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Project Planning Practices and Performance in Rwanda: A Case of Umurimo Kuri Bose Project in Rwamagana District

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Abstract

Nobody sets out to fail, yet projects are still failing to reach to their intended objectives. This cross-sectional research design investigated effect of project planning practices and project performance, evidence from Umurimo Kuri Bose in Rwamagana District, Rwanda. Specifically, this study sought to analyse the effect of project scope planning, and project risk planning on project performance, a case of Umurimo Kuri Bose Project. The population of this research was beneficiaries of Umurimo Kuri Bose, a project implemented by education development center in Rwamagana district and local leaders in Rwamagana district. Total population were 906 and sample size was 279 calculated using Yamane formula. Both simple random and purposive sampling techniques were employed. Regarding to first objective of this study, the findings showed that 50.5% concurred that, identifying project activities significantly contribute to the performance of Umurimo Kuri Bose Project, and about 46.5% strongly agreed that estimation significantly contributes to the performance of the project while 37.7% asserted that identifying risk and their risk response is the main contributor of project performance. During the interview, staff members of EDC emphasised that identifying overall project activities and align them with time and budget should be the root foundation of ensuring better project performance. Moreover, the findings showed that most of the respondents agreed that cost efficiency, quality of a completed project and completing a project on time are the main indicators of a project performance indicated by 78.8%, 68.4% and 65.2% respectively. Based on the interpretation of collected and analyzed data during this study which aimed to assess the contribution of project planning practices and project performance. The study concluded effective scope planning, cost planning and risk significantly contribute to the performance of project in Rwanda whereby scope planning has 0.696, cost planning has 0.749 and risk planning has 0.845 with project performance. The study recommended similar organizations to EDC to adopt the habit of cost, scope and risk planning in their planning practices as a way of securing project performance; for effective and efficiency use of resources, during cost planning, organizations are advised to outsource experienced personnel in budgeting and finance; lastly there is always a need to set a clear and realistic project scope during project planning which is the basis for setting clear project indicators, outputs and outcomes.

Keywords: *Project Planning, Project scope planning, Project risk planning, Performance*

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1.1 Background of the Study

In this modernized world, projects are the central component of the social and economic development of the population. Nobody sets out to fail, yet projects are still failing to reach to its intended objectives. One of the main causes of project failure globally is poor planning, which is followed by inaccurate requirements, absent sponsors, inaccurate estimates, shifting project goals during implementation, inadequate project management, and corruption during project implementation (Anne, 2023). Approximately 75% of projects fail to meet at least one of their stated baseline objectives. This includes failure to meet full scope of deliverables, failure to meet all quality requirements, failure to make schedule, and/or failure to stay within budget (Wrike, et al, 2023).

Globally, starting point to ensure that the proposed project will be successful lies within project planning. A carefully planned project takes into account necessary aspects of a project and provides a plan with a project team that can refer to during project implementation (Kostalova, 2014). Though government projects of any nation especially in developing countries are a great contributor to the socio-economic development of the citizens; governments projects implemented in Africa have witnessed project failures as a result of poor planning in terms of project implementation, financial planning, unable project implementation team, inefficient project resource management and quality control throughout the implementation of the projects (Rame, 2019). Project planning practice plays an important role in worldwide project management as mapping and organizing project goals, tasks, schedules, and resources before anyone assigns roles linked to project implementation. A typical clear explanation of the project manager's goal is to bring a project on time, within the budget cost, and meet the intended performance or achieved project goals (Mukeshimana, 2021).

Project refers to set of activities carried out by persons or institutions to achieve specific objectives within determined timeframe, cost and performance measures (Alashwal & Al-Sabahi, 2018). Project planning practices refers to the formation of prearranged actions in well forecasted situation (Eulerich & Kalinichenko, 2018). It is pertinent to assess those cases in which it consists of top managers in the organization in which was forced out as an impact of poor performance (Ionescu & Niculescu, 2018). East African Countries (EAC) have been impressive economic growth in the past two decades and megaprojects are returning to play a key role in the transformation of rural East African Countries (AC) with significant reductions in poverty in most of the countries through mobilizing international development partners to contribute to the implementation of projects designed as reliable measures that could lead to the sustainable development of the citizens (Müller-Mahn, 2021). However, poor decision making, the undefined scope of intervention, poor leadership and management skills, lack of materials, delay in payments, and cash flow difficulties by contractors which are all symbols of poor planning are the main causes of project failure in East African Countries (Lavagnon, 2014). The rate of project failure in East African Countries has been found to be higher than the rate in developed countries which need creating the need to embark on more development projects. These projects, however, experience several challenges such as inefficient planning (Damoah, 2018).

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Project scope planning denotes to the definition of what was expected to achieve to assume of includes to utilize in presenting project actions prior closing it deliverables to expected outcomes. Therefore, cost planning practices include the estimation of costs and expenses (Liu Low & Zhang, 2018). Cost planning is a crucial element to the success of any project (Obondi, 2020). However, project risk management planning is crucial for project success and sustainability (Organization, 2020) denoted project risk as value condition that if it occurs, have an effect on specific objectives. Risk planning consist of assessing problems that would affect project implementation for decreasing probability to the low success of any project. Consequently, project performance means the achievement of expected target and objectives (Organization, 2020). Project performance leads to the enabling women, improving positive effect and decreasing low level of socio-economic welfare, ameliorate living standards, revenue increase, recoding progress or development, and meeting objectives (Uwanyirigira & Rusibana, 2020). Therefore, measurements of project performance usually include immediate output, intermediate outcomes and long-term impact.

Rwanda now aspires to Middle Income Country (MIC) status by 2035 and High-Income Country (HIC) status by 2050 which will be achieved through a series of seven-year National Strategies for Transformation (NST1), underpinned by strategies focused on achieving the Sustainable Development Goals (SDG) through implementing projects in all sectors that aims to boost the economy and lead to the development of citizen's, particularly rural people. However, Nyamugabo (2016) showed that lack of sufficient planning, mismanagement of project resources, and corruption during project implementation, miscommunication between decision makers and executive team of projects, and poor project management practices are the forefront cause of the failure of projects in Rwanda. Planning effectively is a vital process that ensures performance and sustainability of projects in any organization within the scheduled time, allocated resources and cover target scope.

Education Development Center (EDC) through United States Agency for International Development (USAID) funded Umurimo Kuri Bose (UKB) between 2020 – 2022 with government of Rwanda and local youth serving organizations to equip youth with employability skills and work-based learning opportunities. In addition, UKB developed innovative and effective approaches tailed to youth with disabilities based on their type and degree of disability. UKB implemented activities aiming to build on EDC's extensive experience with workforce development and youth livelihoods programming and promoting an inclusive and enabling environment for youth with disabilities to access and succeed in employment opportunities. As a result of the project, between 2020 and 2022, UKB served 1,708 youth across 12 districts in Rwanda including Rwamagana districts. Therefore, this study sought to assess the contribution project planning practices influence project performance with respect to Umurimo Kuri Bose specifically in Rwamagana district.

1.2 Statement of the problem

These project management practices have a significant impact on their performance, which include project planning, project execution, monitoring, and evaluation. Globally, 70% of projects fail due

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to poor planning (Thaddee, 2020). Projects in Africa currently are on the rise though most of them don't get completed on time or fail to take off at the time expected, among the contributors to project failure in Africa include unclear project objectives and expected outcomes, poor project management, nepotism to delegate project managers and poor planning (Antony, 2022).

Regardless the influence of project planning practices on its performance in Rwandan context, a number of projects did not success. For instance, the case of labor project (Usanase, 2021). Literacy project (Tuyishime & Nyambane, 2021). Past scholars felt that unsuccessful program refers to low level of performance for non-governmental organization project is still very acute (NISR, 2021). Therefore, 4,358 households obtained support where a process of project planning practices and management were carried out to follow up the deliverables being outcomes by the program (Muute, 2019).

The discoveries of a research carried out in Nyabihu District showed that R-square is 0.824, and that implies that the variety in execution of the Huguka Dukore Akazi Kanoze Project in Nyabihu not entirely set in stone by project scope arranging at 82.4%. R-square outcomes show that undertaking cost arranging represents 81.9 %, task's human asset arranging represents 78.3 % of the absolute variety in project execution (Mutabazi & Ndabananiye, 2022). In order to prevent future low project performance, it as evidenced that adequate project planning practices would stimulate project performance. Most of this may not be appropriate (Tavakolan & Mohammadi, 2018). Previous researches argued on the role of scope plan (Cakmak & Tezel, 2019), cost plan (Chapman, 2019) and risk plan (Obondi, 2020).

Therefore, past researchers such as Tavakolan and Mohammadi (2018), Cakmak and Tezel (2019), Chapman (2019), Obondi, (2020) and Usanase (2021) conducted surveys on the influence of project planning practices on project success. Unfortunately, these works failed to use descriptive and correlation design in order to identify effect of project planning practices on the performance of social protection project. In light with the able considerations, the research gaps will be filled by undertaking a deep analysis of effect scope, cost, and risk on project success in Rwamagana District.

1.3 Objectives of the Study

The present research examined the contribution of project planning practices on performance in Rwanda, A case of Umurimo Kuri Bose Project in implemented in Rwamagana district by Education Development Center.

1.3.2 Specific objectives

- i. To analyse effect of project scope planning practice on performance of Umurimo Kuri Bose Project in Rwamagana District;
- ii. To assess effect of project cost planning practice on performance of Umurimo Kuri Bose Project in Rwamagana District;

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- iii. To assess effect of project risk planning practice on performance of Umurimo Kuri Bose Project in Rwamagana District.

2.1 Theoretical Review

This study was guided by Theory of Change and Planning Theory

2.1.1 Theory of Change

Theory of change is a methodology for planning, participation and adaptive management and evaluation. It defines long term goals and then maps backward to identify necessary preconditions. Theory of change explains the process of change by outlining causal linkages in an initiative, begin at any stage of an initiative (Westine, & Schoter, 2011).

Concisely, a theory of change explains how and why a sequence of logically linked events should lead to an ultimate outcome. It articulates assumptions and the beliefs and hypotheses they rest on, about how short-, medium-, and long-term change happens in specific external context, and stipulating how early and intermediate outcomes toward the long-term change will be brought and documented with indicators that suggest how much of, for Whom, and when outcome is to be realized. Kurt Lewin supported the theory of change by developing a model that linked to theory of change which involving three steps: unfreezing, changing and refreezing.

For, Lewin, the process of change entails creating the perception that a change is needed, then moving toward the new, desired level of behavior and finally, solidifying that new behavior as he norm. This theory is helpful in clarifying results and describing techniques to copy with unfavorable social phenomenon. This model pertinent in designing and focusing on the planning framework in initial phase of designing not of execution phase (Serrador, 2013).

Theory of Change requires participants to be clear on long-term goals, identify measurable indicators of success, and formulate actions to achieve goals. It is distinct from any other method of describing initiatives in a few ways: it shows a causal pathway from here to there by specifying what is needed for goals to be achieved. it requires you to articulate underlying assumptions which can be tested and measured. it changes the way of thinking about initiatives from what you are doing to what you want to achieve and starts there. In developing theories of change we articulate the assumptions that stakeholders use to explain the change process represented by the change framework. Assumptions are at the basis of all the hypothesized causal connections between early, intermediate, and long-term outcomes, and the expectations (Westine, 2016)

This model was pertinent to the clarification of findings and assessing methods to face challenges in social protection program. The present approach will help to design and focus on project planning process to the implementation phase of the project (Westine, 2018). Therefore, this model was adopted in conducting the present research since it was helpful to the researcher to accelerate the level of conceptual framework understanding for influence together the issues, and outcome and study into the utilization of mechanisms.

2.4.2 Theory of Planning

Planning Theory is defined in the context of various processes encapsulated in the project management book guide. Project planning practices include scope, resource, cost, budget and risk (Ofer, 2014). Planning consists of programming, regulation, and verification of behavior,” it is “a set of decisions or strategies an individual adopts and modifies to solve a problem and reach a goal,” “a supervisory attentional system,” and “it directs behaviors, resisting distractions. Instead of making plans that are assumed to be predictions of what will happen, plan making becomes more of an activity of social mobilization, encouraging new ways of understanding situations and new practice (Gunder, 2015).

Planning model is pertinent in the field of project management in order to establish factors influencing performance and results of any project (Walker, 2005). Therefore, planning theory was relevant since it was expected to assist the researcher to examine the challenges in planning process. Planning Theory refers to different procedure summarized in managing project. Therefore, Podsakoff and Podsakoff (2019) argued that project planning practices in term of scope, cost and risk, planning model is pertinent on the domain of managing projects for establishing factors affecting the success and outcomes of any project implemented (Flacke, & Van Maarseveen, 2019). Therefore, planning theory was relevant since it was expected to assist the researcher to examine the challenges in planning process.

2.2 Conceptual Framework

Conceptual framework explains the relationships between project planning practices and project performance. The study assessed the linkages between project scope planning, project risk planning, project cost planning with performance of Umurimo Kuri Bose Project.

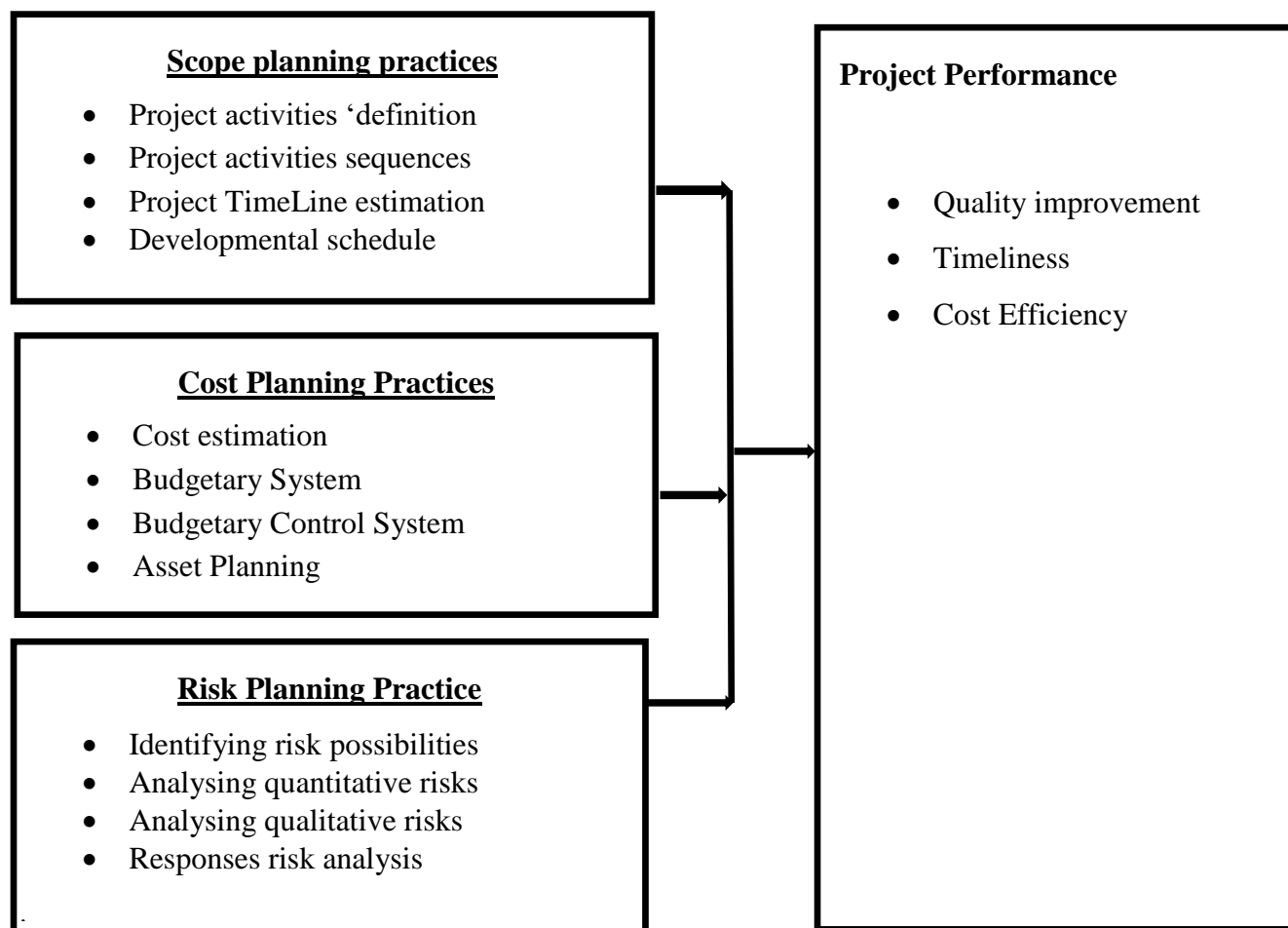


Figure 1: Conceptual Framework

Source: Researcher (2022)

Therefore, project planning practices was independent variable, project performance, beneficiaries’ participation was analyzed attentively. In fact, project planning practices will be assessed in term of scope planning, budgetary system, and risk management planning. In the same vein, scope planning was measured using definition of project, defining project activities, sequencing project activities, estimation of project time and scheduling development. Additionally, cost planning was assessed through asset plan, cost estimation and to ensure budget control. Risk plan was measured using risk management plan, identifying risks, analyzing of qualitative and quantities risks and risk responses. The dependent variable which was project performance was measured the quality improvement, the timeliness, and the efficient cost. However, project planning practices and project performance was facilitated by beneficiary’s participation. Therefore, intervening variables were government policies, beneficiary.

2.3 Empirical Literature

Under review a piece of writing that was published in the similar field. This section covers the past studies that reflected on the effects of project planning practices and performance specifically looking at the effect of project scope planning practices, project risk planning practices, and project cost planning practices.

2.3.1 Project Scope Planning Practice and Project Performance

Previous studies done on project scope planning practices and project performance, were conducted worldwide. In this regard, research done by Tavakolan and Mohammadi, (2018) reiterated the existence of clear relationship between planning and project performance in China in order to assess the role of planning practices on project performance. The author demonstrated that plan was significantly associate with project successful project implementation.

Moreover, a study done by Cakmak and Tezel (2019) evidenced that management performance in scope planning process was strongly correlated with the entire project implementation in China in order to assess influence of project planning practices. Thus, this present research will use a deck review for project planning.

Furthermore, a survey conducted by Chapman (2019) confirmed the role played by project scope change on project success using a desk review and demonstrated that poor project success is attributed to inadequate and inaccurate project scope and cost planning. Obviously, Obondi (2020) focused on influence of participation in disseminating information on project performance. In this regard, the above research extends to identify the effect of in-service trainings, M&E and project performance

2.2.2 Project Cost Planning Practices and Project Performance

Eulerich and Kalinichenko (2018) researched cost planning effects on successful project implementation. The researcher has utilized a descriptive study and respondents dome from executed projects. The survey evidenced that a professional amelioration of budget efficiency and effectiveness and identified cash flow in project execution. The study demonstrated that poor management of available cashes would lead to poor performance and delay in project implementation. Therefore, the research failed to explain the influence of project cost planning on project success in Rwanda. According to Grigore, Ionescu and Niculescu (2018), it has been demonstrated that cost design and plan were more like to play a significant role to the successful implementation of project. The researcher utilized a descriptive survey with Swedish residents. The author evidenced that training, cultural practices and financial mean are more like to determine how project are managed and implemented.

Reconsidering the same research topic, Habimana, Nkubito and Jyambere (2018) assessed effect of budget design and plan on successful project implementation. The study used a census approach and demonstrated that estimating cost and budget to be used in executing project was guided by scope planning, and work breakdown associated with project planning process. Finally, the researcher confirmed that for attaining project success, there is a need to estimate cost, expenses and budget for project execution

2.2.3 Project Risk Planning Practices and Project Performance

A study undertaken by Laerd Statistics (2018) felt that risk management are designed and evaluated prior to the accordance, however they are not planned and mist of them are resulting from poor planning and poor budgeting of expenses and asset to be allocated to project execution. The term will give the association or interaction between variables and project deliverables. In accordance with research conducted by Usanase (2021), it was clear that managing risks will contribute to effective project implementation. However, managing risks would effectively play a significant place to the success and sustainability of project

2.4 Critical Review and Research Gap Identifications

Past studies conducted on project planning practices and project performance; however, no study has indicated the effects between planning practices and project performance. A survey done by Tavakolan and Mohammadi (2018) on correlation between project plan and its performance in China adopted only secondary source of information. Cakmak and Tezel (2019) undertaken research on project management practices and successful parameters in Ghana. This research was pertinent in making decisions, but it relied only on successful parameters where project performance rely on nature and sector of economic.

3.0 Research Methodology

The study employed descriptive research design. According to Doyle and McCabe (2020), descriptive research designs aid in the collection of quantifiable data that may be utilized to make statistical inferences through the analysis of data. The population of this research was beneficiaries of education development center program and local leaders in Rwamagana District. In this regards, 906 beneficiaries and four local leaders, social affairs in the district, 2 staff of the district and one in charge of planning and another in charge of non-governmental organizational activities. The researcher used both simple random and purposive sampling techniques (Lauren, 2020). To choose respondents among beneficiaries, the researcher used simple random sample technique. Therefore, for purposive sampling technique, the researcher chose a group of people deemed as relevant for the present research. The study sampled 279 respondents.

The questionnaire was administered to participants to gather personal ideas on what they earn. The researcher formulated both closed and open-ended questions. Interview guide helped the researcher to hold interviews with local leaders and officers in charge of planning and project performance in Rwamagana District in order to be aware of the effect of project management practices on the success of project in Rwanda. Finally, secondary data was gathered using a desk research review from both published and unpublished writings available to Mount Kenya University Library, Kigali Public library, reports from Rwamagana District, other available resources on internet.

The primary data will be collected using structured and semi-structured questionnaires that capture the variables of the study. A pilot study was conducted to establish the reliability and validity of the questionnaire. Descriptive and Inferential analysis was conducted using SPSS.

4.0 Findings and Discussions

This section discusses the data analysis as well as the interpretation of the findings.

4.1 Descriptive Statistics

With respect to the specific objectives of this study, the following sections mainly cover the findings per objective. The first presentation under this analysis discusses the extent to which project scope planning influence project performance, the second part reveal the influence of project cost planning on the project performance and lastly, how project risk planning can influence project performance.

4.1.1 Project scope planning practices and project performance

Project scope planning is an important management discipline for successfully planning and executing projects. The scope of a project encompasses both high-level features and capabilities that the business team has committed to delivering to a customer and those that they have not committed to delivering. In this study, researcher was interested to find out the linkages between project scope planning and project performance. The analyses focused on the role of identifying project activities, sequencing activities, estimating time of activities to be done and developmental scheduling. The findings are illustrated in Table 1.

Table 1: Project Scope Planning Practice and Performance

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total		
Statement	N	%	N	%	N	%	N	%	N	%	N	Mean	Std
Identifying project activities	6	2.1	70	25.0	2	0.7	60	21.5	141	50.5	279	3.9	1.310
Sequencing activities	26	9.3	50	17.9	20	7.2	80	28.6	103	36.9	279	3.6	1.374
Estimation time of activities	68	24.3	3	1.07	5	1.1	111	39.7	93	33.3	279	3.5	1.554
Scheduling development	37	13.2	41	14.6	20	7.2	103	36.9	78	27.9	279	3.5	1.379

Source: Primary data (2023)

Regarding to the influence of identifying project activities with performance, the results showed that the respondents agreed with the statement at the mean of 3.9 and standard error of 1.310. Prior to this, 50.5% strongly agreed with the statement, 21.5 % agreed with the statement and 0.7 % neither agreed nor disagreed the statement. However, 25.0% disagreed the statement and 2.1 %

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strongly disagreed the statement. Respondents said that identifying project activities facilitate to list the specific tasks and actions that need to be undertaken within a period of time to achieve the project objectives. They also said that by identifying project activities, stakeholders can gain a clear understanding of the work that needs to be done, allocate resources effectively, establish a realistic timeline, and develop a comprehensive project plan. This practice is essential for ensuring project performance, as it provides a comprehensive framework for organizing and executing project tasks. On the other hand, respondents who disagreed with the statement, they supported their arguments by saying that, some activities of the projects revealed during the implementation of activities, means that there should be an error by saying that all activities are listed during the planning practices.

Concerning on the influence of sequencing activities as project scope planning practice and project performance, the findings demonstrated that the respondents agreed with the statement at the mean of 3.6 and standard error of 1.374. Moreover, 36.9 % strongly agreed with the statement, 28.6 % agreed with the statement and 7.2% neither agreed nor disagreed the statement. On the other hand, 17.9% disagreed with statement and 9.3 % strongly disagreed with the statement. Sequencing activities refers to the process of identifying dependencies and establishing a sequence in which activities should be executed to achieve project objectives efficiently. Respondents who supported the statements said that, this practice helps in optimizing resource utilization, minimizing project duration, and ensuring smooth coordination among team members.

Sequencing activities is an integral part of the project management body of knowledge (PMBOK), which provides guidelines and best practices for project management. According to the PMBOK Guide, the sequencing of activities is performed during the development of the project schedule, which is an output of the project time management knowledge area (Project Management Institute, 2017). During the interview, respondents said that by properly sequencing activities, project managers can effectively allocate resources, identify critical paths, and estimate project durations more accurately.

Regarding to the linkages between estimating time of activities as project scope planning practice and project performance. The findings revealed that respondents concurred with the statement at the mean of 3.5 and standard deviation of 1.554. About 33.3 % asserted with the statement, 39.7% agreed the statement 1.1% were neither agreed nor disagreed with the statement. However, 24.3 2% strongly disagreed and 1.07% disagreed. Respondents supported the statement by saying that by accurately estimating the time required for each activity, project managers can effectively plan and schedule tasks, allocate resources, and establish realistic project timelines.

Furthermore, accurate estimation helps in identifying critical activities, determining dependencies, and sequencing tasks, which are essential for effective project management (Project Management Institute, 2017). Estimating time of activities to be done enables project managers to identify potential bottlenecks, allocate resources efficiently, and mitigate risks associated with delays or disruptions. And also estimating activity durations also contributes to project performance by facilitating progress tracking and monitoring. When activity durations are estimated accurately, project managers can compare planned versus actual durations, assess project status, and take

timely corrective actions to keep the project on track. It allows for better resource utilization, reduces project delays, and improves overall project efficiency.

Lastly, the study assessed whether there is an influence between developmental scheduling as project scope planning practice with project performance. The findings showed that, 27.9 % strongly agreed with the statement, 36.9 % agreed with the statement and 7.2% were neither agreed nor disagreed 13.2 % strongly disagreed the statement and 14.6 % disagreed with the statement. Respondents agreed with the statement at the mean of 3.5 and standard deviation of 1.379. From the interview, respondents said that, as a part of project scope planning, scheduling development helps in defining the project timeline and identifying critical milestones. By establishing a clear schedule, project teams can better allocate resources, manage dependencies, and monitor progress throughout the project lifecycle.

During the interview, one of the staff members of EDC emphasized that identifying overall project activities and align them with time and budget should be the root foundation of ensuring better project performance. Among the reasons behind UKB has been successful in Rwamagana district, it was because activities and interventions to be offered were clear and budgeted during the planning phase and interviewer recommended similar projects to always ensure that project activities are clear enough and well identified during project planning.

Under estimation of project lifespan, unable to identify project activities were the most repeated cause of poor performance of the project and were highly recommended by respondents to highlight during project planning. Moreover, interviewed staff at district level has stressed that, there is always a need to engage project beneficiaries during project planning particularly when it comes to identifying interventions which is the basis of identifying project activities. Having in mind what beneficiaries needs facilitate in determination of kind of activities to be done and when beneficiaries are a part of implementers, they feel involved. Furthermore, apart from that, clear project scoping reduce risk and resources are well allocated because activities, time and work plan are all clear. Again, having scope of the project early align all interventions with project objectives and prevent scope creep. Without a clear project scope, a project could grow beyond team ability to complete it or causing delays. The overall findings imply that, there is a significance influence of identifying project activities, sequencing activities, estimating time of activities and scheduling development with project performance.

4.1.2 Project cost planning practice and project performance

Project cost planning is an important part of an entire project planning. By definition project cost planning refers to the estimation of costs, setting project budget and forecast costs against budgets. Generally good cost planning facilitates in estimating cost of production, reduce financial risk in terms of deficit budget and give values to every detail of resources that shall be engaged in project execution. Cost planning help to allocate resources effectively and efficiently through budgeting and help project planners to prioritize all resources that must be used in the project implementation. It is this background that, one of the specific objectives of this study was to assess the extent to which cost planning influence project performance with respect to UKB Project. In particular, under cost planning practice, the study looked at the attributes of cost estimation, cost budgeting, provision of the basis for budget control and resource planning.

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Table 2: Project Cost Planning Practice and Project Performance

Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total		
	N	%	N	%	N	%	N	%	N	%	N	Mean	Std.
Cost estimation	12	4.3	22	7.8	11	3.9	104	37.2	130	46.5	279	4.1	1.094
Cost budgeting	63	22.5	44	15.7	5	1.8	78	28.0	89	32.0	279	3.2	1.589
Provision of the basis for budget control	53	18.9	51	18.2	19	4.0	65	23.2	99	35.4	279	3.3	1.567
Resource planning	47	16.8	48	17.2	15	5.4	73	26.1	76	27.2	279	3.4	1.515

Source: Primary Data (2023)

Table 2 illustrates the findings after collecting and analysing data on project cost planning practice and project performance. The findings indicated that, the majority of the respondents (46.5%) strongly agreed that cost estimation significantly contributes to the performance of the project, 37.2% agreed with the statement and 3.9 % were neither agreed nor disagreed, 7.8 % disagree, and 4.3 % strongly disagree the statement. Respondents agreed with the statement at the mean of 4.1 and standard deviation of 1.094.

Respondents supported the findings with the facts that effective cost estimation enables project managers to allocate resources appropriately, make informed decisions, and monitor project progress. Accurate cost estimation helps in several ways. It aids in creating a realistic project budget, which is crucial for securing funding and managing financial resources throughout the project lifecycle. A well-planned budget ensures that sufficient funds are allocated to different project activities, minimizing the risk of cost overruns and delays. Cost estimation contributes to effective project scheduling. By estimating the costs associated with various project tasks, managers can determine their duration and sequencing, allowing for the development of realistic and achievable project schedules. This integration of cost estimation and scheduling enhances project planning and coordination.

The study also looked at the influence of cost budgeting and project performance. The findings revealed that, respondents concurred with the statement at the mean of 3.2 and 1.589 standard deviation. About 32.0 strongly agreed the statement, 28.0 % asserted with the statement, 1.8 % were neither agreed nor disagreed, 15.7 % disagreed and 22.5 % strongly disagreed. By developing a comprehensive cost budget, project managers can effectively manage expenses, control financial resources, and monitor the financial health of the project. Cost budgeting facilitates tracking and evaluation of actual costs against the planned budget, enabling project managers to identify any deviations or variances.

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Regarding to the influence of provision of the basis for budget control and project performance. The findings indicated about 35.4%, and 23.2 % of the respondents strongly agreed and agreed that provision of the basis for budget control on project performance. Furthermore, respondents agreed with the statement at the mean of 3.3 and standard deviation of 1.567. Contrary, 18.2% disagreed with the statement and 18.9 % strongly disagreed the statement. Provision of budget control is crucial for ensuring that a project remains within its financial limits and achieves its objectives efficiently. Provision of the basis for budget control enables project stakeholders to track expenses, identify potential cost overruns or deviations, and take corrective actions as necessary. Additionally, it helps in evaluating the project's financial performance and making informed decisions regarding resource allocation and project adjustments. Moreover, the study looked on the influence of resource planning on project performance. The findings indicated about 27.2%, and 26.1 % of the respondents strongly agreed and agreed the statement and respondents agreed with the statement at mean of 3.4 and standard deviation of 1.515. On the other hand, 17.2 % disagreed and 18.9% strongly disagreed with the statement. The findings supported the study conducted by Smith and Johnson (2019) and he found that effective resource planning positively correlates with project performance. When resource planning is executed well, projects are more likely to be completed on time, within budget, and with improved quality. Furthermore, efficient resource allocation minimizes wastage and promotes optimal utilization, maximizing the return on investment.

The overall analysis indicated that, a good cost estimation and cost budgeting contribute to the performance of the project. According to the interview held with UKB project management team they highlighted that a good cost plan keeps people to be focused and on track by ignoring to spend money in activities that were not given budget. Again, a good cost plan brings transparent to executive team or implementation team of a project. However, respondents who were on the opposite side reminded errors made during cost project planning practices, such as overspending or underspending, which had a negative influence on project performance. Therefore, as a means of decreasing errors caused by poor cost planning, this study recommended similar organizations to hire experienced individuals to handle budgeting concerns, particularly during project planning. The overall analysis implies that effective cost planning that looked the attributes of cost estimation, cost budgeting, provision of the basis for budget control and resource planning significantly contribute to project performance.

4.1.3 Project risk planning practices and project performance

Project risk management is the process of recognizing, analysing, and responding to any risk that develops during the course of a project's life cycle in order to keep the project on track and on target. Risk management should not be a reactionary process; it should be part of the planning process to determine the risks that may exist in the project and how to control those risks if they do occur. Under this section, researcher assessed the contribution of project risk planning on project performance specifically that looked into the attributes of identifying risks, importance of analysing quality risks and quantity risks as well as response contributes to project performance. The findings are presented in table 3.

Table 3: The effect of project risk planning practice and project performance

Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total		
	N	%	N	%	N	%	N	%	N	%	N	Mean	Std
Identifying risks	24	8.7	40	14.5	29	10.5	89	32.2	94	34.1	279	3.6	1.309
Analysing qualitative risks	43	15.6	85	30.8	10	3.8	59	21.1	79	28.6	279	3.1	1.506
Analysing quantitative risks	66	23.9	86	31.2	7	2.5	32	11.6	85	30.8	279	2.9	1.619
Analysis response risks	65	23.6	36	13.0	7	2.5	64	23.2	104	37.7	279	3.6	1.635

Source: Primary Data (2023)

Regarding to the influence of identifying risks with project performance, respondents agreed with the statement at the mean of 3.6 and standard error of 1.309. About 34.1 % strongly agreed with the statement, 32.2 % agreed with the statement and 10.5 % neither agreed nor disagreed the statement. However, 14.5 % disagreed with the statement and 2.1 % strongly disagreed with the statement. Respondents said that by identifying risks timely, project teams can develop appropriate mitigation strategies and contingency plans to minimize the negative impact of risks on project objectives. Again, timely identification of risks enables project managers to make informed decisions, allocate resources effectively, and take necessary preventive or corrective actions to ensure successful project delivery. Concerning to the influence of analysing quality risks with project performance. The findings revealed that, respondents concurred with the statement at the mean of 3.1 and 1.506 standard deviation. About 28.6 % strongly agreed with the statement, 21.1 % asserted with the statement, 3.8% were neither agreed nor disagreed, 30.8 % disagreed and 15.6 % strongly disagreed with the statement.

The study was interested to assess the effect of analysing quantitative risks with project performance. The findings showed that, 30.8% % strongly agreed with the statement, 11.6 % agreed with the statement and 2.5 % were neither agreed nor disagreed, 23.9 % strongly disagreed with the statement and 31.2 % disagreed with the statement. Regarding to the influence of analysing risk response with project performance. The findings indicated about 37.7 %, and 23.2 % of the respondents respectively strongly agreed and agreed the statement with the statement, 2.5 % neither agreed nor disagreed with the statement. Generally, respondents agreed with the statement at the mean of 3.6 and standard deviation of 1.635. On the other hand, 13.0 % disagreed and 23.6% strongly disagreed with the statement. During the interview, respondents said that risks response significantly contribute to the performance of the project. From the interview held with EDC and staff from district level highlighted that risk planning helped to identify the most

important risks at the initial stage of a project or during project planning and develop early risk response or brainstorming possible strategies to cope with the risks as early as possible. The overall analysis implies that, risk planning that take into consideration risk identification, analysing both quantity and quality of risks and propose risk responses during project planning phase because they have influence on project performance.

4.1.4 Indicators of project performance

One of the main and desired outcomes for every project implemented relies on its performance after its completion. This study has identified indicators which indicate the project performance which are quality improvement, timeliness and cost efficiency. The table 4 illustrates how the respondents ranked these indicators according to their views.

Table 4: Indicators of Project Performance

Statement	Strongly Disagree		Disagree		Agree		Strongly Agree		Total		
	N	%	N	%	N	%	N	%	N	Mean	Std
Quality improvement	0	0	0	0	82	29.3	191	68.4	279	4.243	0.8052
Timeliness	0	0	0	0	89	31.8	182	65.2	279	4.151	0.8746
Cost Efficiency	0	0	0	0	59	21.1	220	78.8	279	4.311	0.9581

Source: Primary data (2023)

Respondents view to what extent they consider quality of delivered project as an indicator of project performance. The findings showed that respondents agreed with the statement at the mean of 4.243 and standard deviation of 0.8052. About 68.4% strongly agreed with the statement and 29.3% agreed with the statement. On the indicator of timeliness, respondents concurred with the statement at the mean of 4.151 and standard deviation of 0.8746 whereby about 65.2% strongly agreed with the statement and 31.8% agreed with the statement. On the indicator of cost efficiency, respondents asserted with the statement at the mean of 4.311 and standard deviation of 0.9581.

The findings give us an assumption that, it is always important for project managers to ensure that every project implemented should be implemented timely, consider cost effectiveness and should take into account quality. From the interview held with EDC staff, cost efficiency refers to being able to provide projects interventions at the lowest price without compromising quality or while maintaining high level service. Regarding to the quality of the project, beneficiaries of Umurimo Kuri Bose Project have emphasised to every organization should stick to quality of the service offered because every project should aim to provide their best service to ensure that they are complying with intended project impact.

With respect to UKB Project, the quality of service offered lied in providing the needed skills to target beneficiaries, and the overall interventions were offered in a very engaging manner. Furthermore, participants reflected on the reasons behind that most of the project fail to be

completed on time, these include change of project scope during implementation phase, unavailability of resources, poor planning of project timeline, interventions are not realistic and external vendors don't deliver procured goods and services on time. The overall analysis implies that it is always important to consider quality improvement, timeliness and cost efficiency as indicators of project performance.

4.2 Correlation analysis between dependent and independent variables

Correlation analysis is a statistical method used to analyse whether there is a relationship between dependent and independent variables. Researcher applied correlational analysis to measure the relationship between independent variables and dependent variable. The study considered scope planning, cost planning, risk planning as independent variables while dependent variable was project performance. Table 5 illustrates the findings.

Table 5: Correlation Matrix

Variables of interest		Risk planning	Cost planning	Scope planning	Project performance
Scope planning	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	279			
Cost planning	Pearson Correlation	.200*	1		
	Sig. (2-tailed)	.000			
	N	279	279		
Risk planning	Pearson Correlation	.359**	.153	1	
	Sig. (2-tailed)	.000	.000		
	N	279	279	279	
Project performance	Pearson Correlation	.845**	.749**	.696**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	279	279	279	279

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

Source: Primary data, (2023)

The findings showed that, there is a strong relationship between risk planning, cost planning and scope planning with performance of the project. Risk planning has 0.845 correlation with project performance. Cost planning has 0.749 correlation with project performance and scope planning has 0.696 correlation with project performance. Correlation analysis, this implies that, it is always

important to consider the contribution of risk planning, cost planning and scope planning during planning practices.

4.3 Regression analysis

With respect to the present study, regression analysis a way of mathematically sorting out which of independent variables (project scope planning, project cost planning, and risk planning) have an impact on dependent variable.

Table 6: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.962 ^a	.913	.899	.12449

a. Predictors: (Constant), Project scope planning, project cost planning, project risk planning

The model summary showed that, a combination of project scope planning, project cost planning and project risk planning contribute up to 89% to the better performance of Umurimo Kuri Bose Project. The model summary showed that the regression analysis calculated equal to ($R = .962$) and calculated Std. Error of the estimate is equal to 0.12449 which indicate that the results are considered reliable. Therefore, considering scope planning, risk planning and cost planning contribute up to 89.9% to the performance of Umurimo Kuri Bose Project. This gives us an assumption that, there is a significant relationship between project scope planning, project cost planning and project risk planning with performance in Rwanda.

4.3.1 Analysis of Variance

Analysis of variable seeks to test whether the study is statistically significance

Table 7: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	109.119	4	27.280	259.081	.000 ^b
	Residual	11.898	113	.105		
	Total	121.017	117			

a. Dependent Variable: Project performance

b. Predictors: (Constant), Project scope planning, project cost planning, project risk planning

F value of the model is 259.081 which is significantly different from zero. P-value of 0.000 is below predetermined level which indicates statistically significance of independent variables to the dependent variable. In recommendation, the model is good to indicate the influence of project

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planning practices which considered project risk planning, project cost planning and project scope planning.

4.3.2 Regression Coefficient

Table 8: Regression coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	9.117	.545		16.733	.000
1 Risk planning	.461	.013	.949	29.654	.000
Cost planning	.326	.028	.072	2.359	.000
Scope planning	.131	.019	.059	.735	.000

a. Dependent Variable: Project performance

Table 8 shows the results of the regression coefficients. Project performance was determined through determination of standardized coefficients (Beta). With respect to regression model which is equal to $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$ where x_1 symbolize project risk planning, x_2 symbolize project cost planning, x_3 symbolize project scope planning and ε symbolize error term. β_0 is constant while β_1 , β_2 and β_3 are slopes. After computing regression line, model equal to $Y = 9.117 + 0.461x_1 + 0.326x_2 + 0.131x_3 + 0.12449$. All p-values in the research were less than 0.05, this gives us an assumption that independent variables are statistically significant with project performance.

5.0 Conclusions

Based on the interpretation of collected and analyzed data during this study which aimed to assess the contribution of project planning practices and project performance. The findings from first objective which assessed the influence of scope planning practices and project performance considered the case of Umurimo Kuri Bose Project. The overall analysis and results concluded effective scope planning that take into consideration identifying project activities, sequencing activities, estimating time of activities and scheduling development significantly contribute to the performance of project in Rwanda. This significance contribution shown by the correlation of 0.696 with project performance. Regarding to the second objective of this study that examined the relationship between cost planning practice and project performance. Under this objective, the study assessed attributes of cost estimation, cost budgeting, provision of the basis for budget control and resource planning. Based on the findings, the study concluded that there is a strong relationship between cost planning and project performance. Correlations analysis indicated that cost planning has 0.749 correlation with project performance. Regarding to the third objective that assessed the linkages between risk planning and project performance. The findings concluded that

there is a relationship between risk planning practices project performance. Correlations analysis indicated that the relationship equal to 0.845 with project performance.

6.0 Recommendations

The aforementioned conclusions are based on the collected data that aimed to respond general and specific objectives of this study. Finally, the study concludes with the following major recommendations; similar organizations to EDC are recommended to adopt the habit of cost, scope, and risk planning in their planning practices as a way of securing project performance; project planning practices should be participatory by engaging key project stakeholders as way of complying with cost, scope, and risk of the project; there is always a need to set a clear and realistic project scope during project planning which is the basis for setting clear project indicators, outputs, and outcomes; scope planning practices should be dynamic and adjustable whenever it comes to comply with key project deliverables; and for effective and efficient use of resources, during cost planning, organizations are advised to outsource experienced personnel in budgeting and finance. Lastly, during scoping planning, organizations are recommended to engage relevant stakeholders due to their input and involvement are crucial for understanding their validate scope assumptions and their points of view to ensure comprehensive scope coverage.

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