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RISK MANAGEMENT AND SUCCESSFUL NORRSKEN HOUSE PROJECT IMPLEMENTATION IN NYARUGENGE DISTRICT, RWANDA

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Abstract

This research is investigating the effect of risk management and successful Norrsken house project implementation in Nyarugenge district, Rwanda. This research achieved the following objectives: to determine the effect of risk identification on successful implementation of Norrsken House Project; to examine the effect of risk analysis on successful implementation of Norrsken House Project; to establish the effect of risk mitigation on successful implementation of Norrsken House Project and to find out the effect of risk monitoring on successful implementation of Norrsken House Project.The research also was compared two variables which are independents and dependents variables. A case study was described as analysis of risk management and successful Norrsken house project implementation, the researcher acquired knowledge regarding the subject under review from in-depth exploration of single case. It is a quantitative analysis that involves careful observation of the situation. Results of regression analysis for the effects of risk management and successful Norrsken house project implementation. The results indicate that risk management have positive and significant effect on operational performance of one acre fund (β_1= 0.376, t= 3.514, p = 0.002<0.05; β_2= 0.243, t=2.382, p =0.023<0.05; β_3= 0.267, t= 0.317, p = 0.003<0.05; β_4= 0.29, t= 4.83, p = 0.29<0.05), respectively. This shows that 1 per cent increase in risk management will lead to 0.376, 0.243, 0.267 and 0.29 percent increase on successful Norrsken house project implementation. Based on the findings above the model one (1) is represented as follows: successful Norrsken house project implementation = 1.771+ .376X_1 + .243X_2 + 0.267X_3+ 0.29X_4 Thus, all hypothesis are below 0.05, it means that our hypothesis are rejected. The findings of this study mainly indicated that risk management indicators have positive and significant effect on successful Norrsken house project implementation by this study. Risk is identified throughout the project life cycle this is part of the monitoring and controlling. Therefore, it is recommended to conduct more studies in the construction projects targeting bigger number of population. The study was applied in construction industry in general, it was not made specific for any party such as focusing only on client side, contractor or consultant. It is recommended to carry out similar studies and focusing in only one part then we can predict which party in more aware about the risk management and it is influence on project success implementation.

Keywords: Risk management and successful Norrsken house project implementation**.**

Introduction

Worldwide, risk management is very important in every activity, business sectors, private sectors as well as in public sector; its history is closely related to the history of successful projects implementation, risk management in project is considered as an important tool for the achievement of the projects (Basu, 2017). In order to determine the direction of the project, it is necessary to understand its current and future position in risk may occar within project. According to Wiley and Sons (2005), a well-wrought risk management helps you to set priorities, acquire and allocate the resources needed to achieve project goals as key of risk management. It provides a framework for analyzing and quickly adapting to future challenges.

China as one of developed countries, according to Sandhu (2014), project risk management is considered to be a natural part involved in project management and each stakeholder has a different perspective. Because project environments are complex, understanding the interrelationships of projects is critical to understanding their impacts (Olsson 2018). Cervone (2018) mentions that risk management is considered very important in the project agenda. However, it is not given the desired meaning. But this means that the project manager

ignores risk management, which is done by superficially evaluating the risks associated with the project. According to Wangel. (2018) Risk management differs from different perspectives. From the perspective of a construction project, it is the probability of an event or even several events that can occur at any moment during the entire project process. Events that affect the occurrence of events do not contribute to the goal and objectives of the project. Alessandri (2019) reports that all decision makers, such as board members and managers, should consider risk and uncertainty, especially in the decision-making process. Risks and uncertainty should be identified based on the proposed actions, then their impact on objectives should be assessed and contingency plans developed. The above is essential for decision making, without which decision making is sub-optimal for an organization to outperform its competitors in the market.

United States of America, Definition of risk management in terms of probability of not achieving project objectives and consequences of failure Zwikael and Ahn (2019). Therefore, risk management is a tool used to identify risks, determine responses to the risk, and then monitor the risks to mitigate them because risks cannot be eliminated, Raz el at. (2002). There is always risk in projects. According to Mobey and Parker (2018), one of the most important tools for achieving project success is identifying potential risks in order to systematically analyze them and thus understand vulnerabilities and uncertainties that may arise in the future and affect projects. This will allow the organization to take necessary precautions and develop contingency plans to prevent or mitigate the impact of risks in the event of an incident. The use of such risk management tools can be as mentioned by Lam et al. (2017) to investigate project feasibility and thereby avoid unprofitable projects, identify and analyze risks, and mitigate risks.

African countries such as Nigeria, Senegal and South Africa, managing uncertainty leads to successful project implementation, and as it is the ultimate goal of every project manager, risk management becomes the key to managing the inevitable uncertainty. When uncertainty occurs, its impact does not always have a negative impact on the project objectives, it can also have a positive impact on the project objectives, the traditional approach to the implementation of risk management and the common perception of uncertainty is focused on the threat of negative impact, the positive impact opportunities were ignored. According to Kishka and Ukaga (2018), the nature of projects is inherently risky because projects are carried out by people, are complex and face obstacles. Adaptation of risk management is therefore necessary for successful project implementation and should be used systematically and holistically throughout the project life cycle. Many projects that do not include risk management fail because they do not identify risks and therefore do not provide any risk contingency plans (Rozenes et al., 2016). Hillson (2020) added that risk management is used to identify and then analyze risks in a project to provide a response to the identified risks, a process that either mitigates the impact of negative events on the project's objectives or achieves the best outcome from positive events that occur in the project event.

Kenya as a country of East Africa, risk is multifaceted in nature. During construction, risk can be the likelihood that any factor or combination of factors will occur that can adversely affect the project, and these factors can occur at any point in the project's life cycle. Uncertainty when setting project goals and failure to foresee consequences during the planning process. However, the consequences may be worse or even better than expected (Wang et al. 2018). There are different approaches to classify risks, sometimes in construction as internal or external risk factors. However, others use a different type of classification, e.g. the nature of the risk and its source. Thus, risks can be political, cultural, economic, etc. Zhi (2015) mentioned that risks in construction projects are divided into two categories, one is internal risks, that is, inherent uncertainties in construction projects, the other is external risks resulting from the impact of the project environment. Foreign projects therefore face higher external risks due to political unrest as well as market and economic fluctuations.

Rwanda recognizes that for a project to be successful, risks must be identified at the conceptual stage. Risks are seen as an obstacle to project success, so organizations focus on risk management to achieve project success, spending time, energy, and money on risk management (Zwikael and Ahn 2017). Raz Ait. (2020) mentioned that risks in projects are considered as undesirable events that can lead to time overruns, cost overruns, failure to achieve project goals, safety incidents, environmental violations, and overall project failure in all aspects. Carbone and Tippett (2018) report that there are many variables that affect project success, and in fact, poorly executed risk management can lead to project failure. Aloz. (2017) reported that project managers mostly did not implement a risk management process when project

plans differed. De Bakker et al. (2017) mentioned that among project management activities based on the application of project risk management, these activities will lead to project success. Jiang and Klein (2020) found that risks in research projects have a negative effect on the achievement of successful software development projects.

Based on Akintoye and MacLeod's (2020) study in construction project, it has been found that risk factors affect the success of projects in terms of budget, schedule and quality of results, and therefore risk processes should be applied from project initiation to project closure. Zwickel and Alain (2011) found that culture has an impact on how risk is perceived and dealt with. They add that risk varies from industry to industry, so different types of risk were identified in different companies. Lack of or poor risk management planning will have a negative impact on the success of the project. This means that risk management increases the success of projects by establishing processes to reduce risk and contingencies. Risk in a project can arise due to the nature of the task, if it is complex or involves uncertainty and time is limited. A project typically includes activities that are intended to result in a final good, service, or outcome as a result of the successful completion of that project. Real projects must always have a clear start and finish in terms of time, as well as a defined scope and set of resources within these two points. Both project management and project implementation require different knowledge, skills, and tasks to be completed (Kerzner, 2018). The current challenges facing the projects include financial risk, legal and compliance risk, strategic risk and technological risk. The problem faced by Rwandan project focused in this study is the effects of risk management on successful implementation of projects. Rwandan most projects being under operation still faces many challenges with respect to management of risks which they are exposed to, despite the tremendous growth in the sector. According to Huang et al. (2014), risk in project is a possible future problem that will affect the success of the project and the loss of results.

According to Dey et al. (2017) A risk is a future event beyond the project manager's control and can adversely affect project objectives. While the problem exists to be solved, the risk, on the other hand, may occur in the future, so it is a future problem. In the implementation of Norrsken housing projects, risks are often perceived as events that affect the most important project objectives, namely cost, time and quality. Many projects fail because agencies fail to establish risk management and provide for project risk factor limits or contingencies in the belief that all efforts will succeed. In fact, successful project management is valued. Therefore, for a project to be successful, the project manager must try to address and resolve problems before they occur, rather than waiting for them to occur. It is true that not all risks can be identified before they occur, but most problems can be identified even before they occur. According to De Bakker e at (2018) Due to the inherent uncertainty and unpredictability of projects, project management is important in project management because it mitigates and eliminates the consequences of these uncertain events. Risk management is generally risk identification, risk analysis and risk response There are four risk response options, risk acceptance, risk mitigation and transfer to other parties.

It's crucial to manage the risks associated with cost, schedule, and scope because they may have an impact on how well various projects function and are carried out. The effectiveness of the project will be impacted, which will then have an impact on the successful implementation of projects, if scheduling and budgeting are not done correctly or followed by the project team. The failure to properly manage the risks of cost, schedule, and scope has an impact on the project's ability to achieve its goals (Serpell & Larissa, 2019). The Rwandan construction industry has not conducted many studies on the mediating role that project efficiency plays in the relationship between project risk management and successful project implementation. The moderator between a project's efficiency and its quality hasn't, to date, been the project culture. Therefore, the study was intended to find out the effects of Risk management and successful Norrsken house project implementation in Nyarugenge district, Rwanda.

Research objectives

The objective of the study was categorized as general and specific objectives as shown below:

General objective

The general objective of this study was to assess the effect of risk management and successful Norrsken house project implementation in Rwanda.

Specific objectives

i. To analyze the effect of risk identification on successful Norrsken house project implementation in Nyarugenge district, Rwanda;
ii. To examine the effect of risk analysis on successful Norrsken house project implementation in Nyarugenge district, Rwanda;

iii. To assess the effect of risk mitigation on successful Norrsken house project implementation in Nyarugenge district, Rwanda;
iv. To evaluate the effect of risk monitoring on successful Norrsken house project implementation in Nyarugenge district, Rwanda.

Research hypotheses

Ha1: Risk identification has an effect on successful Norrsken house project implementation in Nyarugenge district, Rwanda;
Hb2: Risk analysis has an influence on successful Norrsken house project implementation in Nyarugenge district, Rwanda;
Hc3: Risk mitigation affects successful Norrsken house project implementation in Nyarugenge district, Rwanda;
Hd4: Risk monitoring affects successful Norrsken house project implementation in Nyarugenge district, Rwanda.

Review of Literature

Conceptual Review

The goal of the conceptual literature review is to categorize and describe concepts relevant to the study or topic and outline a relationship between them, including relevant theory and empirical research

Risk identification

Shrivastava (2012), Teller (2013) and Kwak and Stoddard (2014) mentioned that risk identification is one of the most important processes of risk management and risk identification is a complex task. This requires a broad understanding of the project in relation to the scope, objectives, client and all other stakeholders. What works is working with all stakeholders, involving them and using technology. For example, brainstorming can be used as it has been shown to be an effective method for gathering different scenarios from stakeholders and then creating risk lists and regular risk reports (Raz and Michael, 2018). Risk identification is one of the keys to project success according to Carbone and Tippett (2014), who believe that to achieve a successful project, risks must be identified at an early stage. Starting from the definition of risk management Zou el at. (2017) suggested risk identification, then risk assessment, and finally risk response. There are various tools that can be used to identify project risks, such as brainstorming, cause-and-effect diagrams, and checklists (Zwikael and Ahn 2011). Kishk and Ukaga (2018) reported that risk can be identified using methods such as brainstorming, focus group, analysis of previous similar projects and interviews.

According to Ribera and Sieber (2019), the decision tree tool is used to identify each node in the tree and the option for each node, thus creating scenarios that can be analyzed to select the best option. During the execution phase, the team must be aware of potential changes in the environment and be prepared to identify any foreseeable risks so that contingency plans can be developed. According to Boehm (2017) and Ahmed el at (2017) The process of risk identification is aimed at achieving a successful project, and the analytical methods are decomposition, evaluation of decision drivers (Keil el at. 2018; Raz and Michael 2016) and checklists. In addition to this, Hillson (2018) also mentioned risk identification tools and techniques such as brainstorming, questionnaires, impact diagrams, SWOT analyses, interviews and cause-effect diagrams. In addition, Hillson (2019) suggests that risk factors can be identified from the structural elements of a risk distribution, a technique that can be used in risk assessment workshops and checklists.

Risk analysis

According to Carbone and Tippett (2014), risk assessment is measured using the probability and consequences of the risk. The feasibility and consequences of these projects are measured by project experts or use risk data from previous similar projects. Risk assessments can be addressed using analytical tools such as Delphi techniques, probability and consequence assessment (Raz and Michael 2018), and event tree analysis (Zwikael and Ahn 2011). Hillson (2019) argues that the ranking of risk factors uses qualitative assessment, which is carried out by weighing probability and consequences. Also, Fabricius and Buttgen (2015) add that project management measures (such as assessing the likelihood and consequences of risks) contribute to successful projects. In addition, quantitative risk analysis can be used as a risk assessment tool. The term quantitative is used because it provides numbers on the impact of risk factors on project objectives. Boehm (2017) adds that risk assessment is used to measure the probability and severity of loss of each risk factor and to determine the composite risk. Various tools are used, such as performance models and statistical decision analysis. Teller (2013) reported in his project portfolio study that the risk assessment process separates the levels of risk in a project to understand whether the project is acceptable or not. Risks are categorized by type and priority, so focus on the main risks. According to Ahmed el at

(2017) Risk assessment uses qualitative methods rather than quantitative methods because data collection in quantitative methods is not easy and mostly unavailable. Moreover, in qualitative risk assessment, input is provided by experts, which is more adequate than in quantitative methods, where mostly unreliable data is accumulated.

Risk mitigation

Zwikael and Ahn (2018) argue that risk management reduces the amount of risk in a project by first identifying risks and then assessing risk events, determining risk responses and monitoring risks during the project life cycle. They also mention risk response analytical tools such as project risk response plans and plan diagrams, as well as impact predictability matrices. According to Teller (2013), risk factors with a higher priority receive more attention to prevent negative impacts on project objectives. Dey and Ogunlana (2014) report in their study that the UK private finance scheme suggests that the best way to reduce risk is to transfer the risk to another party. Kishk and Ukaga (2018) mentioned that for successful project implementation, there must be very effective participation and risk awareness among the stakeholders and the project execution team. Consequently, it positively affects the risk reduction process and contingency planning and project activity management, thereby reducing the likelihood of the risk actually occurring. Keil el at (2018) emphasizes the critical role of senior management; they use the term “commitment” rather than “support” to emphasize their participation and commitment to deliver results in the success of risk management. Therefore, they must be proactive from the inception phase through the project life cycle and up to the end of the project.

Risk monitoring

Raz and Michael (2017) mentioned that the School of Software Engineering as a pioneer in providing different types of methods illustrates the project risk management model by identifying risks, analyzing risks, responding and tracking and controlling. Tracking and control can be achieved using different tools, this article uses monitoring instead of tracking. Risk monitoring is achieved through a variety of methods, such as ongoing review of risk assessment, periodic documentation review, periodic reporting of risk status, periodic reporting of key risks to senior management, and periodic reporting of risk mitigation plans (Raz and Michael 2016). To control risk, you need to analyze trends, compare actual plans with plans, and analyze exceptions. Implement contingency plans if risk mitigation measures are insufficient and reschedule projects based on analysis. Establish risk closure procedures and perform cost-benefit analysis (Raz and Michael 2019). One of the main successes of the project was the regular review of risks and subsequent communication of findings to relevant stakeholders. The purpose of risk monitoring is to identify new risks as early as possible and thereby increase the risk response. Thus, it increases awareness of risk response and identifying risks encountered in projects helps build good knowledge that can be used to identify risk factors in future projects, rather than just filling unrealistic gaps.

Risk (Teller and Kock 2013). Cervone (2016) suggests that in order to monitor risks in projects, risk assessments should be carried out continuously. This process is an important process that leads to project success because it allows all project participants to identify high-priority risks at a given stage of the project. However, project managers do not buy the idea of being flexible in planning and changing project responses as each new event occurs, but changing plans based on new data that becomes available is essential to project success. Monitoring project risks provides learning experiences that can be applied to future projects. In addition, Hillson (2019) mentioned that monitoring is the final process in risk management, the ongoing monitoring of identified risks, the identification of new risks, the review and monitoring of risk responses, and the monitoring of changes in risk management throughout the project life cycle. In addition, Hillson (2019) recommends monitoring risk management, risk and project review meetings to monitor the status of risk and the status and implementation of consensus risk response and a process to assess the feasibility of risk management to ensure its compliance with project requirements.

Successful Implementation of Project

Timeliness

A timeline is a list of scheduled events arranged in the order in which they occurred, starting with the earliest event and moving forward in time, defining a start and end point. Schedules provide busy team members with time to perform duties that they can incorporate into their daily duties. The schedule is an important tool that coordinates all aspects of the event, keeping all parties involved within deadlines. It is difficult to track events or activities if timelines do not include detailed information (Grafton, Rosenberg, and Daniel 2010). Truly effective performance management that supports employee performance, development and success requires everyone to be involved in setting responsibilities, schedules and deadlines. Workplace accountability is important in the workplace because it

demonstrates employee professionalism, promotes career advancement, helps build professionalism, and shows business leaders how valuable employees are to the organization. Job responsibility refers to the clear definition and understanding of the work roles, functions and responsibilities of individuals and teams in the workplace (Lockwood, 2013).

Tetrick and Buffardi (2016) explain that employee performance can be influenced by individual differences between propensity to engage in work and commitment to work. Higher levels of engagement can negatively impact employee performance. Tetrick and Buffardi (2016) show that emotional labor affects employees' job performance. As part of performance management, employees must be updated to meet future job requirements, responsibilities and deadlines. Upgrading provides a sustainable competitive advantage in development that meets today's needs without compromising the ability of future generations to meet their own needs. Keeping up with the times is an advantage that allows companies to survive in long-term competition (Altenburg, Schmitz & Stamm, 2016). According to Mukesh, Andy and Louis (2013), if a company has an advantage over its competitors in protecting customers and fending off competitive forces, it achieves modern sustainable competitive advantage.

Project Cost

Project costs play an important role and directly reflect the efficiency of the project, especially in construction. This article will focus on cost estimates and project costs in Vietnam and Finland. In addition, factors such as human resources, design, risk, materials, etc. can affect the project cost. Based on the case study, these questions are explored in depth using the data in the case study. Furthermore, the differences between the two countries will be shown in order to understand which system is more optimal and what can be learned from each other. The information and research methodology presented in the article is based on cost estimates from case studies, professional opinions and existing data from Internet research. Project cost management is the management action of planning, forecasting, controlling, costing, analyzing and evaluating contractors and is used to control project costs. Effective project cost management is reflected in the closing stage of the project, regardless of whether the project is completed within the budget and within the plan, the success of the project's financial flow must be evaluated. The price of the project is a very important factor that affects the decision of stakeholders to invest in it (Eby, 2017).

This is a very important question that will be asked at the beginning of the project and will definitely affect its future. The cost of the project will determine the materials used in the construction, the quality and quality of the work and the techniques used. The equipment and facilities can vary from low-quality machines to state-of-the-art equipment. Project costing also helps all parties involved focus on time and on budget (or under budget). Completing the project on time and within budget is the most important attribute of any construction project. Regular updates and meetings of all parties will help to distribute the work of each party as much as possible. A proper project estimate will also guarantee the overall project goals and requirements. Project execution on time is not the only requirement, but compliance with the customer's specifications is also very important. Proper cost estimation helps maintain a disciplined approach to construction activities to achieve client specifications. Easily detect fraud by tracking your budget. Construction projects that have the potential to exceed deadlines may involve some financial uncertainty. But with a good cost estimate, the contractor can easily keep track of these numbers, be careful with the cost for any deviations, and thus ensure that the total cost does not exceed the estimate (Eby, 2017).

Scope

Scoping the project with input from all stakeholders is an important task that needs to be done properly at an early stage. The purpose of the project definition is to provide sufficient information to define the work to be done to avoid large changes that could negatively impact project performance (Gibson et al., 2016). This information is required before deciding whether to proceed with the project (Kähkönen, 2019). While adequate front-end project planning and a clear definition of project scope can reduce the likelihood of cost overruns, insufficient project planning and poorly defined scope can lead to costly changes, delays, rework, cost overruns, schedule overruns, and project failures. Change often reflects the uncertainty that occurs in the early stages of a project (Assaf & Al-Hejji, 2016). Change is necessary because each stakeholder has a different perspective on the project.

Therefore, for successful project execution and satisfactory project results, it is very important to formulate a clear project in the pre-project planning phase. In the public sector, the definition of projects is very important because projects serve the public first and their satisfaction and comfort are the main concerns, while in the private sector, projects are usually designed to benefit investors or owners.

Therefore, they should reflect their needs and requirements. This cannot be done if all stakeholders have not defined the project at an early stage. It is not reasonable to ask stakeholders for input on project outcomes after the project has ended if stakeholder participation is limited. Incomplete project definitions can occur when the input of one or more stakeholders is intentionally or unintentionally omitted (Sharma & Lutchman, 2016), while the input of others dominates. Failure to consider and clarify stakeholder expectations and concerns in the early stages of a project can lead to overlooked unusual risks and lead to difficulties in project management, resulting in poor outcomes (Atkinson et al., 2006). Therefore, project scoping is essential to increase stakeholder satisfaction as well as successfully implement construction projects (Heywood & Smith, 2016).

Quality

Quality provides clear direction and focuses the efforts of the entire organization on common innovation goals. Oke, (2014) emphasizes that the first step in developing a quality, innovation and creativity program is to define what innovation means to a company or innovation field. By understanding the drivers of the need for innovation, companies can develop their areas of innovation. Kuczmarski and Associates (2014) confirm that more successful companies show clear signs of management commitment to new product development, particularly in terms of securing adequate funding and resources. One of the themes of quality, innovation and creativity is the value creation of products. Creating value for customers helps sell products and services, while creating value for shareholders ensures the availability of future products and investment capital to fund operations. From a financial perspective, value is created when a company's revenues exceed its expenses. Value creation is increasingly seen as a rigorous financial measure of project success in meeting these stringent management objectives.

In fact, emphasizes the creative funds creative fund, involving a large number of adaptations and high values that bring new products or innovative products or services, and find the ability to solve a solid customer problem or new product methods (Pieter, 2020). Wachira (2012) mentioned that the best national concept is another topic of quality, creativity and innovation. Creativity and innovation always start with new creative campaigns that collect and filter the good ideas and keep the best ideas. These ideas are translated into strategic innovation plans and actionable programs. Idea is the source of all the materials to create prototypes and put innovative solutions in the hands of users. Ideation requires experience in understanding and leading teams, adaptability and flexibility in human dynamics, and a host of other soft skills that are actually harder to master. Generating good ideas requires committed employees, motivated and committed to the success of the organization. In this complex environment, organizations must place customer value creation at the center of their operations to enable organizational agility, experimentation, learning and collaboration. Employees must be motivated, confident, prioritized and driven to create value.

Theoretical Review

Theoretical framework involves the review of theories underlying the study topic. “Theories covered in this study include: Allocation of resource theory, expenditure theory, economic theory and progressive theory of expenditure”.

Allocation of Resource Theory

Allocation of resource theory was developed by Peteraf and Barney (2015). It is concerned with the discovery of how nations, corporate, entrepreneurs or individuals distribute financial resources through budget management process to attain financial goals. For corporate economic resource to attain sustained competitive advantage, it should have the following qualities: priceless, rare, imperfectly imitable and non-substitutable. This calls for use of budget management systems to allocate those scarce economic resources in government institutions (Anantadjaya, 2018).

The economic concept of resource allocation is an important area of study in an organization using the invisible hand theory. Under invisible hand theory, the allocation of resources is done through competition, supply and demand by individuals and corporate (Peteraf, 2014). “Corporates distribute financial resources through budgeting in their attempts to meet predetermined financial targets”. Therefore, the allocation of resource theory, help organizations in allocating financial resources at their disposal through budget management system and financial resources help a project to sustain for long as well to achieve their goals.

Theory of Constraints

The theory of constraints is a set of management tools created by Eliyahu Goldratt in 1984. The theory is applicable in many areas including project management and performance measurement among many others (Blackstone, 2017). The theory helps organizations to identify the most important constraints or bottlenecks in their processes and systems and dealing with them to improve performance. According to Goldratt (2014), organizational performance is dictated by constraints present in processes and systems.

Constraints are restrictions that hinder an organization from maximizing its performance and achieving its goals and objectives (Goldratt, 2014). He states that constraints can involve policies, equipment, information, supplies or even people, and can be either internal or external to an organization.

Theory of constraints can be applied in conjunction with other management techniques such as total quality management and risk management to ensure a comprehensive set of techniques that ensure continuous improvement in all areas of operation in an organization (IMA, 2009). The theory is based on five steps which include: identifying the system's constraints that limit progress toward the goal, exploiting the most important constraint, subordinating everything else to the decision made by managing the system's policies, processes and resources to support the decision, elevating the constraint by adding capacity or changing the status of the original resources to increase the overall output of the constraining task or activity, and finally going back to step one and identify the next most important constraint (Steyn, 2016). The five steps in applying the theory of constraints enable an organization's management to remain focused on the most important constraints in their systems.

Theory of constraints is applicable in many aspects of project management. Monitoring and evaluation are done throughout the steps on the theory of constraints to record information regarding the progress of managing the constraints. Step five of the theory of constraints provides for feedback which is important in evaluation of results to determine whether there is progress in achieving project goals and objectives (Steyn, 2016).

Any project risk might be a constraint or could become a constraint (Steyn, 2016). In most cases, risk events that are initially not considered as posing the highest risk are neglected. Often, this may result in a risk event that was initially considered as not being critical becoming the most important constraint. Once a risk event has been identified as important or critical, the focus is to eliminate the risk or reduce either the probability of its occurrence or its impact to a level where it would not be critical anymore (Steyn, 2016). Project leadership is critical in executing the theory of constraints. It involves managing project schedules to ensure projects are completed on time and within the scope and budget (IMA, 2019). Managing constraints requires project leaders to coordinate their project teams in order to minimize the effects of constraints effectively. Stakeholder participation is important in any project or organization as they contribute to decision-making to enhance the quality of products and services. While executing a project, stakeholder needs could be expected to change, which leads to changes in scope of the project, (Steyn, 2016). It helps management focus on what's important by identifying individual constraints that inhibit the organization from achieving its goals. The process allows organizations to identify the root cause for poor performance

Stakeholders' theory

The theory that guided this study was stakeholders' theory. Stakeholder theory first developed in 1950's and during 1960's (Kippenberger, 2016). This was during post-war period as economic growth raised living standards that both employees with strong unions and consumer groups started to challenge the power and might of modern organizations. Management of these organizations had to accept that there were other interested parties beyond themselves and their shareholders of whom they would have to take some account.

Freeman in 2015 was the first scholar to present a theory assessing the role of actors in the firm's environment. He states that organizations operations are affected by both internal and external actor's behaviour besides stockholders (Susan, 2017). The theory says that all stakeholders must be identified and listed and that they are supposed to shape the organizational structure and behaviour. Mellisa, (2012) quotes freeman's book, Strategic Management: A stakeholder approach that the firm exists for the purpose of serving stakeholder interests. A stakeholder has been defined as any group or individual who can affect or is affected by achievement of an organizations purpose (Mellissa, 2012). There is a consensus that stakeholders often include customers, employees, management, stockholders, creditors, suppliers, community and even competitors (Stark, 2014). Evan and Freeman (2015) say that stakeholder theory does not give primacy to one stakeholder group over the other. He further emphasizes participation and that all members have the right to participate in the decisions which affect the accomplishment of their projects in an important way.

Whereas it may be correct to suggest that the firm's survival be linked to external, the motivating description of this linkage needs to be more clearly addressed. Further Hill and Jones (2016) beg to differ from Evan and Freeman above by saying that some stakeholders have more primacy than others and may vary with respect to the degree of importance management places on their stakes and with respect to the amount of power the stakeholder has with management. Caroll also conquers with Hill and Jones by saying that

stakeholders with more power and legitimacy require more attention as quoted by (Starik, 2014). Shareholder theory was used it to challenge corporate leaders and project owners to rethink their usual approaches to management. It advocates managers shifting the primary focus of the education projects away from short-term performance and toward long-term success.

2.2.4 Progressive Theory of Public Expenditures

Progressive theory of Public theory was developed by (Walker, 2014). "Walker believed on a theory of expenditure based on cost-effective thoughts as preferable to dependence on theoretical claim to the argument of impartiality that was noneconomic and outside the government". Theory of expenditure allotment based on finances provided records to replace condemnatory influence and thus using marginal utility theory indifference point is discernable in the distribution of government budgets, (Hildreth and Zorn, 2015).

"Walker asserted that the best approximation of marginal utility for cities is first obtained as general measure or an aggregate that is not distinctive to the locale or region and then an indifference point could be made more certain for that region based on local preferences". Progressive theory of public expenditure is important since Walker's work predates key budget writers, including Herbert Simons 'financial performance measurement research in Chicago (Walker, 2014). Walker suggests the norm for distribution of scarce financial resource and gives an approach for a positive budget process which leads to high corporate financial performance. "This theorist further states that, public budgets must traverse the complex nature of executive-legislative relationships in order to achieve the set financial goals". This theory come for showing the progress of the project as well as with the used money during implementation.

Research Gaps

According to (Foster, 2015) "The organization of work to achieve the best possible results. From this simple view point, project planning, planning management is not a system or technique; it is the totality of the day-to-day activities of all managers "the best outcome of the project relies heavily on the effective risk management. This process of risk management measuring project sucess as well as its performance often requires the use of statistical evidence to determine progress toward specific defined project objectives. A lack of risk identification, risk analysis, risk mitigation and risk monitoring can hurt an organization (Foster, 2015).

The government has established structures to successfully lay the foundations for project risk management through the Rwanda Development Board (RDB). It has a well-executed long-term reform strategy that informs all of the country's short-term development goals. The government is trying to successfully manage project risks by streamlining the regulatory process involved at every step so that both the public and private sectors can take off. In addition to legal and administrative reforms, the government has invested in training professionals, including risk management specialists, to ensure risk mitigation and monitoring. Recognizing the benefits of a diverse knowledge base, Rwanda also needs technical expertise in risk management from other countries to replicate good practices and build capacity. The government has engaged in the process of reforming the risk management of the construction sector and is keeping open lines of communication to protect project owners, residents, civil society and others (RDB Report 2014). All these efforts have shown the fruits of Rwanda's legislative achievements, and Rwanda's commitment to risk management reforms has led to positive legal reforms that have significantly contributed to its overall goal of improving risk management in various construction projects that are booming. This study aims to fill this gap. This chapter summarizes information from previous literature on projects that successfully implement risk management criteria. This includes reviewing the competitive views of the services provided.

Materials and Methods

The research was descriptive and analytical research design; it is key role in statistics and data analysis. Descriptive research classifies, describes, compares, and measures data; it is also identified characteristics, frequencies, trends, and categories for the effect of risk management and successful Norrsken house project implementation in Rwanda. The study was based on a single case study to enable a broad cross section of researchers to facilitate the great understanding of the phenomenon and apply a series of statistical tests to help in the presentation of the data via mean standard deviation, correlation and regression analysis.

Target Population

Population was the staff management, members and was comprised by 214 people. This was the study population though a convenient sample which was taken based on sampling design represented.

Sample Size

There are many ways of calculating sample size, but the researcher may need to calculate the necessary sample size for a different combination of levels of precision, confidence, and variability. Due to the information needed, the researcher decided to use all population as simple size thus simple was 214 respondents.

Sampling technique

Universal sampling

As all population was a sample size. The sample was, therefore, be made of number the staff management, stakeholders and employees Norrsken house project

Data Collection Methods

Data collection is the systematic gathering of data using a specified scientific process (Cooper & Schindler, 2014). Poor selection of data collection methods affects the collected data. Research was adopted the questionnaire for collecting primary data and documentation review to collect secondary data.

Here it follows a rationale that once questionnaires and other data collection tools have been administered the mass of collected raw data must be systematically organized in a manner that facilitates analysis. Thus, data from completed questionnaire was edited, categorized and entered into the computer SPSS and summarized using simple frequency counts and percentage distribution for analysis, mean and standard deviation was used during data analysis. In relation to qualitative analysis the researcher used the collected information from the respondents to establish patterns and relationships with the area being studied. Quantitatively the researcher summarized data using descriptive statistics like graphs, percentages and frequencies which enabled the researcher to meaningfully describe the distribution of scores and measurements. Using these techniques, the presentation, analysis and interpretation of the findings made it easy to comprehend and draw conclusions were based on the findings. A regression model was provided a function that was describe the relationship between one or more independent variables and a response, dependent, or target variable.

4. Results

4.1 Discriptive of the Respondents on risk identification for successful Norrsken house project implementation

Table 1: Shows the Descriptive Statistics on risk identification for successful Norrsken house project implementation

Statements	N	Mean	Std. Deviation
Identify risks from experience, similar previous projects and checklist for risk identification at Norrsken House project	214	4.22	.941
Risk identification through interviews and brainstorm to identify risks at Norrsken House project	214	4.22	.941
Norrsken House project examining each work area and work task for the purpose of identifying all the hazards for successful implementation	214	4.22	.941
Norrsken House project is engaged the right stakeholders to identify project risks for maintaining successful implementation	214	4.25	.888
Norrsken House project always evaluate the risks for its successful implementation	214	4.25	.888
Norrsken House project use risk treatment for its successful implementation	214	4.22	.941

There is effective risk assessment for Norrsken House project	214	4.22	.941
There is effective reporting, communication, business process improvement, proactive design, and contingency planning for Norrsken House project	214	4.22	.941
Valid N (listwise)			

Source: Primary Data (2023)

From the findings show that "Identify risks from experience, similar previous projects and checklist for risk identification at Norrsken House project" with mean of 4.22 and .941 standard deviation. This implies that that the respondents strongly agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

The second statement shows that "Risk identification through interviews and brainstorm to identify risks at Norrsken House project" where the respondents agreed with a mean of 4.22 and standard deviation of .941 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Third statement shows that "Norrsken House project examining each work area and work task for the purpose of identifying all the hazards for successful implementation" where the respondents agreed with a mean of 4.22 and standard deviation of .941 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Forth statement shows that "Norrsken House project is engaged the right stakeholders to identify project risks for maintaining successful implementation" where the respondents agreed with a mean of 4.25 and standard deviation of .888 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Fith statement shows that "Norrsken House project always evaluate the risks for its successful implementation" where the respondents agreed with a mean of 4.25 and standard deviation of .888 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Six statement shows that "Norrsken House project use risk treatment for its successful implementation" where the respondents agreed with a mean of 4.22 and standard deviation of .941 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Seventh statement shows that "There is effective risk assessment for Norrsken House project" where the respondents agreed with a mean of 4.22 and standard deviation of .941 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Eighth statement shows that "There is effective reporting, communication, business process improvement, proactive design, and contingency planning for Norrsken House project" where the respondents agreed with a mean of 4.22 and standard deviation of .941 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement and last statement.

4.2 Discriptive of the Respondents on risk analysis for successful implementation of Norrsken House Project

Table 2: Shows the Descriptive Statistics on risk analysis for successful implementation of Norrsken House Project

Statements	N	Mean	Std. Deviation
Analyze risk based on probability and analyze risks according to their impact at Norrsken House project	214	4.47	.785
Analyze risk using qualitative analysis and analyze risk using quantitative analysis at Norrsken House project	214	5.14	6.013
Norrsken House project use risk assessment sheets as tool for indicating causes, consequences, rating and mitigations measures for successful implementation	214	3.98	1.165
Norrsken House project used overall risk profile for successful implementation	214	3.99	1.171
There are several ways to categorize an effective risk management process's at Norrsken House project	214	3.86	1.086
There are monitor and report on the risk at Norrsken House project	214	3.86	1.086
There are treat the risk at Norrsken House project	207	3.86	1.104
Risk analysis is the process of identifying and analyzing potential issues that could negatively impact on Norrsken House project	214	3.86	1.086
Valid N (listwise)			

Source: Primary Data (2023)

From the findings show that " Analyze risk based on probability and analyze risks according to their impact at Norrsken House project" with mean of 4.47 and .785 standard deviation. This implies that that the respondents strongly agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

The second statement shows that "Analyze risk using qualitative analysis and analyze risk using quantitative analysis at Norrsken House project " where the respondents agreed with a mean of 5.14 and standard deviation of 6.013 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Third statement shows that "Norrsken House project use risk assessment sheets as tool for indicating causes, consequences, rating and mitigations measures for successful implementation" where the respondents agreed with a mean of 3.98 and standard deviation of 1.165 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Forth statement shows that "Norrsken House project used overall risk profile for successful implementation" where the respondents agreed with a mean of 3.99 and standard deviation of 1.171 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the

standard deviation where the respondents had different opinions of the statement.

Fith statement shows that " There are several ways to categorize an effective risk management process's at Norrsken House project" where the respondents agreed with a mean of 3.86 and standard deviation of 1.086 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Six statement shows that " There are monitor and report on the risk at Norrsken House project" where the respondents agreed with a mean of 3.86 and standard deviation of 1.086 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Seventh statement shows that "There are treat the risk at Norrsken House project" where the respondents agreed with a mean of 3.86 and standard deviation of 1.104 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Eighth statement shows that "Risk analysis is the process of identifying and analyzing potential issues that could negatively impact on Norrsken House project" where the respondents agreed with a mean of 3.86 and standard deviation of 1.086 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement but same answer. This indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

This indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement and last statement "The attitude of the staff towards the risk management "was measured by a mean of 4.05 and standard deviation of 1.1.086.

4.3 Discriptive of the Respondents on risk mitigation for successful implementation of Norrsken House Project

Table 3: Shows the Descriptive Statistics on risk mitigation for successful implementation of Norrsken House Project

Statements	N	Mean	Std. Deviation
Mapping the risk response process and impact prediction matrix for the risk response process at Norrsken House project	214	3.83	1.096
Risks with a high negative impact on the objectives are given a high priority at Norrsken House project	214	4.20	.932
Reducing the impact of potential risks by developing a plan to manage, eliminate, or limit setbacks as much as possible at Norrsken House project	214	4.22	.941
Norrsken House project maintaining the risk premium are business risk, financial risk, liquidity risk, and exchange-rate risk for successful implementation	214	3.98	1.026

Common risk mitigation strategy used by Norrsken House project is avoidance	214	3.86	1.086
Common risk mitigation strategy used by Norrsken House project is reduction	207	3.86	1.104
Common risk mitigation strategy used by Norrsken House project is transference	214	3.83	1.096
Valid N (listwise)			

Source: Primary Data (2023)

From the findings show that "Mapping the risk response process and impact prediction matrix for the risk response process at Norrsken House project" with mean of 3.83 and 1.096 standard deviation. This implies that that the respondents strongly agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

The second statement shows that "Risks with a high negative impact on the objectives are given a high priority at Norrsken House project " where the respondents agreed with a mean of 4.20 and standard deviation of .932 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Third statement shows that "Reducing the impact of potential risks by developing a plan to manage, eliminate, or limit setbacks as much as possible at Norrsken House project" where the respondents agreed with a mean of 4.22 and standard deviation of .941 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Forth statement shows that "Norrsken House project maintaining the risk premium are business risk, financial risk, liquidity risk, and exchange-rate risk for successful implementation" where the respondents agreed with a mean of 3.98 and standard deviation of 1.026 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Fith statement shows that "Common risk mitigation strategy used by Norrsken House project is avoidance" where the respondents agreed with a mean of 3.86 and standard deviation of 1.086 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Six statement shows that "Common risk mitigation strategy used by Norrsken House project is reduction" where the respondents agreed with a mean of 3.86 and standard deviation of 1.104 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Seventh statement shows that "Common risk mitigation strategy used by Norrsken House project is transference" where the respondents agreed with a mean of 3.83 and standard deviation of 1.096 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement. This implies that there is trend mean and different opinon of respondents in the study henceforth full participation of them. This indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

4. 4 Discriptive of the Respondents on risk monitoring for successful implementation of Norrsken House Project

Table 4: Shows the Descriptive Statistics on risk monitoring for successful implementation of Norrsken House Project

Statements	N	Mean	Std. Deviation
Trends are analyzed, reported periodically and risk is closed systematically as per the procedure at Norrsken House project	214	4.20	.933
Risk mitigation status (success/failure) is reported periodically and critical risks are reported to the top management at Norrsken House project	214	4.22	.941
Norrsken House project identify and assess current risks, prepare response plans, track the occurrence and evolution of risk, identify new contingencies	214	3.86	1.086
Norrsken House project evaluates the quality and effectiveness of the risk monitoring process and strategy over time	214	3.86	1.086
objectives and then develop strategies to mitigate or avoid those risks	209	3.85	1.119
Norrsken House project use risk monitoring as essential aspect of project management, and plays a critical role in the success	214	3.83	1.096
Risk monitoring aims to identify, assess, and prioritize potential risks at Norrsken House project	214	3.99	.816
Valid N (listwise)			

Source: Primary Data (2023)

From the findings show that "Trends are analyzed, reported periodically and risk is closed systematically as per the procedure at Norrsken House project" with mean of 4.20 and .933 standard deviation. This implies that that the respondents strongly agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

The second statement shows that "Risk mitigation status (success/failure) is reported periodically and critical risks are reported to the top management at Norrsken House project" where the respondents agreed with a mean of 4.22 and standard deviation of .941 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Third statement shows that "Norrsken House project identify and assess current risks, prepare response plans, track the occurrence and evolution of risk, identify new contingencies" where the respondents agreed with a mean of 3.86 and standard deviation of 1.086 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Forth statement shows that "Norrsken House project evaluates the quality and effectiveness of the risk monitoring process and strategy over time" where the respondents agreed with a mean of 3.86 and standard deviation of 1.086 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Fith statement shows that “Objectives and then develop strategies to mitigate or avoid those risks” where the respondents agreed with a mean of 3.85 and standard deviation of 1.119 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Six statement shows that “Norrsken House project use risk monitoring as essential aspect of project management, and plays a critical role in the success” where the respondents agreed with a mean of 3.83 and standard deviation of 1.096 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

Seventh statement shows that “Risk monitoring aims to identify, assess, and prioritize potential risks at Norrsken House project” where the respondents agreed with a mean of 3.99 and standard deviation of .816 and this indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement. This indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement.

5. Conclusions

Hence, in the literature review the project success was reviewed thoroughly from the previous literature and all different measures of project success implementation were mentioned generally in all types of projects. This gave us the ability to proceed further as it was clear what is meant by project success implementation from all the aspects. Additionally, the risk management was reviewed holistically from the previous literature. Then while reviewing the risk management model, various models and standards were found which are used in different projects and region. In all the models the three main processes were mentioned, risk identification, risk analysis and risk response. This implies the importance of these three processes which were included in this study model with additional processes risk monitoring and controlling and project success implementation.

It was found that there is a significant relationship between project success and risk management, and this relationship was found positive the more the risk management the more the project success implementation. This study model can be applied in any type of construction projects as well as any other project to manage the risks in the project. As per the findings of this study the most important process is risk identification and monitoring and controlling. The is concurrent with the literature the suggest that risk identification is very crucial in the risk management process, as it is the first step. In risk identification all the stakeholders should be involved because there are some risks which cannot be important or can be identified by one party but it can be identified and crucial for the other party as well as crucial for the entire project success implementation. Therefore, brainstorming, lessons learned from past similar projects, check lists and other tools and techniques are used to identify risks. In a very simple way if risk factors are not identified the further process cannot apply such as risk assessment and response. The second strong correlation was found with the risk monitoring and controlling, in risk monitoring and contorting all the processes are monitoring and redone again periodically as shown this study model. Risk is identified throughout the project life cycle this is part of the monitoring and controlling. Risk assessment and risk response are monitored and tackled during risk monitoring and controlling. Risk management must be applied in the construction projects as it has a huge influence in exploiting project opportunities and avoid as well as manage the threat.

6. Recommendations

The biggest dilemma for this study was to get the respondents for the questionnaire. Therefore, it is recommended to conduct more studies in the construction projects targeting bigger number of population. The study was applied in construction industry in general, it was not made specific for any party such as focusing only on client side, contractor or consultant. It is recommended to carry out similar studies and focusing in only one part then we can predict which party in more aware about the risk management and it is influence on project success implementation. This can be done by adding a question in the questionnaire in the demographic part which should be about the nature of the organization whether it is client, contractor or consultant. It is also recommended to carry out qualitative studies on risk management and project success implementation. In qualitative study using interview is more effective to collect data with good quality as the person is in front of you and of course he will give the full attention to the researcher to provide the answers and information the researcher

requires. Speaking about the quality it is important to mention that in the survey strategy the limitation is to find the respondents and once found most of them don't answer or answer but not focused or interested. Additionally, is qualitative approach the case studies can be used to focus in some real life data or to use focused group to get more ideas and insights about the project management.

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