



STAKEHOLDERS MANAGEMENT AND PROJECT PERFORMANCE A CASE OF KIVU WATT PROJECT, RWANDA

Author Details (optional)

Author: Kagoro Sheila Gladstone is currently pursuing master's degree program in Business Administration Option of Project Management in Mount Kenya University, Rwanda, PH +250788847920. E-mail: shelagladstone@gmail.com

Co-Author: Eugenia Nkechi Irechukwu is Lecturer in Business Administration Program in Mount Kenya University, Rwanda, PH +250788834116. E-mail: irenkechi@mail.com

KeyWords

Community Participation, External stakeholders, Internal stakeholders, Project Performance, Project Team Management, Stakeholder Management, Supply Chain Management

ABSTRACT

Stakeholder management is a segment of project management that requires good communication and relationship linkages. This study assesses the relationship between stakeholder management and project performance. This study was guided by the objectives such as to identify the level of community participation on project performance, to identify the level of project team management on project performance, and to establish the relationship between stakeholder management and project performance in Kivu Watt Project. The research used the descriptive research design with both qualitative and quantitative method. Ideally, the target population was the whole Kivu Watt totaling 60 staffs 90 community leaders and 16 staff from the Ministry of Energy, the total was therefore 166. Slovene's formula simplification showed that from a population of 166 employees, the sample size was 118 respondents. The probability sampling method called simple random sampling was used. The structured questionnaire was used for data collection. The cronbach alpha coefficient formula was used to analyze the reliability and validity. By analyzing data, SPSS vision 21 since data were statistically analyzed, the analysis was a descriptive statistic, where frequency, percentage and mean were calculated. Regression and correlation were calculated so as to determine the relationship between stakeholder management and project performance. The findings presented and interpreted by frequencies in the tables. On the community participation, the result showed that average mean was 3.8587 which is strong and showed that social responsibility in Kivu Watt Project needs to be improved in very strong level. On the level of project team management on project performance, average mean was 4.0085 which is strong. This showed that working conditions contributes in satisfaction of project stakeholders and there is a need to improve working conditions at Kivu watt Project. On the relationship between stakeholder management and project performance, the results showed that the correlation between stakeholder management and project performance was equal .868**, it presents that there was a high positive correlation and there was significant relationship between stakeholder management and project performance in Kivu Watt Project. The result also illustrates the analysis of variance by inspecting the significance level which is .000 and <.05), It should be noted that the regression model is highly important, which aided the researcher in confirming that stakeholder management has an effect on project performance. The study provided the important information that was inform stakeholders on the impact of stakeholder management on project performance. Kivu watt Project could be influential with those who have the power to impact its project.

1. Introduction

The project manager's primary challenge is that a project needs both to consider and gratify a variety of stakeholders, which include the end- users, the customers, the designers, the contractors, and the maintenance team. Moreover, each stakeholder has destined requirements with respect to the project, which create fundamental conflicts with others. Conflicts are at the root of most project management difficulties at both the strategic level and at the tactical level. A Stakeholder is anyone who has an interest in the development or result of a project (Chan, 2021).

In a normal project management, any or all of the following may be a stakeholder: the client, the principal contractor, designers, subcontractors, people employed in any capacity in the project, local authorities, the end users of the product, professional bodies, local residents, local business owners, politicians, environment groups, and many more. Stakeholder satisfaction seems to be one of the major concerns in project management. The prospect of project success is greatly reduced if stakeholders are not satisfied. The communication and interrelationships among stakeholders mostly determine the total performance of a project, and have the critical responsibility for bringing a project to a successful completion (Olander, 2017).

Project involves processes of planning, scheduling, and controlling. Proper management of all these will lead to a successful completion of the project. But many major projects fail to satisfy the expectations of their stakeholders (Newcome 2013; Smith & Love 2014) hence a need to consider the satisfaction of project stakeholders has become key priorities of project success (Olomolaiye & Chiniyo 2010). Dissatisfied stakeholders will negatively affect the sustainability of a project, funding as well as continuity of a project (Olomolaiye & Chiniyo 2010).

The number and nature of stakeholders vary with the life of the project; it would therefore make sense to carry out the review of identification throughout the project (Moodley 2012). A Stakeholder Involvement increases their management and can be achieved at varying points in the project cycle and at different levels of society, and take many different forms. These can range along a continuum from contribution of inputs, predetermination of projects, information sharing, consultation, decision-making, partnership and empowerment. Involvement is both a means and an end. As a means, it is a process in which people and communities cooperate and collaborate in developing the project (Moodley 2012).

There are several stakeholders whose expectations and influences must be included in the project management process. And it has been emphasized that if a project's key stakeholders are not satisfied with the ongoing project outcomes, the project team will as a result be required to adjust scope, time, cost and quality in order to meet the stakeholders' requirements and expectations. The level of stakeholder satisfaction depends on two basic considerations: The concerns and needs of stakeholders, and the stakeholder management process, e.g. how they are treated (Moodley 2012).

Studies have shown that a relationship does exist between stakeholder management and performance of a project. One such a study was conducted in Vietnam state-owned civil engineering design firms by Nguyen et al. (2009). The study showed that stakeholder management did affect the sustainability as well as continuation of the state-owned projects. A similar conclusion was arrived at by Chandra et al. (2012) in a survey of over 204 individuals involved in construction projects in the Indonesian construction industry.

Lack of attention to stakeholders has contributed to higher rate of failure in construction projects (Kayijuka, 2021). According to Lander, 2017), the negative attitude of stakeholders to a construction project can led to increase in cost of production and sometimes delays because of the difficulty in implementation of project design in Nigeria. A project may not be considered successful if the project stakeholders are not satisfied.

The government of Rwanda has established a set of quantified development objectives for the years 2010 and 2020 in the Vision 2020 document. The government now intends to take a leading role in setting economic and financial policies and carrying out the investments necessary to achieve these objectives. In particular, the government believes that it must take an active role in financing the building of the necessary physical and human capital infrastructure that will eventually increase the productivity of private investments (Mugabo & Mulyungi, 2016). The Kivu Watt project is one such initiative that aim at increasing the electricity base of the country.

The Kivu Watt Project in Rwanda involves the construction of an integrated methane gas extraction facility and independent power plant in two phases. The project is being implemented by Kivu Watt, a subsidiary of Contour Global. Lake Kivu, one of the world's deepest lakes, is estimated to hold 60 billion cubic metres of methane gas (CH₄) and 300 billion cubic meters of CO₂ at a water depth of 350m. The project is the first in the world to use methane on such a large scale, and will be followed by three more phases eventually increasing the electricity generation capacity to 100MW. Besides supplying additional, cleaner, power to the national grid, Kivu Watt is expected to do so at much lower prices than existing diesel-fired power plants. It is also expected to generate approximately 200 construction jobs and 60 permanent jobs. Against the above background, the researcher aimed at evidencing the success and failure of project in Rwanda with

much emphasis to Kivu Watt project (Contour Global, 2011).

2. Review of Literature

2.1 Construction Stakeholder Management

Stakeholder management is a segment of project management that requires good communication and relationship linkages. The possibilities of influencing project success and value creation are perceived as the best during the early stages of the project. Early decisions reduce needless variations during later development phases and even the total costs of the life-cycle. However, influencing demands that the project management identify and involve the project's main stakeholders immediately at the commencement of the project.

The organizations in the construction sector operate these days in a globalized market with large project teams and joint projects with intercontinental companies in which they exhibit cultural differences, professional ethics and different concepts about how to do business. To conduct a successful project, it is necessary to address the requests of the projects' stakeholder, effectively predicting how the project affects them and how they affect the project. The effective management of project stakeholders is considered as very vital to project success (Olomolaiye & Chiniyo 2010). Nevertheless, ineffective stakeholder management as enlightened by Olomolaiye & Chiniyo (2010) results in displeasure with the end product and undesirable effects on the projects' schedule and budget.

However, to accomplish a more successful project desired outcome, the project executive must be competent in the management of the different stakeholders throughout the whole development of the project. Regular interaction with various stakeholders would inform their management of different element of danger. According to Umumararungu and Mulyungi (2018) there are many features that contribute to the success of a project, and these are influenced by the kind of decisions made by various personalities, entities and groups. Project performance has to deal with people externally to the organization as well as the internal environment, indeed more complex than what a manager in an internal environment faces. For instance, suppliers who are not on time in supplying important quantities of materials could delay the project program. Normally, when project managers have little or no direct control over any of these persons, it compounds the problem. Problems with any of these members can disorganize the project.

Chan (2021) opines that a stakeholder is anyone who has an interest in the process or outcome of a project. The stakeholders define attributes of the suggested project, most challenges comes from the requirements that the project stakeholders and project surroundings place on the project. The definition led to the obligation of which kinds of stakeholders are going to be part of the project. There are a lot of different opinions regarding the definition of a stakeholder. The decision about how to define stakeholders is important as it affects who and what counts (Chan, 2021). Again, Umumararungu and Mulyungi (2018) define stakeholders as 'People or small groups with the authority to respond to, negotiate with, can change the future planned of the organization'.

He also defines stakeholders as individuals or groups that have, or believe they have legitimate rights against the practical aspect of a project. These can include the teams, relatives, individuals who acquire the product or are affected by the finish product of the local community at large. They recognize a relation between project success the ability to forge a productive union between persons affected by the end product. Again, Umumararungu and Mulyungi (2018) add to the meaning of stakeholders as representatives, direct and indirect, which may have an interest and can make an input to the planned project. However, they suggest a more inclusive explanation of stakeholders as those players who will incur a direct benefit or loss as a result of the project. He thinks that two categories of stakeholders exist in the construction industry are internal and external stakeholders.

Scholars who study stakeholder management (Bolsshakova, et al; 2019) have pointed out the import of distinguishing stakeholders. The project stakeholders can be divided into different types according to various criteria (Chan, 2021). In the construction industry, during the different stages of a project from the formation through to the final operation, specific parties get involved whose expectations can affect the outcome or may be affected by both undesirable or positive events when the project is carry out (Rockart, 2011). The groups include the following: Client, Project Management Team, Consultant and Designing Team, Contractor, Sub-contractor, Supplier, Employees, Local Communities, Funding Bodies, and Government Authorities.

These parties as indicated by various scholars (Yamg et al. 2010) are key stakeholders of construction projects. Nazia and Bill (2016) suggest that successful execution and achievement of the project mostly depend on addressing the desires and anticipations of those who are involved and failure to correctly address their requests can result in a lot of project failure issues. This notion was re-echo by Johnson and Scholes (2014) who argue that it is not sufficient just to identify stakeholders, instead, managers and owners need to value each stakeholder's interest in order to communicate their expectations on project resolutions. Lander (2017) also advocates that it is the fundamental duty of project leaders to respond to the desires and requirements raised by their stakeholders and to be able to carry out, manage and control the project policy procedure. These subjects stress the demand for having a logical approach in recognizing main project stakeholders, looking at their requests and evaluating the effect and possible threats that they can have on the project.

2.2 Internal Stakeholders to the organization

They are the team members of the project or those who provide the finance for the project. Internal stakeholders are people who have legal contract with the client and those assembled around the client on the demand side (employees, customers, end-users and financiers) and on the supply side (architect, engineers, contractors, trade contractors and material suppliers). They are the people affected by the project in some significant way. The external stakeholders included private and public actors. The private actors are from the local residents, landowners, environmentalists and archaeologists while the public actors are from supervisory agencies, local and national governments (Lander, 2017).

Direct stakeholders are individuals closely linked or include in the project. These involve the client, members of the project team, project sponsor, technical and financial service providers, internal or external consultants, project manager, material and equipment suppliers, site personnel, contractors and subcontractors as well as end users (Lester 2017). They are also seen as internal stakeholders.

Indirect Stakeholders: Indirect stakeholders are persons who are not closely related with the project, such as; internal managers of the company and supplementary workforce not directly involved in the project, national and local government, technical institutions, public utilities, professional bodies, and personal interest groups such as stockholders, licensing and inspecting organizations, labour unions and pressure groups (Lester 2017). They are also known as external stakeholders.

2.3 Community Participation

According to comprehensive statement by Project Management Body of Knowledge (PMBOK) guide published by the Project Management Institute (PMI 2013), project success criteria consist of the golden triangle (time, cost and quality) and key project stakeholders' satisfaction and their incorporation to the project. Some studies have extended project success criteria into new aspects such as stakeholders' participation and satisfaction, customers' benefit and upcoming prospective to organization (Kayijuka, 2021). The key point is that both of these success components must meet stakeholders' satisfaction where there is a link between their interest and these components. More importantly, it has been emphasized that if the projects' stakeholders are not satisfied with the quality of the ongoing project management or project outcomes, the project team will as a result be required to adjust scope, time and cost in order to meet the stakeholders' expectations on quality issues (Mugabo & Mulyung, 2016)

Stakeholders whether they are directly or indirectly involved in projects and have different views about success, play crucial roles in every project. Stakeholders' satisfaction, both internally and externally (including clients, customers, contractors, managers and etc.) with the final product as a project success criterion is given special importance. Stakeholder satisfaction is the most important success criterion in projects. Satisfying the needs of the client, users and other stakeholders is one of the criteria for project success, and failure to manage their needs and expectations may contribute to project failure (Umumararungu & Mulyungi, 2018).

Customer satisfaction can be seen either as a goal or as a measurement tool in the development of construction quality. Stakeholders' satisfaction describes the level of happiness' of people affected by a project. According to Chan et al. (2012), a client is satisfied when the project is delivered to quality, reliability, on-time deliveries, high service levels and minimum cost of ownership. Chan et al. (2012) also cites that two possible criteria which could be used to measure project success from effectiveness dimension are the resultant system (i.e. the product) which meets customers' satisfaction and benefits many stakeholders such as users. End-users will not be happy if the end product does not meet their requirements in terms of functionality and quality of service. Meanwhile, Liu and Walker (2012) consider client satisfaction as an attribute of project success, while Torbica and Stroh (2011) reckon that if the endusers are satisfied, the product can be considered successfully completed in the long run. Traditionally within the construction industry, performance has been measured in terms of cost, time and quality (Xiao & Proverbs 2013).

To intensify success and productivity of decisions that are made during construction project lifecycle, project executives must develop comprehensive stakeholder participation plans (Saghatforoush et al. 2010). Earlier research in the construction sector by many academics (Bal et al; 2013) underscore the fact that stakeholder participation is necessary in improving the effectiveness of project outcomes (Yang 2010). The quality of a construction project is mainly dependent on the applicable performance management of various stakeholders. As noted by PMI (2013), in order to attain project success, a project manager has to facilitate the input of stakeholders in various project stages.

In addition, as indicated by Atkin & Skitmore (2012), improved stakeholder participation can assist in managing their requests, reducing unexpected risk and decreasing unnecessary activities or responses that have potential to impact on the project success. This can be related to the re-construction of Kumasi Kejetia Lorry Station by Government of Ghana in partnership with Government of Brazil which was met with strong opposition from the stakeholders. Therefore, to achieve project success, stakeholder participation is very imperative in enhancing the efficiency of project results. This helps to avoid actions or reactions that can possibly delay the project.

2.4 Performance

Critical success factors are a set of project variables or factors that are strongly correlated to project success and whose maximization or minimization depending on whether they are favorable or unfavorable will lead to project success. The term Critical Success Factors' in the context of management of projects was first used by Rockart (2011) and it is defined as those factors predicting success on projects. According to him, critical success factors are the limited number of areas in which satisfactory results will ensure successful competitive performance for the individual, department or organization. They are the few key areas where things must go right for the business to flourish. If results in these areas are not adequate, the organization's effort for the period will be less than desired. Frese & Sauter (2013) conclude that good planning, clear responsibility and accountability, and schedule control as well as project leadership governance.

Project Success can be classified into Project Success Criteria (PSCs) and Project Success Factors (PSFs). It is important to differentiate between these two groups. Success criteria are used to measure success whilst success factors facilitate the achievement of success.

These criteria and factors are generic and can influence most forms of construction projects which are given below:

Project Management Success against Product Success: Project Success Criteria consists of Project Management Success and Product Success. Project Management Success covers meeting time, cost and quality objectives. On the other hand, Product Success deals with the ability of the project's final product to meet the product owner's strategic organizational objectives; satisfaction of users' needs and management of stakeholders' needs where they relate to the product (Enquist 2016).

Project Success and Project Management Success: Project Success is measured against the overall objectives of the project while Project Management Success is measured mostly against cost, time and quality (so called performance). Delivering project success is necessarily more difficult than delivering project management success since it involves second order control (Mugabo & Mulyung, 2016).

Success Criteria often changes from project to project depending on participants, scope of service, project size, complexity of the owner related to the design of facilities, technological implications and a variety of other factors. On the other hand, common trends relating to success criteria often develop not only with an individual project but across the industry as we relate success to the perceptions and expectations of the owner, designer or contractor. These success criteria according to owners, designers and contractors are as follows (Enquist 2016).

Owner's Criteria: Owner's criteria for measuring success are: on schedule, budget, function for intended use (satisfied users and customers), end result as envisioned, quality (workmanship, products), aesthetically pleasing, returns on investment (responsiveness to audience), building must be marketable (image and financial) and minimize aggravation in producing a building. **Designer's Criteria:** Designer's criteria for measuring success are: satisfied client (obtain or develop the potential to obtain repeat work), quality architectural product, met design fee and profit goal, professional staff fulfillment (gain experience, learn new skills), met project budget and schedule, marketable product/process (selling tool, reputation with peers and clients), minimal construction problems (easy to operate, constructible design), no liability, claims (building functions as intended), socially accepted (community response), client pays (reliability), and well defined scope of work (contract, scope and compensation match) (Olander, 2017).

Contractor's Criteria: Contractor's criteria for measuring success are: meet schedule (pre-construction, construction and design), profit, under budget (savings obtained for owner and/or contractor), quality specification met or exceeded, no claims (owners, subcontractors), safety, client satisfaction (personal relationships), good subcontractor buy out, good direct communication (expectations of all parties clearly defined) and minimal or no surprises during the project.

Common Criteria: It is a priority item and one that appears in all three lists (designer, owner and contractor) in some form is the financial reality of doing business. The owner wants the project completed on time and on budget, and the designer and contractor both expect to meet certain profit or fee goals. All three viewpoints also recognize the absence of any legal claims or proceedings on a project as a desirable outcome. In other words this is a major criteria for measuring success. Another common development among the three groups involves meeting an appropriate schedule as a way of measuring or determining if a project is successful (Nazia & Bilal, 2016).

Unique Criteria: It is unique factors associated with each of the three groups. The designer for instance is looking for a project that will increase his level of professional development and professional satisfaction among his employees. Safety is a high-priority issue for the contractor that would normally be an issue with the other two groups because their employees are at much less risk during the design or operation of a building than the contractor's workers during the construction of a building. The owner is extremely interested in knowing that the building project functions properly for the intended use and is free from long-term defects or persistent maintenance problems. The factors of importance range from meeting internal budgets to professional satisfaction and on to producing a job that will help the firm obtain repeat business or serve as a marketing tool for similar projects with different clients (Enquist 2016).

Other potential difficulties associated to unproductive management are poor scope of description of work, problems com-

ing from allocated sources to the project, supervisory modifications that affect the project or undesirable reactions from the community against the project. All these problems put together with lack of participation of the stakeholders in the project affect the financial plan and schedules.

The stakeholder management is closely associated to Corporate Social Responsibility (CSR) which could also be understood as a voluntary social environmental concern in the business transactions and interactions with the stakeholders. The organizations assume that they have a social duty that goes much further than their responsibilities with the shareholders (Enquist 2016). Also the impact/probability matrix where the project stakeholders are classified depending on their level of impact and probability of impact on the project. Time or schedule is one of the most important project success criteria for any project. Time has been addressed as a criterion by which to evaluate a project's degree of success. It has also been cited as a factor which can help the other factors/criteria be met (Olander, 2017).

Every project is dependent on its cost or budget. Cost has been noted as a very important success criterion where an intellectual budget plan and proper cost estimation have been mentioned as prominent success factors in some studies. Quality has been considered as both a project success criterion and factor. Some researchers named it quality performance and considered it as a major project success criterion. In addition, some other researchers addressed quality as a criterion under the name of product's quality. On the other hand, some researchers considered quality management process as a project success factor which facilitates the success of other criteria and factors (Dohy Guay 2016).

Although process defines the road map to achieving project success, success provides the vision for the process (Bredillet 2008). Success is the ultimate goal of every project and a function of skillful leadership that creates knowledge work (Zand 2010). However, over the past 2 decades, project management practitioners have succeeded in differentiating between traditional project management success (traditional approach) and project success (adaptive approach) for the purpose of linking projects to ongoing operations.

The traditional definition of project success, also called project management success, holds that a project is a success if the project meets the technical performance specifications and satisfies all project stakeholders (Hughes et al. 2014); if the project objectives are accomplished; if all of the stakeholders are satisfied with the results (Dvir 2015); if a project is on target (scope), on time (schedule), and within budget (cost); and if the customer is satisfied (Scott-Young & Samson, 2012). The point of departure is that project success is no longer viewed as just completing the project on time and within a budget; rather, it also means ensuring that the product ultimately satisfies the end user (Milosevic & Srivannaboon 2016). Defining a project on the basis of satisfying the triple constraints of scope, schedule, and cost without looking at the overall business impact on the initial idea could lead to overall customer dissatisfaction.

On the other hand, the new approach to project success, according to Shenhar & Dvir (2015) refers to business-related processes that are designed to deliver business results rather than a collection of project activities that have to be completed on time. According to Khang & Moe (2018), as well as Yu, Flett, & Bowers (2015), overall project success is measured against the realization of the customer's objectives and goals, as well as the satisfaction of the end users and key stakeholders. Khang and Moe further argued that the modern approach to project success links the traditional project purpose to the final product and long-term goals. Dvir (2015), Gelbard & Carmeli (2019), and Yu et al. emphasized that a productive working relationship, a focus on the overall project goal, and consistency of the approach in managing the project from the initiation to the closeout phase are key to success. Consistency in this perspective applies to the incorporation of standardized tools and technology, proven project methodology into the management of project within the project life cycle.

2.5 Project Team Management

Effective project management practices on their own are not adequate to produce and deliver the desired products or services promptly and at minimal cost (Wysocki 2017). Angelides argued that these practices must be integrated within the working framework of proven processes. Process effectiveness is how well the process meets the requirements of the end customer (Wysocki 2017). A process that is understood promotes the teams' decision-making capabilities and aligns project management with the business strategy (Milosevic & Srivannaboon 2016).

Bhaskar and Singh (2014) claimed that organizations that reengineer their business processes gain sustainable competitive advantage. As they emphasized, one of the most important aspects of decision services is how often they can add value to existing systems and processes. The process of developing effective practices can be just as important as the end result of the project (Axson 2017). However, Miles (2013) argued that process reengineering consists of dividing tasks into their smallest subcomponents, enforcing strict performance specifications for each task, and gearing the system's tools to support the tasks. In the context of this research, these processes, otherwise called project phases or project life cycles, comprise the initiation, planning, execution, control or monitoring, and project closeout phases (PMI 2014). Within these phases are hidden effectiveness variables that are generic in the practice of project management.

Phase Activities in the initiation, or the conceptualizing, phase mark the starting points of a project. Shenhar et al. (2017) asserted that the initiation phase of a project life cycle defines the strategic importance of the project to the enterprise.

Other project experts have described the initiation stage of a project as the stage that defines and authorizes the project (Phillips 20014); involves the identification of a need, problem, or opportunity; and can result in the customer requesting a proposal from a would-be performing organization (Gido & Clements 2016).

This stage is characterized by the approval of a project charter. The power to launch the project or phase is given through a project charter (Phillips, 2014). Kerzner (2014) argued that the approval of the project charter is a generic process that often is omitted in organizations. Kerzner further stated that the project charter should be used to authorize work on the project; define the authority, responsibility, and accountability of the project team; and establish scope boundaries for the project. Other key effective practices in this phase of the project life cycle, according to Khang & Moe (2012), are to identify the potential beneficiaries and assess their development needs; align the development priorities of donors, the capacities of potential implementing agencies, and the development of needs; develop and evaluate project alternatives; and generate interest and support of key stakeholders.

Project Planning Phase If there is no plan, there is no control (Hutka 2019). As Dai and Wells (2014) asserted, project failure rates remain high, despite the advantages of project management methodology. As a result, planning techniques have received enormous attention Olander (2017) based on the need for the appropriate control and management of large-scale projects (Caughron & Mumford 2018) to curb this failure rate. Effective planning contributes to the implementation of innovative ideas and influences the creative problem-solving process at much earlier stages of project development (Caughron & Mumford 2018); enables accurate cost estimates to be produced; acts as an early warning system and keeps the project team focused (Gelbard & Carmeli 2013); and reduces risks and the time required to complete the project. Effective planning can help in the development of strategic information for customers to address risk and decide whether to commit resources to maximize the likelihood of a successful project (Gelbard & Carmeli 2013).

Other researchers in the field of project management have defined planning as the mechanism for translating strategic objectives into tactical actions; an iterative process handled within the planning process group; the art of asking, Who, What, When, Why, How Much, and How Long (Chan, 2021).

The determination of what needs to be done, by whom, and by when in order to fulfill one's assigned responsibility; preparation for the commitment of resources; determination of the details about the project and the process of defining and maturing the project scope, developing the project management plan, and identifying and scheduling the project activities that occur within the project. Project planning is not a one-time approach; rather, it is an iterative process (Besouw & Taryn, 2021). The project managers and their team return to the planning processes as often as needed throughout the project. As a result, experts in managing projects have suggested that the best approach is to allow planning to go through incremental or continuous process, otherwise known as progressive elaboration until the planning baseline has been produced Chan (2021).

During the planning phase, the project managers and their teams meet, except when the project is virtual, to effectively plan their execution of the project. The activities entail planning the scope, cost, schedule, risks, quality, communication, human resources, contract, and procurement. Planning these aforementioned knowledge area perspectives requires the completion of a WBS to define the work necessary to produce the deliverables (Reich, et al; 2014).

Phase The execution of a project begins after a careful planning baseline has been produced. This process allows the project team and vendors to move forward and complete the work outlined in the planning process. Executing a project also refers to implementing the project plan. This is a crucial stage of the project that requires a total commitment of resources and time. Consequently, one of the most significant measures of effectiveness in the execution stage is to ensure that the individuals who were involved in the planning process should also implement the plan. Other important activities at this stage are to carry out the project activities as planned and manage relationships with stakeholders effectively to ascertain that the project is on target (Mugabo & Mulyung, 2016).

Projects should be controlled and monitored very closely by the project managers. Controlling or monitoring the project goes hand in hand with the execution process. An effective project management cycle must integrate project control process throughout the project life. Khang & Moe (2012) as well as Phillips (2015) argued that at this stage of the project, project managers must check that the deliverables of the phases are in alliance with the project scope, cost, and schedule; constantly demand progress reports from the project team; and constantly report project performance with top management and the customer; and control the project budget and expenses. The key to effectively control a project, according to Gido & Clements (2016), is to measure actual progress; compare it to planned progress in a timely manner and on a regular basis; and take corrective action without delay, if necessary, before closing out the project.

This is the stage to test the project outputs, complete the final report, settle all financial transactions with all those involved with the project, hand over the project output to the customer, document the lesson learned, reward the team, and dissolve or reassign the team to other projects. Project completion calls for a celebration. However, not all projects end successfully. Some projects may be terminated before getting to this stage, especially when the reason for the project is no longer warranted. In whatever form the project ends, lesson learned during all the phases of the project life cycle must be properly documented to avoid making the same mistakes and to act as a point of reference toward achieving future pro-

ject success (Khang & Moe 2014).

2.6 The Saliency Model

The saliency model for project stakeholders by Ortega, et al; (2019) explains that stakeholder’s satisfaction is a product of their involvement. Stakeholders are classified and each category has its unique that are key for success. Dormant” stakeholders will only be heard from if something is going terribly wrong with the project. If we have sufficient details communicated to them on a timely basis showing the project in a green or all good status we won’t be hearing from our “dormant” group. Likewise we do not want to micro communicate with this bunch. Proper understanding and adherence to their communication needs along with a good dashboard status on project’s progress should satisfy this class of stakeholders. “Demanding” stakeholders tend to think that their concerns are most pressing and need our full attention. Yet they are without power or legitimacy so we must be careful not to spend too much time and energy with their demands. A more suited action may be to assign an assistant to tender their requests and increase their access to published information which may help calm them down a bit. “Discretionary” stakeholders are those who start needing more attention and may also benefit from increased access to published project information. Checking the communication management plan to see if this group of stakeholders needs more access to project reports could be a proper way handling them. Increased interactions with other team members may help resolve any concerns before items are escalated to the project manager. Besides, the project manager does not to be the sole source of information. And the eighth category of our diagram is “non-stakeholders”. Investing time and effort on such individuals or groups will not help us shape the outcome of the project (Ortega, et al; 2019).

3. Materials and Methods

The research used descriptive research design. Two variables were related with the independent variable predictor and the dependent variable (project performance). The research therefore makes use of descriptive designs with both qualitative and quantitative method. Ideally the whole population of Kivu Watt totaling to 60 staffs 90 community leaders and 16 staff from the Ministry of Energy was contacted so as to get information for the research and the total was therefore 166. Slovene’s formula simplification showed that from a population (N) of 166 respondents, the sample size (S) is 118 respondents. Therefore a sample of 118 respondents was selected using a probability sampling method called simple random sampling.

Table 3.1 Sample size and sampling Techniques

Category	Population	Sample size	Sampling Techenic
Kivu Staff	60	43	Random simple sampling
Ministry Staff	16	11	Random simple sampling
Community Leaders	90	64	Random simple sampling
Total	166	118	

The researcher was used questionnaire as a source of information; such as a self-administered questionnaire. The questionnaire was designed and distributed and was administered to Kivu Watt staff. The self-administrated questionnaire was structured with multiple choice options and was ask the respondents to rank their opinion. Primary and secondary method of collecting data was used where secondary data are the data which has been gathered by other researchers and was include office document and annual reports. On other side primary data are the data which are collected by the researcher for the first time which was gotten throughout questionnaire and interview guide. In order to get quality information, there was a need for standard checking, so that the researcher could end up with realistic data which clearly reflect the depicted situation. This study used statistical analysis methods to present and summarize the data, where frequencies, percentages, and mean were used. Descriptive statistics were used for making conclusions and inferential statistics were used. Statistical Products and Service Solutions (SPSS) software version 21 was used during data analysis procedures as an instrument. The multiple linear regression analysis was applied. The researcher directed this study with respected to ethical values and rules governing the conduct of a research especial-

ly in areas of respondents' anonymity, confidentiality, crediting scholars where and when due and using the sourced data for academic research purpose only. The researcher sought permission from management of Kivu Watt Project for data collection before engaging in the findings collection procedures. This was assisted through recommendations letter from Mount Kenya University Rwanda introducing the researcher as Master's student of University. The letter also confirms that the reports are solely used for scholarly intention. The researcher also took a declaration that the data collected is not revealed to any unauthorized persons, otherwise it would lead to breach of confidence.

4. Presentation of Findings

4.1 Perception of respondents about community participation on performance of projects

This part indicated stakeholder's management about customer and community on performance of project. It's included quality of services, social responsibility, and fair compensation of employees and performance of employees as are indicated in the following tables:

Table 4. 1: Community Participation on Project Performance

Particulars	N	Minimum	Maximum	Mean
This Project has active community members	118	1.00	5.00	4.0000
The project acts timely on community issues.	118	1.00	5.00	3.9915
The project is responsive to community needs	118	1.00	5.00	4.2458
The project targets are realistic	118	1.00	5.00	3.8051
The community participates is dealing issues with the project	118	1.00	5.00	3.5424
The community is aware of the duties of the project manager	118	1.00	5.00	3.5678
Total mean				3.8587

Source: Primary data (2023)

The table 4. 1 indicates the Community Participation results that this Project has active community members with mean of 4.000 which is strong, The project acts timely on community issues with mean of 3.9915 which is strong, The project is responsive to community needs mean of 4.2458 and that the billing is accurate with mean of 2.8814 which is weak. Also indicated that the project targets are realistic with mean of 3.8051 which is strong, that the community participates is dealing issues with the project with mean of 3.5424 which is strong and that the community is aware of the duties of the project manager with mean of 3.5678 which is strong. The average mean is 3.8587 which is strong and showed that social responsibility in Kivu Watt Project needs to be improved in very strong level. This refers to the statement of Dohy Guay, (2006), the organizations assume that they have a social duty that goes much further than their responsibilities with the shareholders and Olander (2007) also makes impact/probability matrix where the project stakeholders are classified depending on their level of impact and probability of impact on the project. It also refers to the statement of Dohy Guay, (2006), the organizations assume that they have a social duty that goes much further than their responsibilities with the shareholders and Olander (2007) also makes impact/probability matrix where the project stakeholders are classified depending on their level of impact and probability of impact on the project.

Table 4. 2: Project Team Management and Project Performance

Particulars	N	Minimum	Maximum	Mean
Clarity of target among the team	118	1.00	5.00	4.1780

There is equal opportunity to all team members participating in the project.	118	1.00	5.00	3.9153
Health and requirements are for every Team member	118	1.00	5.00	3.6949
Team enjoys job security in this Project	118	1.00	5.00	4.2458
Total mean				4.0085

Source: Primary data (2023)

The table 4. 2 presents the results on the level of satisfaction of project stakeholders working conditions indicated that Clarity of target among the team with mean of 4.1780 which is strong, There is equal opportunity to all team members participating in the project with mean of 3.9153 which is strong, Health and requirements are for every Team member with mean of 3.6949 which is strong and Team enjoys job security in this Project with mean of 4.2458 which is strong. The average mean is 4.0085 which is strong. This showed that working conditions contributes in satisfaction of project stakeholders and there is a need to improve working conditions at Kivu watt Project. This refers to the statement of Enquist, (2006) that, the stakeholder management is closely associated to Corporate Social Responsibility (CSR) which could also be understood as a voluntary social environmental concern in the business transactions and interactions with the stakeholders.

Table 4. 3: Project performance

Particulars	N	Minimum	Maximum	Mean
Completion within minimum Cost	118	1.00	5.00	4.2119
Completion within Budget	118	1.00	5.00	4.2034
Completion with Quality	118	1.00	5.00	4.2119
Completion within Schedule	118	1.00	5.00	3.8559
There is a career development policy in this Project	118	1.00	5.00	3.8305
Every employee is given induction training before starting to work	118	1.00	5.00	4.1017
There are in-service programs aimed at improving Team skills	118	1.00	5.00	3.6864
Team members are free to apply for further training/studies, during the project phase	118	1.00	5.00	3.4153
Total mean				3.9396

Source: Primary data (2023)

The table 4. 3 presents the results on project performance indicated that perception of respondents on completion with minimum cost has mean of 4.2119 which is strong, completion within budget has mean of 4.2034 which is strong, completion with quality has mean of 4.2119 which is strong and completion within schedule has mean of 3.8559 which is strong, career development policy in this Project with mean of 3.8305 which is strong, one very employee is given induction training before starting to work with mean of 4.1017 which is strong, in-service programs aimed at improving Team skills with mean of 3.4153 which is strong. On Team members are free to apply for further training/studies, during the project phase

with mean of 3.4153 which is strong. The average mean is 3.9396 which is strong and it showed that career development contributes on in satisfaction of project stakeholders and there is a need to improve career development at Kivu watt project. This refers to the statement of Bal et al. (2013), underscore the fact that stakeholder participation is necessary in improving the effectiveness of project outcome. Also it refers to the statement of Miles (2003), that process reengineering consists of dividing tasks into their smallest subcomponents, enforcing strict performance specifications for each task, and gearing the system's tools to support the tasks.

Table 4. 4 Management

Particulars	N	Minimum	Maximum	Mean
In this project there is Good Supplier relations	118	1.00	5.00	4.0593
Project materials supplied at a competitive price.	118	1.00	5.00	3.7797
The Project pays the suppliers on time	118	1.00	5.00	4.2458
Total mean				4.0283

Source: Primary data (2023)

The table 4. 4 presents the results on management of suppliers indicated that at Kivu Watt Project, there is good business relations with mean of 4.0593 which is strong, at Kivu Watt Project when I apply the products are bought at a fair price with mean of 3.7797 which is strong and the company practices on-time payment with mean of 4.2458 which is strong. The average mean is 4.0282 which is strong and it showed that suppliers contributes on satisfaction of project stakeholders and there is a need to improve suppliers at Kivu watt Project. This refers to the statement of Saghatforoush (2010), to intensify success and productivity of decisions that are made during construction project lifecycle, project executives must develop comprehensive stakeholder participation plans.

3.2 Perceptions of respondents about the relationship between stakeholder management and project performance

Table 4. 5 Correlation between stakeholder management and project performance

		Stakeholder Management	Project Performance
Stakeholder Management	Pearson Correlation	1	.868**
	Sig. (2-tailed)		.000
	N	118	118
Project Performance	Pearson Correlation	.868**	1
	Sig. (2-tailed)	.000	
	N	118	118

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

Source: Primary data (2023)

Table 4. 5 indicates the correlations between the stakeholder management and project performance in Kivu Watt Project, Rwanda. The Pearson coefficient correlation is between -1 and 1 where -1 to 0 presents negative correlation (-1 to -0.5 indicates the high negative correlation and -0.5 to 0 indicates low negative correlation), and 0 to 1 presents positive correlation (0 to 0.5 indicates low positive correlation and 0.5 to 1 indicates high positive correlation). The results showed that the correlation between stakeholder management and project performance was equal .868**, it presents that there was a high positive correlation and there was significant relationship between stakeholder management and project performance in Kivu Watt Project.

Table 4. 6 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.798a	.637	.634	.27738

a. Predictors: (Constant), Stakeholder management
Source: Primary data (2023)

From the table 4. 6, the regression summary representing the proportion of variance in stakeholders satisfaction and project performance. This table shows that 0.637 of the overall variation of stakeholders' satisfaction and project performance was accounted for. This indicates that the monitoring on project success accounts for 63.7% percent of the overall variance at Kivu watt Project.

Table 4. 7ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.694	1	15.694	203.983	.000a
	Residual	8.925	116	.077		
	Total	24.619	117			

a. Dependent variable: Project Performance
 b. Predictors: (Constant), Stakeholder management

Source: Primary data (2023)

The table 4. 7 illustrates the analysis of variance and by inspecting the significance level which is .000 and <.05), It should be noted that the regression model is highly important, which aided the researcher in confirming that stakeholders satisfaction have an effect on project performance.

Table 4. 8 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.215	.080		2.691	.008
	Stakeholder management	.892	.062	.798	14.282	.000

a. Dependent Variable: Project performance

Source: Primary data (2023)

The results in table 4. 8 about the influence of stakeholders management and project performance is demonstrated by standardized coefficients for each response from the respondents and it reports that the change of one standard unit in supervisor checklists will result a change of 0.798 standard unit.

5. Conclusion

Performance of a project is when it achieves its objectives and meets or exceeds the expectations of the stakeholders. But who are the stakeholders? Stakeholders are individuals who either care about or have a vested interest in your project. They are the people who are actively involved with the work of the project or have something to either gain or lose as a result of the project. Throughout the description of the stakeholder management and project performance, it can be seen that stakeholders used completion within minimum cost, completion within Budget, completion with quality and com-

pletion within Schedule and the study showed that there is a needs to improve project performance at Kivu watt Project. Finally, the study was designed to overcome the limitations identified in previous literature on project performance. This study also contributes to collect evidence corroborating some literature suggestions, but also questions some previous findings which need to be contextualized in a contingency approach about stakeholder's satisfaction and project performance. Based on the findings indicated on the relationship between stakeholder management and project performance at Kivu watt Project, The results showed that the correlation between stakeholder management and project performance was equal .868**, it presents that there was a high positive correlation and there was significant relationship between stakeholder management and project performance, and it illustrated that the significance level which is .000 and <.05), helped the researcher in confirming that stakeholders satisfaction have an effect on project performance. Also the findings on the influence of stakeholders satisfaction and project performance demonstrated by standardized coefficients for each response from the respondents and it reports that the change of one standard unit in supervisor checklists will result a change of 0.798 standard unit.

Acknowledgment

This work would not have been done without assistance and contribution of hard-working people who assisted and contributed to my research and solve problems related to the research. First of all, I would like to thank the Almighty God for giving me healthy life and the determination to do this hard work. I thank the staff and lecturer of Mount Kenya University (MKU), especially, in Faculty of Business Administration (Project Management Option) for all they have done for me.

I would like to thank too my supervisor Dr. Eugenia Nkechi, for her advice and help in guidance and supervision of this work despite difficulties of work.

I am grateful to my family's members who have always been caring, assisting, and advising me all along throughout. Finally, I thank my friends whose moral support was paramount importance.

References

- [1] Ahsan K. & Gunawan I. (2010). Analysis of cost and schedule performance of international development projects. *International Journal of Project Management*. *International Journal of Project Management*, Vol.28, No.1, pp68-78
- [2] Arto K., Kujala, J., Dietrich, P. & Martinsuo, M. (2012). What is project strategy? *International Journal of Project Management*, 26(1):4-12
- [3] Axson (2017). *FAO's Experience in the Area of Rural Radio, Including Information and Communication Technologies Servicing Rural Radio: New Contents, New Partnerships*. First International Workshop on Farm Radio Broadcasting. London: Pitman.
- [4] Bal et al. (2013). *Process approaches to development: Theory and Sri Lankan practice*. World Development. Washington, DC: Brookings Institution.
- [5] Besouw. J. V & Taryn. B. B, (2021). Smart project management information systems (SPMIS) for engineering projects – project performance monitoring & reporting. University Road, Hatfield, Pretoria, South Africa, *International Journal of Information Systems and Project Management*, Vol.9, No.1, 78-97
- [6] Bhaskar. H. L & Singh. R. P, (2014). Business process reengineering: A recent review. *Global Journal of Business Management*, Vol.8, No.2, pp24-47
- [7] Bolshakova. V, Annie. G, Gilles. H, (2019). Identifying stakeholders' roles and relevant project documents for 4D-based collaborative decision making. *Frontiers of Engineering Management* 7(2), 02-46
- [8] Chan (2012). *A Project-by-Project Approach to Quality: A Practical Handbook for Individuals, Teams and Organizations*, Aldershot, Gower. International Kindle Paperwhite, 120-125
- [9] Chan. G (2021). *Stakeholder Management Strategies: The Special case of Universities*. Mount Saint Vincent University, Halifax, Nova Scotia, Canada. *International Education Studies*, Vol.14, No.7, pp12-21
- [10] Dohy G. (2016). Failed development vision, political leadership and Nigeria's underdevelopment: A critique. *Asian Journal of Rural Development*, Vol.1, No.1, pp63-69
- [11] Easterly W. (2016). *The white man's burden: Why the West's efforts to aid the rest have done so much ill and so little good*. New York, NY: Penguin, pp436
- [12] Elbanna & Naguib (2009). Changing the conditions for development aid: A new paradigm? *Journal of Development Studies* .Hirschman.
- [13] Enquist (2016). World Bank finds its Africa projects are lagging. *New York Times*. Retrieved from <http://www.nytimes.com/2007/08/02/world/africa/02worldbank.html>
- [14] Frees & sauter (2013). *The success dimensions of international development projects: The perceptions of African project coordinators*. *International Journal of Project*. Boston: Weingarten Publications, 11(4):41
- [15] Fummey (2016). *Experiences in the management and exchange of electronic information for sustainable agriculture*. Food and Agriculture Organization of the United Nations, Rome. UK: Sigma Technical Press.
- [16] Gelbord & Carmel (2013). *Oakland on Quality Management: 3rd ed. of Total Quality Management: The Management of Change Through Process Improvement*. Oxford: Butterworth Heinemann. New York: McGraw-Hill.
- [17] Gido & Clement (2016). *Mapping climate vulnerability and poverty in Africa*. International Livestock Research Institute. New York: McGraw-Hill Book Company.
- [18] Kayijuka. D, (2021). Effect of community participation on project sustainability: A case of Kirehe community-based watershed management project.

International Journal of Science and Research Publications, Vol.1, No.8 pp677-679

- [19] Lander (2017). *Benefit Realisation Management: A Practical Guide to Achieving Benefits through Change*, 2nd edn, Farnham, Gower. UK: Sigma Technical Press.
- [20] Lester (2017). Perceptions of the impact of project sponsorship practices on project success. *International Journal of Project Management*, 11(3):795-823
- [21] Liu & Walker, (2012). *The bottom billion: Why the poorest countries are failing and what can be done about it*. Oxford, England: Oxford University Press.
- [22] Milosevic & srivannasoon (2016). *Don't Park Your Brain Outside*, Newtown Square, PA., Project Management Institute. London: John Wiley and Sons, Inc.
- [23] Moodley (2012). *The project cycle*. Finance and Development. Montreal, Quebec.
- [24] Mugabo. J & Mulyung. P, (2016). Effect of Stakeholder Engagement on Project Success in Rwanda; A case of Gisenyi Youth New Vision Project. *International Journal of Science and Research*, 7(10), 1729-1734
- [25] Nazia. I & Bilal. K, (2016). Critical factors influencing the project success: An Analysis of project in manufacturing and construction in Pakistan. *Arabian Journal of Business and Management Review*, Vol.6.No.2 pp20-25
- [26] Newcome (2013). Examples of failed aid funded projects in Africa. Retrieved from http://www/world_news-africa/
- [27] Olomolaiye & chiniyo (2000). *International development project management*. Paper presented at the Global Project. Management Forum, London, England. UK: Sigma Technical Press.
- [28] Ortega. C. P, Hernandez. M. J, Marti. E. G, Vallejo-Martos. M, (2019). The stakeholder Saliency Model Revisited: Evidence from Agri-Food Cooperatives in Spain. *Sustainability*, 11(3):574
- [29] Phyllis. L. M, (2014). Quantitative correlational research study of leadership development for women engineers. *International Journal of Leadership and management*, 14-21
- [30] Reich. B. H, Gemino. A, Sauer. C, (2014). How knowledge management impacts performance in projects: An empirical study. *International Journal of Project Management* 32(4):590-602
- [31] Rockart (2011). *African successes: Listing the success stories*.
- [32] Saghatforoush (2010). *Project monitoring and evaluation: A method for enhancing the efficiency and effectiveness of aid project implementation*. International Journal of Project Management. Boston: Weingarten Publications.
- [33] Scholes (2014). *The dirty politics of development project hurts*. Retrieved from <http://www.ghanaweb.com>
- [34] Scott young & Samson (2012). *The notorious nine: Critical problems in project implementation*. World Development. Washington, DC: Brookings Institution.
- [35] Shenhar & Dvir (2015). *Preservation and processing technologies to improve availability and safety of meat and meat products in developing countries*. Meat and Dairy Service, Animal Production and Health Division, FAO, Rome, Italy. Mephis : Macmillan
- [36] Shenhar (2017). *Juran's Quality Handbook*, 5th edn. New York, McGraw-Hill.
- [37] Umumararungi. A.F & Mulyungi.P (2018). Influence of Stakeholder Involvement on Successful Implementation of Housing Projects in Rwanda: A case Study of the Gate Real Estates Project. Jomo Kenyatta University of Agriculture and Technology. *International Journal of Management and Commerce Innovation*, Vol.6 (1), pp576-590
- [38] Wysocki (2017). *Why donors should care more about project management*. Washington, DC: Brookings Institution.
- [39] Xiao Proverbs (2013). *Les performances de l'Afrique sont-elles les consequences de sa géographie? [Africa: Geography and growth. Is the performance of Africa due to its growth?]*
- [40] Yang (2010). *Quality is Free: the Art of Making Quality Certain*, New York, McGraw-Hill.
- [41] Zand. I. V, (2010). *Accelerating Business and IT Change: Transforming Project Delivery*, Aldershot, Gower.