,000 items/ respondents. Thus, upon the five LGAs selected, a sample of 278 staff has been selected from the population of 1,002 based on simple random sample size determination formula below:

\[
 n = \frac{2z^2_{\alpha/2} p(1-p)}{e^2} \approx \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = \frac{277.69}{1002 \times 0.05^2} = 277.69 \approx 278
\]

Thus, the level of confidence which placed 95% which provide us Z Value of 1.96 per the normal table, Where Z is the critical value that is 1.96 and e is the margin of error 5% which is 0.05, p is the probability proportional which is 0.5, N is the population and n is the sample size. Proportional sampling is used when the population is large.

Data Collection Methods and Tools
Primary and secondary data were employed in this study. Semi structured interview, focused group discussions and surveyed questionnaire methods were used for collection of primary data. Secondary data also were used in this study, written or printed materials was obtained particularly from the financial statements of projects from selected LGAs (Dodoma CC, Ilala MC, Iringa MC, Singida DC and Chamwino DC). The researcher mainly used financial statements of projects for the consecutive five years (2013-2018) in seeking the extent upon which, projects fund is utilized in the normal course of business.

Data Analysis (Qualitative and Quantitative)
For quantitative data, likert scale, multiple linear regression model used under the study. Likert scale from questionnaires were used whereby data was analyzed using SPSS V. 26 and STATA software’s. Moreover, in case of likert scale of 1-5 stages was used. The scale was divided into 1, Strong Dissatisfied, 2 Dissatisfied 3, Neutral, 4 Satisfied and 5 Strong Satisfied.

Estimation of Model
Multiple Linear Regression Model
Multiple linear regression model was employed under the study. The aim of the model is to obtain a model which best predicts the chance of an outcome variable (let say y) as a function of explanatory variables (let say x’s).

Effect of participation of users of the internal control system on performance of projects in LGAs.
Before employing the multiple regression and partial correlation analysis, the Participation of user’s index was obtained by adding each item in the Participation of users to obtain the total index which is continuous variable since the variable always is considered as continuous variable if it has at least five distinct categories. Then after obtained these variables the partial correlation, multiple linear regression model was employed:

\[
 Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon
\]
Where by \( Y \) = project performance score or index \( X_1 \) = Nature of local government authorities this is categorical variable 1 if urban, \( X_2 \) = Age of local government authorities this is dummy variable 1 if age is above 10 years and \( X_3 \) = Participation of users score or index

Reliability
The issue of reliability was ensured by the researcher through pre-testing of tools, parallel form reliability and using the internal reliability methods such as cronbach’s alpha. The researcher also used semi-structured interview to different categories of the project staff.

Validity
The validity of this study was ensured by the usage of different methods as triangulation. Researcher has also carefully prepared interview guides based on the research questions. Thereafter, it was presented to the experts for validation and improvement before embarking on data collection.

4. Data Analysis, Results and Discussion

Users of the ICS are involved in planning stage of the systems for projects development

The planning stage was sought to investigate if users of ICS are involved in planning of the systems for project development. The aim was to find out the extent upon which the implementers of the project were participated on the planning of the systems of the projects. The questions required the respondents to select the following: Strong disagree, disagree, neutral, agree and strong agree.

The overall of the findings on the involvement of users of the system for internal control systems of projects in LGAs indicated that 22.1% of the respondents strongly disagreed and 39.9% disagreed that they are involved on planning stage of project system development, also they said that they were not adequately communicated on this matter from neither the responsible officers nor LGAs management. Where by 11.2% agreed and 9.4% strongly agreed meanwhile 17.4% were neutral.

Users of the ICS are involved in designing the systems of the projects to be implemented

The study were sought to investigate if users of ICS are involved in designing the systems of the projects to be implemented. The aim was to find out the extent upon which the users of the project were participated on the designing of the systems of the internal controls of the projects. The questions required the respondents also to select the following: Strong disagree, disagree, neutral, agree and strong agree.

The findings on involvement of users of ICSs in designing the systems showed that 10.5% of the respondent strongly disagreed and disagreed 36.1% that they were not involved in designing the systems of the projects; In addition they said that they were not adequately informed on the matter from project management. While 10.1% strongly agreed and 13.7% agreed meanwhile 29.6% were neutral.

Users of the ICS are involved in testing the accuracy of the project systems
The study were sought to investigate if users of ICS are involved in testing the accuracy of the systems of the project. The aim was to find out the extent upon which the users of internal control system were participated in testing the accuracy of the systems of the project. The questions required the respondents to select the following: Strong disagree, disagree, neutral, agree and strong agree.

The overall of the findings on testing the accuracy of the established internal control systems of projects in LGAs indicate that 10.4% of the respondent strong disagreed and 33.1% disagreed that they were not involved on testing on system of the project; also they said that they were not aware of testing action of the ICSs of the implemented projects. While 12.9% strong agreed and 20.1% agreed while 23.4% were neutral.

**Partial correlation between Participation users and project performance**

Partial correlation was employed to explore the relationship between Participation users (as measured by the Participation users score) and project performance (measured by the project performance score), while controlling for age of the project and nature of Local Government authorities. Preliminary analyses were performed to ensure no violation of the assumption of normality, linearity and homoscedasticity. There was a weak, positive, partial correlation between Participation users and project performance, controlling for age of project and nature of Local Government authorities, \( r=0.152, n =274, p=0.001 \). As presented in the table 1, the coefficient of determination R squared is 0.104 and R is 0.323 at 0.05 significance level. The coefficient of determination indicates that 10.4% of the variation on project performance explained by independent variables included in the model.

**Table 1: Partial correlation between Participation users and project performance**

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>Participation users</th>
<th>Project Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &amp; Nature of LGAs</td>
<td>Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Participation users</td>
<td>Significance (2-tailed)</td>
<td>0.012</td>
</tr>
<tr>
<td>Project Performance</td>
<td>Correlation</td>
<td>0.152</td>
</tr>
<tr>
<td></td>
<td>Significance (2-tailed)</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>Df</td>
<td>271</td>
</tr>
<tr>
<td>R</td>
<td>0.323</td>
<td></td>
</tr>
<tr>
<td>R Square</td>
<td>0.104</td>
<td></td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.095</td>
<td></td>
</tr>
<tr>
<td>Std. Error of the</td>
<td>5.56608</td>
<td></td>
</tr>
</tbody>
</table>
** Significant at 0.01(2-tailed).

** Regression analysis on Participation users versus the performance of projects in LGAs**

The analysis of variance in table 2 show that the model used significantly at (P < 0.001, F=10.539 and degree of freedom (DF) = 274) account for the joint variation of independent variables with the dependent variables. This implies that the age of the Council upon which the projects are implemented and nature of the Council upon which projects are implemented and Participation of users has significant combined effect on the project performance.

Table 2: Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>979.566</td>
<td>3</td>
<td>326.522</td>
<td>10.539</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>8395.91</td>
<td>271</td>
<td>30.981</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9375.476</td>
<td>274</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multiple linear regressions were further used to assess effect of age, nature and Participation of users on systems towards project performance. The result in table 20 show that the fitted model:

**Performance = β₀ + β₁ Age + β₂ Participation users + β₂ Nature of LGAs**

The following independent variables were statistically significant influence project performance.

Participation users statistically significance (p-value<0.01) and had positive influence on performance of project. This implies that a unit change in Participation users will increase project performance by the rate of 0.221.as shown in table 3

Table 3: Regression output of Participation of users and Project performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>18.135</td>
<td>1.294</td>
<td>14.015</td>
<td>0.000</td>
</tr>
<tr>
<td>Age</td>
<td>1.596</td>
<td>0.793</td>
<td>0.133</td>
<td>0.045</td>
</tr>
<tr>
<td>Nature of LGAs</td>
<td>2.432</td>
<td>0.816</td>
<td>0.197</td>
<td>0.003</td>
</tr>
<tr>
<td>Participation users</td>
<td>0.221</td>
<td>0.085</td>
<td>0.15</td>
<td>0.010</td>
</tr>
</tbody>
</table>

**Note** -Nature of LGAs was dummy variable 1 if urban and 0 if is rural and also the Age was dummy variable 1 if is above ten years and 0 if below ten years.

5. Recommendations and Conclusions

Summary of findings
The study sought to establish the effects of participation of users of internal control systems on the performance of the projects in LGAs. Specifically, the study was guided by the following objectives: The extent users of ICSs participate in planning stage of ICSs; The extent users of ICSs participate in designing the ICSs and finally the extent users of ICSs participate in testing stage of ICSs. The study adopted descriptive research design using both qualitative and quantitative approach. The target population was 1002 staff who are responsible for project implementation. Sections under which staff involved include, agriculture, water, health, TASAF, finance, administration and audit. The sample was derived from a sample frame, upon which a sample of 278 staff was selected based on proportional sampling formula. Survey data was collected by use of a structured questionnaire. The data obtained was analyzed using both qualitative and quantitative analysis. Multiple linear regression models were used.

**Regression Analysis on Participation of Users on development of internal control Systems versus Project Performance**

Factor analysis was done in order to reduce internal control items to manageable and meaningful size, where all five items met the threshold of 0.4 and above. Descriptive statistics were used to analyze this research objective and other subsequent analysis was done.

The overall of the findings on the participation of users of the ICS on performance of projects in LGAs indicated that 15.6% of the respondents strongly disagreed and 47.3% disagreed that users of ICSs are participated on the development of ICSs of the projects in LGAs. Also they said that, they were not adequately communicated on this matter from neither the responsible officers nor LGAs management. Where by 18.5% agreed and 2.2% strong agreed meanwhile 16.4% were indifferent

Regression analysis was done, the analysis of variance showed that the model used significantly at (P < 0.001, F=10.539 and degree of freedom (DF) = 274) account for the joint variation of independent variables with the dependent variables. This implies that the age of the Council where projects are implemented and nature of the Councils where projects are implemented and Participation of users had significant combined effect on the project performance.

Participation users statistically significance (p-value<0.01) and had positive influence on performance of project. This implies that a unit change in Participation users will increase project performance by the rate of 0.221.

**Contribution of the study to the Body of knowledge, Theory and Practice**

This study contributes to the body of knowledge both in methodology, theory and practice. In order to derive more valuable and broader conclusions, the methodology adopted in this study involved administering structured questionnaires across a wide range of projects in LGAs, in order to increase the generalizability of the results. Lack or inadequate of internal control systems, results to poor project performance among LGAs, this study is of scholarly interest as it has further un-covered factors that lead to enhanced internal control systems. This is likewise true for the testing of possible relation between internal control systems and project performance.

In the context of aspiring to bring out supplemental factors that enhance internal control systems, recent studies ignored the controlling effect of the nature of LGAs and age of LGAs on
project performance. This research gap has been addressed through administering structured questionnaires at the individual level over and above quantitative analysis.

**Theoretical and Practical Implications of the study**

This study has made important contributions to the internal control systems and project performance. This study confirms existing literature in terms of the positive influence internal control systems and project performance. Scholarly research has clearly examined the link between internal control systems and project performance. In Nigeria, Aramide and Bashir, (2015) found out that internal audit has an impact towards the performance of the projects. Omolehinwa (2003) found the quality of internal control systems that has a positive effects upon the project performance. However, Fadzil et al. (2005) found inadequate concentrating on internal control environment and internal audits in LGAs projects. Hence, importance of internal audit is paramount in erasing project fraud and hence, improves the performance in local government projects.

In practice, performance of projects may be achieved through the appropriate design of systems through understanding and addressing challenges which emerge during implementation. Involvement of users in development of project systems is a significant strategy to be used by the system developers, hence this needs to be undertaken into consideration by decision makers when designing and implementing system reforms as suggested by this study. Moreover, users of ICSs are only seen as passive receivers of the outcome, not as active participants in the development of ICSs. By applying the analysis themes, proposed in this study, users of ICSs are supposed to be active in participation of development of ICSs. Effective ICSs will result to improved performance of the projects in LGAs.

**Areas for Further Research**

Despite the contribution made by this research, it showed few aspects to be considered by future researchers. The proposition put forward in this research emphasize the importance of participation of users of internal control systems during development of internal control systems. This means if users of ICSs are well participated, this may results to high performance of projects.

Furthermore, future research may attempt to replicate the study in different economic sectors to confirm the role of internal control systems and corporate governance on project performance of public authorities.

**References**


