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Governance pillars and project performance: A Case of Bugesera District Building construction

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ABSTRACT

The aim of the study was to measure the impact of Project Governance Pillars on Project Performance was the main objective of this study. More specifically, the research addressed the specific objectives of the effect of the structure pillar on Bugesera district building construction project performance, the effect of the people pillar on Bugesera district building construction project performance, and evaluated evaluate the effect of the information pillar on Bugesera district building construction project performance. According to the results obtained from data analysis in structure, people, and information pillars, the predictors were not able to change something significant in project performance. The data collected was analyzed and interpreted by using descriptive statistics to measure the relationship between project governance pillar independent variables and project governance dependent variables, and using regression analysis to measure the effect of independent variables on project performance, with the structure pillar ($p = 0.002$ and beta = 0.53) the analysis resulted that there is the significance and low power to change something on project performance, with people pillar ($p = 0.013$ and beta = - 0.545) the analysis resulted that there is a significant and negative effect on project performance, with information pillar ($p = 0.002$ and beta = - 3.188) the analysis resulted that there is a significant and negative effect on project performance. According to the research findings, the research recommended that construction project managers adopt the principles of project governance, and respect project ethics, through better structure construction, engage the right people for the right job, and provide accurate information in order to support effective communication during construction project implementation.

Keywords: *Governance, pillars, project, performance*

I. INTRODUCTION

Project governance helps in establishing the relationship between project management and decision-making, including stakeholders, to align project implementation and goals. (Derakhshan *et al*., 2019a). The purpose of project governance is to provide the framework for knowing what the tasks are to be performed, who is responsible for them, and to help in alignment with the project objective (Frank, 2019). Project governance in alignment of strategies with objectives supports the project's success improvement and minimizes the pressure between levels of management (Eduardo et al., 2017).

Project governance helps in the separation of project owners and project management in order to overcome confusion of responsibilities and improve the project performance (Hjelmbrekke & Lohne, 2014). Project governance helps the project management to monitor and control the framework for supporting the decision making and achieving the project's success (Ahola et al., 2014). The project governance contributes to the dynamic process of project implementation to optimize the project performance (Yadav et al., 2012).

The supply chain operation reference tool helps to analyze how contractors perform the supply chain during the project implementation of road construction (Wibowo & Nur, 2015). The success or failure of any construction project depends on the project organization culture aligned with project management (Nguyen & Watanabe, 2017). Mismanagement or poor management causes the failure of projects; this is the potential barrier to project performance in construction projects (Meng, 2012). The performance measurement system tool is used in framework management in order to enable decision-making during project implementation and minimize the number of performance indicators(Lauras et al., 2017).

The objectives of the paper are:

i. To examine the effect of structure pillar on Bugesera district building construction project performance.
ii. To examine the effect of people pillar on Bugesera district building construction project performance.
iii. To evaluate the effect of information pillar on Bugesera district building construction project performance.

II. LITERATURE REVIEW

The selected project needs the Project Governance to achieve the success of project. Project Governance is a set of framework management, which enables managers to make an effective decision. One of sensitive of Project Governance is about uses of resources required and manages all of transactions while Project governance enables the management of those transactions to enhance the success of a project. Project governance is the process of task assignment to the right people and resource allocation to achieve the success of a project (Joslin, 2016).

Effective governance in any project organization depends on a strong committee, which consists of the right people at the right job. The people who work on projects should have a clear and effective project organization structure for doing their job well and enabling clear accountability for each project employee. After designing the job structure, the right people should be available to improve the right job. Failure or success can be caused by poor management of project team members, which has a negative impact on project performance. The lack of the right people according to the objective of the project causes the barriers to the project's performance. Due to the lack of good project governance, the people who work on projects lose trust and motivation, which leads to the failure of the project (Too, 2014). The existence of effective project governance pillars influences the project's performance. According to project type, the common factors, which enable project performance, are project timeline and efficient respect. One of the indicators of project performance is objectives and outcomes achieved (Meng, 2012). Project performance is

indicated by the success of a construction project; otherwise, managers have not performed well in their roles and responsibilities. The lack of project governance negatively affects project performance. In construction projects, one of the critical points that project owners and managers must focus on is the timeline. When the project misses the deadline, the project cost increases, which causes the project to use the resources inefficiently. Project managers should improve their accountability by enhancing the project performance and should allow for the achievement of project deliverables from inputs to impacts, which are indicators of project performance (Cheung et al., 2013). The project cannot be completed successfully without excellent project managers; the project managers cannot be performed well with poor activity coordination due to the luck of project organizational structure, which can cause the failure or success of the project. The structure pillar helps to measure the project performance by knowing what it is expected to achieve, who is responsible for it, and what the current performance is observed (Cheung et al., 2013). These findings explain the key issues about ignorance of structural pillars, which affected the activities coordination in Bugesera District Building Construction Project Performance.

Effective communication between project owners, managers, and other stakeholders is required for project success; without effective information flow, the project process, activity coordination, and regular report monitoring and evaluation are not possible; the project cannot be performed well, and the objectives are not met (Placide et al., 2019). Information System Management allows project managers to use Framework Management for effective decision making which affects the project performance (Ong'aro & Asumptah, 2017). These findings explain the impact of relevant and accurate information during project execution; effective communication between project owners, project managers, project employees, and stakeholders; and the key issues of ineffective communication due to the poor management of information systems that affect effective decision-making in Bugesera District Building Construction Project Performance.

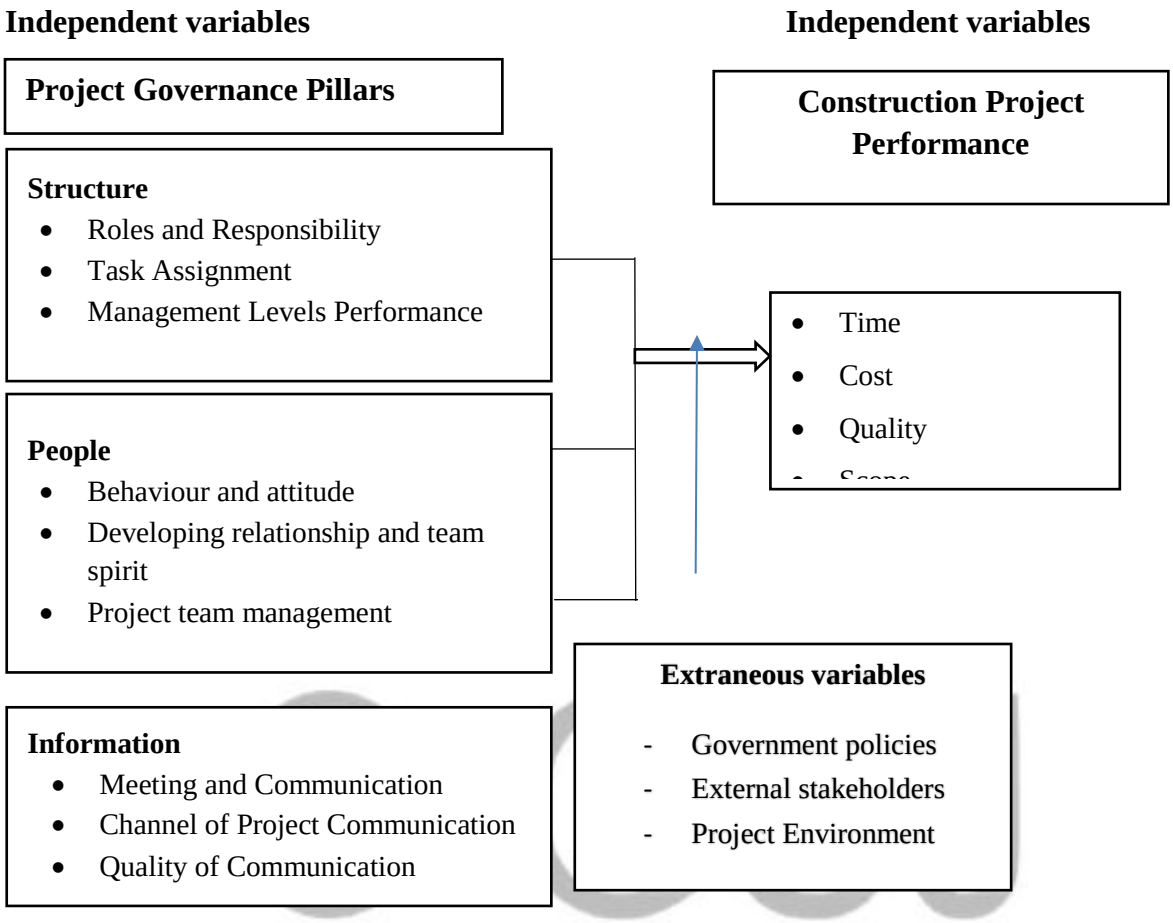

Figure 2.2: Conceptual framework
Source: Researcher (2022)

Independent variables defines as variables which cause the changes in dependent variables either positively or negatively, as I showed them in figure 2 are structure, people, and information project governance pillars. Dependent variables respond to independent variables, and this is the key issue of research, everything cannot be changed in dependent variables without independent variables, no impact can be founded in project performance without independent variable which cause the change in dependent variables, as research showed them in Figure 2.2 are cost, time, quality and scope. Furthermore, Extraneous variables are effects which affect the relationship between IV or DV, such as effects of government policies on project performance where Government can give the rules to follow and all possible facilities for CPP according to its policies, the attitude and behavior of stakeholders can also cause the changes in CPP. Project environment can also cause the changes in CPP, such as climate change, uncertain situation, floods, epidemic or pandemic, etc.

III. MATERIALS AND METHODS

The target population of this study consisted of 107 people from different teams that were involved in the Bugesera district building construction project. This research used the descriptive and explanatory research design, a descriptive study helped researcher to identify all details of picture of phenomenon or event, and provides the enough information about the issues in Bugesera District Building Construction Project, while explanatory study will enable researcher to define well the dependent and independent variables relationship in in Bugesera District Building Construction Project (Brown, 2016). The sample size estimated using Slovin's formula was 88 people. The researcher used a structured questionnaire to collect data. The collected data was analyzed and interpreted using descriptive statistics to measure the relationship between the project governance pillar independent variables and the project governance dependent variables. To measure the effect of independent variables on project performance, the researcher used regression analysis with the structure pillar (p = 0.002 and beta = 0.53).

Slovin's formula given as:

$n = \frac{N}{1+N(e)^2}$ Where:

n = simple size

N = the population size

e = the acceptance margin of error

IV. RESULTS AND DISCUSSION

Data analysis to examine the effect of structure pillar independent variable on Bugesera District Building Construction Project Performance

Table 1: Descriptive statistics analysis of structure pillar independent variable

Statements	N	Min.	Max.	Mean	Std. Dev
Job creation and responsibility based on project's objective	78	1	5	2.83	1.253
The separation of roles was done clearly during implementation	78	1	5	2.88	1.603
Management was demonstrated commitment based on ethics	78	1	5	2.83	1.253
Management was established structure and authority effectively	78	1	5	3.19	1.339
Management demonstrated commitment to competence	78	1	5	2.83	1.253
Management was able to control all tasks assignment	78	1	5	2.74	1.189
Valid N (listwise)	78				

Source: Primary data (2022)

According to Table 1, the majority of respondents (mean = 2.83, standard deviation = 1.253) responded negatively to job creation and responsibility based on the project objective statement, indicating that the job and responsibility were not significantly created in accordance with the project objective. A majority of respondents (mean=2.88, Std dev. =1.603) indicated that there was some confusion on tasks assignment during project implementation, which was the barriers of respecting the project time frame. A majority of respondents (mean = 2.83, standard deviation = 1.253) show that the management team ignored the project principles and ethics. A majority of respondents (mean = 3.19, standard deviation = 1.339) gave a positive response about the establishment of structure and authority effectively. A majority of respondents (mean = 2.83, standard deviation = 1.253) show that competence was not enough during project management performance. The majority of respondents (mean = 2.74, standard deviation = 1.189) rated activity coordination and task assignment control negatively.

Data analysis to examine the effect of people pillar independent variable on Bugesera District Building Construction Project Performance

Table 2: Descriptive statistics analysis of people pillar independent variable

Statements	N	Min.	Max.	Mean	Std. Dev
There was clear behavior and attitude based on project ethics	78	1	5	2.96	1.253
Understanding of project objective was clear to project managers	78	1	5	2.88	1.603
The right job was assigned to the right people	78	1	5	2.83	1.253
The capability of activities coordination and control was high	78	1	5	3.19	1.339
There was effectiveness of relationship and teamwork spirit	78	1	5	2.79	1.313
There was effectiveness of decision making	78	1	5	2.86	1.501
Valid N (listwise)	78				

Source: Primary data (2022)

Table 2 shows that a majority of respondents (mean = 2.96, Std dev = 1.253) gave a negative response on clear behavior and attitude based on the project ethics statement. This explains that the actors were not acting significantly according to project ethics. A majority of respondents (mean=2.88, Std dev =1.603) indicated that the managers did not understand the projective objective significantly. According to the project objective, the majority of respondents (mean = 2.83, SD dev = 1.253) believe that the right job was not assigned to the right person. The capability of activity coordination and control was rated positively by the majority of respondents (mean = 3.19, SD dev = 1.339). A majority of respondents (mean = 2.79, SD dev = 1.313) show that the relationship among project employees and teamwork was not significantly achieved. A majority of respondents (mean = 2.86, Std dev. = 1.501) gave a negative response to decision-making according to the issue detected.

Data analysis to evaluate the effect of information pillar independent variable on Bugesera District Building Construction Project Performance

Table 3: Descriptive statistics analysis of information pillar independent variable

Statements	N	Min.	Max.	Mean	Std. Dev
Existence of information exchanging between employees	78	1	5	2.96	1.253
Meetings and reports were done regularly and correctly	78	1	5	2.88	1.603
The reporting was done at time	78	1	5	2.83	1.253
The quality of information was high to support decision making	78	1	5	3.19	1.339
Information about issues was communicated within time frame	78	1	5	2.58	1.222
The communication channel was clear and effective to support reporting system	78	1	5	3.10	1.344
Valid N (listwise)	78				

Source: Primary data (2022)

Table 3 shows that a majority of respondents (mean = 2.96, Std dev. = 1.253) gave a negative response to information exchanged between employees. This explains that the information was not consistent and accurate according to the project objective. A majority of respondents (mean = 2.88, Std dev. = 1.603) gave a negative response on the regularity and correctness of meetings and reports. This explains that the meetings and reports were not done significantly according to the project objective. The majority of respondents (mean = 2.83, standard deviation = 1.253) indicate that the reports were not completed at the time specified in the statement. A majority of respondents (mean = 3.19, standard deviation = 1.339) gave a positive response about the quality of information to support decision making. A majority of respondents (mean = 2.58, Std dev. = 1.222) show that the issues were not communicated within the time frame. The majority of respondents (mean = 3.10, standard deviation = 1.344) agreed that communication channels should be used to support decision-making.

V. DISCUSSION

The purpose of this research was to investigate the relationship between Project Governance Pillars and Project Performance in the Bugesera District Building Construction Project, with a focus on measuring independent variables and evaluating the effect of structure, effect of people, and effect of information pillars on Bugesera District Building Construction Project Performance. The researcher collected data in collaboration with respondents from various district departments, institutions, contractor company, and supervision company who were involved in the Bugesera District Building Construction project, and information gathered by the researcher through a questionnaire designed and interviews.

To examine the effect of structure pillar on Bugesera district building construction project performance. The results from the descriptive statistics analysis in Table 1 revealed that job creation and accountability were not effective, and team managers did not respect project governance principles. A majority, with a mean of 2.88 and a standard deviation of 1.603, indicated that there was some confusion about task assignment during project implementation. Furthermore, a majority, with a mean of 3.19 and standard deviation, also gave a positive response to the effective establishment of structure and authority. Regression statistics analysis showed that there was a positive significant relationship between structural-dependent and project performance-independent variables, implying that as the structural pillar improved, project performance would be achieved. In addition, the result from the descriptive statistics of dependent variables showed that the dependent variables were affected negatively.

To examine the effect of people pillars on Bugesera district building construction project performance. The result from descriptive statistics analysis showed that the behavior and attitude of project employees, from managers to subordinates, were not matched with project ethics and objectives. A majority, with a mean of 2.83 and a standard deviation of 1.253, indicated that the right job was not assigned to the right person according to the project objectives. A majority, with a mean of 3.19 and a standard deviation of 1.339, gave a positive response about the capability of activity coordination and control. Regression statistics analysis showed that there was a positive significant relation between people pillar dependent and project performance independent variables, which implies that with the improvement of the structure pillar, the project performance would be achieved. Furthermore, The result from the descriptive statistics of dependent variables indicated that the dependent variables were affected negatively.

To evaluate the effect of the information pillar on Bugesera district building construction project performance. The result from descriptive statistics analysis showed that the communication was not effective, which implies poor decision-making. A majority, with a mean of 2.88 and a standard deviation of 1.603, found that the meetings and reports were not regularly enough to support decision-making. A majority, with a mean of 3.19 and a standard deviation of 1.339, gave a positive response about the quality of information, which means that the quality of information was enough to support the decision-making. Regression statistics analysis showed that there was a positive significant relation between information dependent and project performance independent variables, which implies that with the improvement of the information pillar, the project performance would be achieved. Furthermore, the result from the descriptive statistics of dependent variables showed that the dependent variables were affected negatively.

VI. CONCLUSION

The findings from research lead to the conclusion that project governance pillars have a significant effect on Bugesera district building construction project performance. The F test of 29.981 in model I demonstrates how the structure pillar on Bugesera district building construction project performance was significant. The R square value of 28.2 percent explains why the predictor has little power to influence project performance. The T statistical result showed that the structure pillar had a significant effect on Bugesera district building construction project performance, with a beta coefficient of 0.531, showing that with structure pillar improvement, the project performance would be changed significantly. The F test of 6.476 in model II demonstrates how

the people pillar on Bugesera district building construction project performance was not significant. The R square value of 7.9 percent explains why the predictor has a low power to significantly change project performance. The T statistical result showed that the structure pillar had a significant effect on Bugesera district building construction project performance, with a beta coefficient of 0.280, indicating that with people pillar improvement, the project performance would be changed significantly. The F test of 10.160 in model III demonstrates how the information pillar on Bugesera district building construction project performance had no significant relationship between the people pillar and project performance. The R square value of 10.6 percent explains why the predictor has a low power to significantly change project performance. The T statistical result showed that the information pillar had a significant effect on Bugesera district building construction project performance, with a beta coefficient of 0.325, showing that with information pillar improvement, the project performance would be changed significantly.

VII. FUTURE RESEARCH

As the researcher carried out the impact of Project Governance Pillars on Project Performance in Bugesera District Building Construction Project Performance, future research should be conducted in order to overcome the delays in project implementation due to the poor of project governance pillars. Future research should be conducted to help all construction project managers in order to respect the principles and ethics of project governance, and overcome the ignorance during project management performance, The current research focused on examining the effects of structure, people, and information on construction project performance. Future research should be conducted in order to help the researcher with future studies in the construction project area.

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