ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

SCHOOL OF COMMERCE

"The Effect of risk management on project performance-the case of Dot Ethiopia in Community Development work"

By

Mesgana Manchlot Mammo

A Thesis submitted to Addis Ababa University College of Business and Economics School of Commerce graduate studies in partial fulfillment of the requirements of Master of Art in Project Management.

Advisor:

Fesseha Afework (Professor)

June, 2022

Addis Ababa, Ethiopia

"THE EFFECT OF RISK MANAGEMENT ON PROJECT PERFORMANCE-THE CASE OF DOT ETHIOPIA IN COMMUNITY DEVELOPMENT WORK"

By

MESGANA MANCHLOT MAMMO

A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS SCHOOL OF COMMERCE GRADUATE STUDIES IN PARTIAL FULFILLMENT OF REQUIREMENTS OF MASTER OF ART IN PROJECT MANAGEMENT.

ADVISOR

FESSEHA AFEWORK (PROFESSOR)

JUNE, 2022

ADDIS ABABA, ETHIOPIA

CERTIFICATION

This is to certify that Mesgana Manchlot Mammo has carried out his research work on the topic entitled "The Effect of risk management on project performance-the case of Dot Ethiopia in Community Development work". The study is an original work and is suitable for the submission for reward of MA Degree in Project Management.

Name of Advisor:	Signature:	Date:
Fesseha Afework (Professor)	_____	_____

APPROVED BY BOARD OF EXAMINERS

As members of the board of examining of the final Masters of Art thesis open defense, we certify that we have read and evaluated the Thesis prepared by Mesgana Manchlot Mammo under the title "The Effect of risk management on project performance-the case of Dot Ethiopia in Community Development work" we recommend that this Thesis be accepted as satisfying the thesis requirement for the Degree of Master of Art in Project Management.

Name of Advisor:	Signature:	Date:
Fesseha Gebreanania (Professor)	_____	_____
_____	_____	_____
External Examiner	Signature	Date
_____	_____	_____
Internal Examiner	Signature	Date
_____	_____	_____
Advisor	Signature	Date

DECLARATION

I, Mesgana Manchlot Mammo, hereby declare that this Thesis is my original work and has never been presented in any other institution. To the best of my knowledge and belief, I also declare that any information used has been duly acknowledged.

Name: Mesgana Manchlot Mammo

Signature: _____

Date: _____

ACKNOWLEDGMENTS

No words could properly acknowledge the amount of gratitude I owe for so many people. First and for most I would like to express my gratitude to the almighty God. Secondly, I would like to extend my warmest appreciation and gratitude for my Advisor Fesseha Afework (Professor) for his invaluable comments, criticism and professional advice in my research work.

I also owe an intellectual debt to all of my instructors during my stay in Addis Ababa University School of Commerce. Next, I would like to extend my special thanks to all my family members who has supported me and encouraged me in my endeavors in life especially my brother Nathanael Manchlot for his kind support and encouragement for the success of my work and my classmate Surafel T. for being a continuous inspiration throughout my study and I also want to extend my deepest gratitude to my friends and colleges and I am indebted to you all. Finally, I want to extend my gratitude to Dot Ethiopia officers and Managers with whom I had interaction with on the course of my research and made a contribution to this study.

Table of Contents

LIST OF ABBREVIATIONS/ACRONYMS

BDS	Business Development Service
CSA	Central Statistics Agency
EBG	Entrepreneurship and Business Growth
EYE	Employability Youth in Ethiopia
ICT	Information Communication Technology
WEDP	Women Entrepreneurs Development Project
DOT	Digital Opportunity Trust
NGOs	Non-Governmental Organizations
SPSS	Statistical Package for the Social Sciences
PMMM/PM3	Project Management Maturity Model

LIST OF TABLES

LIST OF FIGURES

Abstract

Effective risk management strategies allow you to identify your project's strengths, weaknesses, opportunities and threats. By planning for unexpected events, you can be ready to respond if they arise. To ensure your project's success, define how you will handle potential risks so you can identify, mitigate or avoid problems when you need to do. This research focused on the Effect of Risk Management on project performance in the case of Dot Ethiopia, Addis Ababa. And explore the organization's risk management practices influencing the project success on community development work. The study assessed the role of effective risk management, independent risk management unit and good risk management culture on the performance of projects in Dot Ethiopia. For this research explanatory and descriptive research design methods were used. The total sample sizes of the study were 30 of Dot's employees and out 30, 25 of the questionaries returned correctly. The dependent variable of this research was project performance that affect the performance of Dot such as, project risk management planning, risk awareness, risk management culture and risk identification as independent variables. In this study descriptive, correlation and Binary logistic regression methods were used for data analyses. Based on the result of the cross-tabulation analysis, project performance was found to be significantly associated with project risk management planning and risk management culture. Whereas risk awareness and risk identification do not have direct association with project performance and we do not include it the binary logistic regression model. The study recommended, the organization, managerial team and other involved stakeholders should consider the identified major factors while implementing projects' that will impact project success of organization the most. It is also recommended that creating a risk management culture which will help the projects that are implemented in terms of risk awareness, identifying risk and on time responses for the risks' appeared will secure their sustenance for in the future. Risk management unit service such as, Training on risk awareness, identifying and controlling risk, managing the risk by using the risk management practice such as avoid the risk, accept the risk, transfer the risk and mitigate the risk have significant impact on the performance of project and project success.

Keywords: *Risk Management, Project Management, Project Performance, Project Success, Community Development Work.*

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the study

For humanitarian organizations, the presence of risk in the operating environment can force difficult trade-offs between the needs of people they are trying to serve and the need to mitigate potential harm to their personnel, resources, and reputation. Whether or not the risks to humanitarians have objectively increased in recent years (and there is evidence that they have), more to the point is how the organizations perceive their risk and how these perceptions have affected their work by dint of new policies and practices. Unforeseen threats can have a catastrophic impact on your business if you don't carefully plan and manage potential risks. From financial to operational to new global health and safety risks, many companies may find themselves wishing to avoid every type of risk out there. Yet, not all risks are created equal – some are worth the reward and are essential to business growth. The trouble is, how do you prepare for the countless number of threats all with varying scope and severity? Following a standardized process for assessing, managing, and monitoring risk can help. Not only are following these three risk management techniques great for managing all your potential threats, but they are also valuable for creating alternative solutions – ones where your organization can reap the rewards of staying ahead of carefully assessed risks. In any given project both threats and opportunities are usually involved, and both should be managed. In order for the project manager (PM) to set priorities, allocate resources and implement actions for any risks the project might face the PM must have a risk management strategy. According to Humanitarian Outcomes (February, 2016) "Focusing on a participant-sample group of 14 major international NGOs, the study analyzes the current approaches to risk in humanitarian action through a systematic review of 240 relevant policy documents, interviews with 96 key informants, and a web-based survey of 398 humanitarian practitioners." The findings reveal an international NGO sector whose major operators perceive a heightened level of risk, particularly manifest in the same, roughly half-dozen extreme environments: Afghanistan, Central African Republic, Iraq/Syria region, Somalia, South Sudan, and Yemen. These conflict-driven emergencies with highly politicized international dimensions tend to involve multiple types of risks—violence, corruption, diversion, and others—which can also be interlinked in complex ways.

Therefore, it is important for organizations to establish a consistent approach to risk management with uniform risk assessment methodologies. Ensuring all employees have risk awareness will involve identifying, assessing, monitoring, and mitigating risks in a systematic manner. Identifying, evaluating and understanding risks is a very important aspect of project management. Projects can suffer dreadful consequences if risks are not appropriately managed. In order for PMs to properly manage risks they have to create a risk awareness culture amongst their colleagues.

Ethiopia's 2009 Proclamation number 621/2009 has established determined permissible issue areas and activities, dictated organizational structures, and announced new NGO monitoring mechanisms. Most importantly, its re-classified NGOs working in Ethiopia into three categories.

Type 1- Ethiopian charities and societies,

Type 2 - Ethiopian resident charities and societies, and

Type 3 - foreign charities and societies.

To implement the legislation, the government has established Charities and Societies Agency (CSA) having three objectives –

1) to enable and encourage Charities and Societies to develop and achieve their purposes in accordance with the law;

2) to create a situation in which the operation of Charities and Societies is transparent and accountable;

3) to ensure that Charities and Societies operate legally.

However, there is no scientific evidence informing the risk management level and a road map to improve the project performance of NGOs in Ethiopia. Hence, this project work will focus on using project risk management model for assessing the project performance practices and project managers of NGOs in Ethiopia. Good organizational risk awareness culture relies on the message being conveyed and enforced from both the top down and bottom up. Employees should participate and be aware of how their role helps to achieve the project objectives. Management should lead by example and act in ways deemed to

be ethical and held accountable for the times when they don't. The findings will provide insight to improve the risk management of projects and increase the project performance success and recommendations to improve the existing practices of NGOs.

1.2. Statement of the problem

The fact that projects involve heavy funding is an indication that risks are involved in whatever project is undertaken (Zhu & Mostafavi,2017). Risks need to be factored in any project planning as this could be the surest way of avoiding total loss in case of failure or that risk coming to pass (Gruden & Stare, 2018). Initial project risk management strategies, including avoidance and reduction strategies, can be interchanged but require strict calculations with forecasts to aid in mitigation processes. These two strategies have been tested successfully on various NGOs' specific projects (Naeem, Khanzada, Mubashir & Sohail, 2018). NGOs have struggled to have well-performing projects even though they have always shown tremendous or colorful initiation or commencement (Njeri & Were, 2017). In any given project both threats and opportunities are usually involved, and both should be managed. In order for the project manager (PM) to set priorities, allocate resources and implement actions for any risks the project might face the PM must have a risk management strategy. Therefore, it is important for organizations to establish a consistent approach to risk management with uniform risk assessment methodologies. Ensuring all employees have risk awareness will involve identifying, assessing, monitoring, and mitigating risks in a systematic manner.

Identifying, evaluating and understanding risks is a very important aspect of project management. Projects can suffer dreadful consequences if risks are not appropriately managed. In order for PMs to properly manage risks they have to create a risk awareness culture amongst their colleagues.

Risk awareness is the acknowledgement of risks and the active process of reducing or eliminating those risks. Risk awareness may also be defined as a capability of the organization to recognize risks before they threaten, mitigate them when they arise, and recover from the damages they may cause. Risk identification, assessment, monitoring, and mitigation is vital to delivering timely risk intelligence. It is this risk intelligence that can be fed back into the organization to drive important decisions, improve performance, and reduce losses.

To raise risk awareness in an organization, one must create a risk awareness culture. By creating this culture, one could improve and showcase appreciation for the value of managing risk, improvements in safety, lower claims, reduced cost of risk, and better financial results.

Methods of creating a risk awareness culture

1. Know the organization. It is fundamental to understand the dynamics of the project (how it works, what it needs to operate, and the obstacles it faces).
2. Turn colleagues into risk managers.
3. Communicate wins and losses.

Misconceptions About Risk

A. Thinking that someone else will know better leads to decreased responsibility.
B. Thinking that "it is not in my role description."
C. Thinking that "it is the manager's role to manage risks."
D. Lack of ability to apprehend the real likelihood of events.
E. Not accounting for differences in personal risk tolerance levels.

Good organizational risk awareness culture relies on the message being conveyed and enforced from both the top down and bottom up. Employees should participate and be aware of how their role helps to achieve the project objectives. Management should lead by example and act in ways deemed to be ethical and held accountable for the times when they don't.

However, there is no scientific evidence informing the risk management level and a road map to improve the project performance of NGOs in Ethiopia. Hence, this project work will focus on The Effect of risk management on project performance-the case of Dot Ethiopia in Community Development work using project risk management model for assessing the project performance practices and project managers of NGOs in Ethiopia.

1.3. Research questions

The research will Attempt to answer the following Questions

1. What types of risks appear and the types of cases exposed to the risks?
2. What is the effect risk management on project performance?
3. What are the challenges of handling the risks?

1.4. Objectives of the study

1.4.1. General objectives

The study examines The Effect of risk management on project performance-the case of Dot Ethiopia in Community Development work.

1.4.2. Specific objectives

More specifically the study aspires to:

I. Assess the type of risks appear and the types of cases exposed to those risks in the project performance of community development work in Dot Ethiopia.
II. To determine the effects of risk management on the performance of a project that helps in the success of projects in Dot Ethiopia and
III. To understand the challenges of handling the risks in a project and Dot Ethiopia's method of overcoming those challenges.

1.5. Significance of the Study

This study would be very beneficial to several stakeholders including Dot Ethiopia, other non-governmental organizations, donor agencies, project managers and project management students, future researchers and academicians. For the management of Dot Ethiopia, the findings of this study would be important in understanding of the effect of risk management on project performance-the case of Dot Ethiopia in Community Development work such as the several projects currently active in Dot Ethiopia, hence it

will inform them on necessary alleviation strategies to handle on their effects. It will inform the organization future planning and strategy development as far as the operations of the NGO are concerned.

A project risk management will be a roadmap showing the organization how it can systematically move to more mature levels of performance and do it in more effective and efficient ways. After an objective assessment, Dot Ethiopia will understand its project risk management, identify strengths & weaknesses, can set its goals for increasing the capability of its processes; track progress against its project management improvement plan; build a culture of project risk management excellence; and demonstrate better contribution at local, national and international level partner organizations. Hence, there will be a trust among community, government and NGOs.

Findings and recommendations will help developing assessment approach and frameworks suitable to NGO sector on the project success. It will also help the various donors understand the various factors affecting successful implementation of projects in Ethiopia. The donors using the report will be able to know the various areas that they should address during the monitoring and evaluation of projects.

To future researchers and academicians, the study would be important in the suggestion of areas requiring further research to build on the topic of factors affecting project implementation of non-governmental projects.

1.6. Scop of the study

The scope of the research is to explore and investigate the effect of risk management on project performance-the case of Dot Ethiopia in Community Development work such as the several projects currently active in Dot Ethiopia. Amongst them are the Entrepreneurship and Business Growth Project (EBG), Women Entrepreneurs Development Project (WEDP) and Employability Youth in Ethiopia (EYE). Through the Entrepreneurship and Business Growth (EBG) project DOT uses multipronged strategies such as internships, business training, local capacity development and business development services to facilitate youth education. The study is limited to the specified organization and the location will also be limited in the head quarter of the organization located at

Addis Ababa, Bole sub city woreda 04 house no -378. The findings out of this study might be generalized only to the organization and might not apply to other international NGOs in Ethiopia because of the uniqueness of projects and the varied area of project implementation. Larger research would be more appropriate for generalization of the findings to the whole NGO sector in Ethiopia.

1.7. Limitation of the Study

Some project employees who are new to the organization lack comprehensive understanding of the organizations' project management system. Some project managers who had been managing the project from the start to the closure level left the organizations due to project completion that limits detail data collection; however, this gap was covered by approaching program managers who are permanent staff of the organization.

There were no previous relevant studies in the research area that made the research unable to compare results. There are no specific frameworks developed to assess NGOs that forces this research to use generic PMMM. This study requires a substantial amount of time and effort from participating organizations in which all respondents may not provide accurate information. To minimize it, different mechanisms has been applied including asking appropriate date and time, and explaining the relevance of the research findings to the respondent organization.

1.8. Organization of the Study

This study has five chapters. The first chapter includes the introductory part with the background of the study, a background of the project, statement of the problem, research objective, research questions, and significance of the study, limitation of the study, and scope and delimitations of the study. Chapter two is composed of the review of various books and journal articles to base the study on existing literature. This chapter discusses relevant issues to build an understanding of the subject matter. Chapter three contains the details of the research methodology to gather and analyze data from which findings are drawn. Chapter four contains the analysis of the data the last

chapter will discuss the summary, conclusion, and recommendation. The references, questionnaire, other documents will be in the appendix.

Chapter two

2.1. Literature Review

Introduction

As a component, the review of related literature has four major sections, the first part begins with conceptual literature like defining what Risk is in general and Risk management. The second part discusses meaning and definition of Project performance, the third part empirical literature review based on previous research evidence regarding the Effect of risk management on project performance and the Fourth part synthesizing the reviewed literature and develop conceptual framework for the purpose of the study analysis.

2.2. Theoretical Literature

2.2.1 Definition of Risk and Risk management

Project: is a temporary endeavor undertaken to create a unique product or service" (PMI 2017 PMBOK guide).

Project Management: project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements (PMI, 2017).

NGOs: Is an organization that is active in humanitarian, educational, health care, public policy, social, human rights, environmental, and other areas to effect changes according to their objectives.

Risk implies future uncertainty about deviation from expected earnings or expected outcome. Risk measures the uncertainty that an investor is willing to take to realize a gain from an investment. Risks are of different types and originate from different situations. We have liquidity risk,

sovereign risk, insurance risk, business risk, default risk, etc. Various risks originate due to the uncertainty arising out of various factors that influence an investment or a situation.

2.2.1.1 Project risk management

Risk: is an uncertain event or condition that, if it occurs, has an effect on at least one project objective. According to Forsberg et.al (2005) project, risk management is the art and means of identifying, analyzing and responding to risk events in the life cycle of a project. Risk management is important when overall stakes are high and a great deal of uncertainty exists.

The very purpose of project risk management is to minimize the risks of not achieving the objectives of the project and the stakeholders with an interest in it and to identify and take advantage of opportunities. In particular, risk management assists project managers in setting priorities, allocating resources and implementing actions and processes that reduce the risk of the project not achieving its objectives. The processes are according to (PMI, 2017)

I. Plan Risk Management: it's a process of how to conduct risk management activities for the project.
II. Identify Risks: identifying overall risks and documenting their characteristics.
III. Perform Qualitative Risk Analysis: prioritizing individual risks for further analysis by assessing their probability of occurrence, impact and their characteristics.
IV. Perform Quantitative Risk Analysis: numerically analyzing the combined effect of identified individual project risks and other sources of uncertainty on overall project objectives.
V. Plan Risk Responses: developing options, selecting strategies, and agreeing on actions to address overall project risk exposure, as well as to treat individual project risks.
VI. Implement Risk Responses: implementing agreed-upon risk response plans.
VII. Monitor Risks: monitoring the implementation of agreed-upon risk response plans, tracking identified risks, identifying and analyzing new risks, and evaluating risk process effectiveness throughout the project.

2.2.1.2 Defining Project Success

According to the PMBOK Guide, since projects are temporary in nature, the success of the project should be measured in terms of completing the project within the constraints of scope, time, cost, quality, resources, and risk as approved between the project managers and senior management (PMBOK Guide). For a project to be successful, it is essential to understand the project requirements right from the start and go for project planning which provides the right direction to project managers and their teams and execute the project accordingly (Nader Sh. Kandelousi, Ooi. J., Abdollahi, 2011). A successful project is one that is delivered on time and managed within the budget. Toor and Ogunlana (2008) categorized the critical success factors for large construction projects based on the perception of project professionals into four main groups: comprehension, competence, commitment, and communication. Cserháti and Szabó (2014) defined success criteria and factors of organizational event projects. The study revealed that success factors can be classified into five groups, namely, project management processes, project resources, project team, organizational culture, and communication and co-operation. They also analyzed the relationship between these factors and success criteria. All these studies attempt to classify the success factors either by extending the work of previous researchers or by developing a new framework which is specific to their own research (Costantino et al. 2015). However, most of these studies focus on identifying success factors in one specific sector, and the role of the sector as a project contextual variable is overlooked. There is a knowledge gap in the project management literature regarding what success factors are most influential in a specific sectoral context.

2.2.1.3 Defining Project Performance

Identifying the critical determinants of project performance is crucial, but few studies test how variables in projects' initiation and planning phases affect the outcomes of those projects.

Project performance management is the process of creating, implementing, and managing projects that contribute to the performance of an organization and its strategy. Rather than focusing on task execution, project performance management is about the bigger picture. Projects can experience dynamic change, which then result in overspending, delays in on-time delivery, reduced quality,

and other such failings in achieving their intended objectives. Such failures can occur in any project type, sector, or industry. For most organizations, project funding is not unlimited, which creates a very real constraint on the project that is difficult to overcome when cost overruns occur. Projects are often created in response to a specific time-sensitive organizational need; where there is a hard deadline for the delivery of a product or opening of a building, this may be more important and critical to the organization than cost. If a project is performing well, reviews may be conducted at regular intervals as a preventive measure. Identifying risks and performing qualitative and quantitative risk analysis and developing risk management strategies are key to successful project outcomes. These activities can require a lot of time and considerable coordination to complete because they can range from simple to sophisticated and complex depending on project, scope, size, and a range of other factors. The more risk points or the greater the consequences, the more planning is required.

The key to having great project outcomes is to first recognize from the project ‘s inception because careful project planning is a critical component to reducing risks and increasing success. It may seem more time consuming up front, but will save substantial undue stress, time and costly rework later. Project planning with precision can be an iterative process, but it’s worth it to measure twice and cut once, when compared to the risks associated with poor planning. The important point here is to remember that planning is vital to reducing project risks, which in turn increases the likelihood of a successful project.

Finally, risk is present at all levels of activity. There are risks that may affect the organization as a whole such as risks to the organization’s reputation. There are risks that may affect the health and safety of staff, financial activities, service delivery activities, or risks that affect more than one activity. There are also risks specific to each and every project. What this means is that everyone in an organization bears some responsibility for managing risk.

2.2.1.4 Why do you need to manage risk?

Risk management is good practice. It helps an organization to make more efficient use of resources, increase performance and minimize harm to staff and beneficiaries.

2.2.1.5 Benefits of Risks Management

As well as contributing to compliance and good governance, effective risk management can contribute to strategic and business planning and the general running (operational activities) of an organization. It creates confidence that your organization can deliver the desired outcomes, manage threats to an acceptable degree, and make informed decision about opportunities.
Some benefits of risk management are that it helps to:

- Reduce the likelihood of potentially costly surprises;
- Prepare for challenging events and improve overall resilience;
- Improve the quality of decision-making at all levels;
- Enable effective execution of decisions;
- Improve planning processes;
- Priorities resource;
- Increase performance;
- Establish clear purpose, roles and accomplishments for all staff; and
- Improve stakeholder confidence in the organization.

2.3. Empirical Literature

2.3.1. Project Management Knowledge Areas

Project management body of knowledge describes that the overall knowledge with in the profession of project management and includes tools and techniques used to manage project management process and practices. There are ten knowledge areas according to the PMBOK guide (PMI, 2017) as described below.

1. Project integration management: Project integration management includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the project management process groups.

2. Project scope management: Project scope management includes the processes required to ensure that the project includes all the work required and to complete the project successfully.

Managing the project scope is primarily concerned with defining and controlling what is and is not included in the project.

3. Project time management: Project time management includes the processes required to manage the timely completion of the project. Plan schedule, define and sequence activity, resource and duration estimation, develop and control schedule are the processes required in project time management.

4. Project cost management: Project cost management includes the processes involved in planning, budgeting, financing, funding, managing, and controlling costs so that the project can be completed within the approved budget.

5. Project quality management: Project quality management includes the process and activities of the performing organization that determine quality polices, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. It works to ensure that the project requirements, including product requirements, are met and validated.

6. Project resource management: Project resource management includes the processes that organize, manage, and lead the project team and other resources. The project team is comprised of the people with assigned roles and responsibilities for completing the project.

7. Project communications management: Project communications management includes the processes required to ensure timely and appropriate planning, collection, creation and distribution, storage, retrieval, management, control, monitoring and the ultimate disposition of project information.

8. Project risk management: Project risk management includes the processes of conducting risk management planning, identification, response planning, and controlling risk on a project. The objectives of project management are to increase the likelihood and impact of positive events, and decrease the likelihood and impact of negative events in the project.

9. Project procurement management: Project procurement management includes the processes necessary to purchase or acquire products, services, or results needed from outside to the project team. The organization can be buyer or seller of the products, services, or results of a project. It

includes the contract management and change control processes required to develop and administer contracts or purchase orders issued by authorized project team members.

10. Project stakeholder management: It includes the processes required to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.

The vital issue in project performance then becomes how risk management should be handled. As Schneicker (2018) pointed out in the USA, any NGO starting a project has to consider all factors, including its size, the expected impact on the community, and the project's cost, before undertaking it, because if the risks involved are high, they cause financial losses and in worst case scenario a failed NGO. Risks represent obstacles that can derail any set of plans leading to the termination or partial completion of the whole project (Franz & Messner, 2019). Through careful mitigation processes, it becomes possible to offset the impending effects of such risks and this constitutes the risk management process as witnessed in projects across the global, regional and local scenes. As pointed out by Pratano (2018), the expected returns when measured against the inputs of a project constitute the performance of such project although this is viewed differently from the shareholders' view as well as stakeholders' view in which the former concerns financial benefits whereas the former is concerned with societal impact of the project as the key indicator of performance. According to "*International Academic Journal of Information Sciences and Project Management | Volume 3, Issue 6, pp. 483- 498*" In a study on humanitarian NGOs across Europe and the United States of America, Schneiker (2018) seeks to establish the risk averse measures that ensure delivery of services during emergencies. The need to remain active under all circumstances means that such NGOs must have systems that mitigate against all forms of risks. Using a sample of 54 such humanitarian NGOs, Schneiker surveys these NGOs seeking to find out the risk management systems in place and proves that various barriers exist in implementing such risk management systems. In conclusion, Schneiker observes that processes, policies and structures require the success of risk management systems.

Similarly, Mojtahedi and Oo (2017) consider risk management and stakeholders in managing early detection of disasters in Hong Kong. The scholars hold that proactivity in management systems is the key to minimize those risks that cannot be avoided entirely or shared. They point towards

power and management reactive as well as proactive measures that would minimize such disasters. In surveying disaster management organizations, Mojtahedi and Oo conclude that policy makers with disaster mitigation measures will balance resources to cater to all forms of risk.

In terms of social performance, Pratano (2018) postulates that it is more objective to use social project performance measures rather than financial measures such as: return on investment, actual cost, planned value, and earned value; these measures are difficult to determine when assessing projects in the NGO sector. Peral, Maté and Marco (2017) recommend using milestone completion on time, stakeholder perception of value, stakeholder participation and business performance impact of the project as the best measurements; strategy planning is recommended to plan and align project measures to organizations strategic (Nederhand & Klijn, 2019; Peral et al., 2017; Franz & Messner, 2019).

Risk avoidance strategies are calculated measures meant to deflect off as much risk as possible in case of occurrence (Ahmadi, Behzadian, Ardeshir & Kapelan, 2017). As is commonly referred to in daily lives, avoiding risk is being aware of where risks exist and taking the best steps to take out the chance of encountering the risks.

Risk reduction is another risk management strategy, as pointed out by Srivanas (2019). Otherwise known as mitigation strategy, this is a measure undertaken to reduce the value loss, such as the financial losses incurred. The strategy works to minimize the number of losses if that hazard occurs in the future. Risk sharing on its part is also referred to as the spread of risks in a pre-calculated formula amongst various parties but normally between a firm and its insurance partners (Ghadge, Dani, Ojha & Caldwell, 2017). The common measures or indicators of risk sharing include transfer, outsourcing and most likely insuring. Risk retention is the calculated strategy of reserving funds to offset a risk when and if it occurs, a saving fund in the form of self-insurance with the possibility of covering many forecast risks for the entity. The risk is not transferred to second parties nor fund hedging (Aiyer, Panigrahi & Das 2018).

Project management practices, when applied properly, lead to an increase in the probability of project success (Thomas & Mullaly, 2008). However, each organization must assess the applicability of each practice because their use may not have the same effect for different

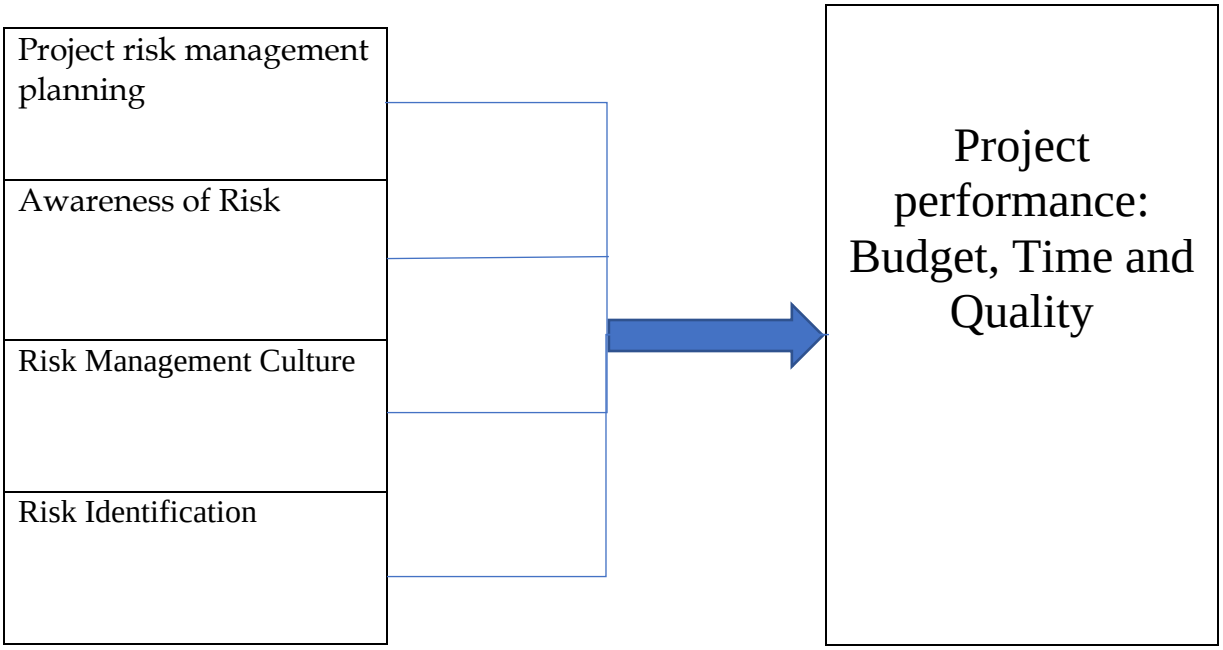
organizations. Project management, therefore, can be implemented by means of tools and techniques, which should be tailored to the organization's context.

The researcher tries to see the 10 knowledge areas According to Marchewka (2015), those considered most important are the scope, schedule, cost, and quality management areas, which correspond to the main objectives of project management.

Risk identification and risk response planning influence the process performance and the success of projects. Risk identification has the highest positive influence on project performance, followed closely by risk response.

2.4. Conceptual Framework

Independent Variable Dependent Variable



Conceptual Formwork of the Study (own model)

The conceptual framework looked at how various factors under the study influence the performance of Dot Ethiopia projects implemented at different locations of Ethiopia. The conceptual framework of this study was based on four independent variables and one dependent variable as represented diagrammatically in the above figure. The study uses

a conceptual framework in order to answer the research questions. The independent variables are: Project planning, Awareness of risk, Risk management culture, Risk identification While dependent variable is the project success measured by schedule, cost and quality. It was hypothesized that these independent variables will have significant influence on project success. Structural representation of this model is illustrated in figure.

Chapter three

Research methodology

3.1. Introduction

This part will attempt to describe the methods through which the objectives of the study are answered. Accordingly, it states about the research approach, target population and sampling procedures, data gathering methods and instruments, data analysis, validity and reliability of this study,

3.2. Research Design

The research design refers to the overall strategy that we choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring we will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. The research used a quantitative approach.

This study adopted explanatory and descriptive research design. According to Cooper and Schindler (2003), a descriptive study is concerned with finding out the what, where and how of a phenomenon. Explanatory research design has been chosen because this study seeks to establish factors affecting successful implementation of projects in Ethiopia in-the case of Dot Ethiopia projects Addis Ababa.

3.3. Target population and Sampling technique

A research population is generally a large collection of individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done. The target population of this study includes staffs who are currently working with projects implemented at Dot Ethiopia. The researcher uses the census survey and evaluate the data with the primary source. Although 30 employees work in the organization, who has direct involvement with the organization's work and are fit for this study. The questionnaires are filled out by 25 of them out of 30 considering all and finally the study have collected data of 25 employees which 5 of the employees couldn't succeed.

3.3.1. Data collection

While conducting the study, the researcher used primary data types. Primary data collected by distributing all the questionnaires to the employees, distributed to them via email, the researcher also contacted with the employees who used to work there for their insights of the projects and some board members too who were on the projects. Collecting data for this study were a challenge, some of the workers are new and understanding the new terms in the question were hard for them. The researcher used explanation to get them into an understanding of the terms.

3.3.2. Data analysis

The questionnaire is composed of close-ended and Likert type scale questions that is distributed to the target population and collected back. Then the data collected from the questionnaires were logged to the software, SPSS and analyzed. After Analysis using descriptive statistics, the findings will be presented in frequency, mean and charts and further explained in detail along with data gathered from interviews and reviewing document project risk management practices. Afterward, summary, conclusions and recommendations will be made.

3.4. Methods of Data Collections

In order to assess the Effect of risk management on project performance is covered by the study by means of structured questionnaire and of insights interview.

Details of the technique described as follows:

Interview- to get a reliable information for their insights of the projects was conducted with interview from officers and head of enterprises.

Questionnaire- in order to give freedom for selected respondents to describe their feelings, data was collected by making the use of close ended questionnaires.

3.5. Validity

Validity concerns the extent to which a measurement actually measures those feature the investigator wishes to measure and provided information that is relevant to the question being asked. Validity was ensured by making sure the sampling techniques were free from bias by giving each subject an equal opportunity to score. The questionnaires are comprehensive to cover all the variables being measured. Comparison is done between the conceptual framework (own variables) and theoretical framework (what has been said by others) for validation.

3.6. Reliability

Reliability concerns the extent to which measurement is repeatable and consistent. The reliability of the questionnaire is determined using a pilot study. First, the researcher give the respondents the query as it is and used interview to each question and they again gave their response and the response will be measured its consistence and this is the way the reliability of the study is ensured. The reliability of the data has been checked by Cronbach alpha. “According to George and Mallery (2003) provide the following rule when Reliability is greater than 0.9 it is Excellent, when it is between 0.9 and 0.8 it is Good, if it is between 0.8-0.7 is Acceptable, when it is between 0.7-0.6 Questionable, if it is between 0.6-0.5 Poor and bellow .5 Unacceptable."

Reliability Statistics

Cronbach's Alpha	N of Items
.860	28

Reliability of the study

3.7. Ethical Considerations and Instruments

The respondents were approached after the purpose of the study has been explained in detail so that they can be comfortable to give their response in time. All participants were asked to voluntarily participate in the data collection by collaborating in filling the questionnaire and responding. By doing so, the respondents are free of any harm and more importantly their views are very confidential and anonymous. Moreover, the questionnaire does not have any connection with the respondents since the research is done for academic purpose.

A pilot test was conducted to confirm the validity of the assessment method. Some clarification sentences were included in the survey questionnaire based on the pilot test findings. The data were collected from project coordinators and program managers of each project in the months of April and May 2022 through the survey questionnaire and face to face interviews.

The GDPR (General Data Protection Regulation) that set a global data protection standard was applied. As part of research ethics and GDPR, any information collected from the organization will not be given to the third party except by the written consent of respondents at individual and organizational level.

Chapter Four

DATA ANALYSIS AND PRESENTATIONS OF RESULTS

4.1. Introduction

This chapter displays the discussion of the final results and the process through which the results were obtained. The data was collected through questionnaires as the main data collection instrument. The purpose of the data analysis is to determine the factors that affects successful implementation of non-governmental organization projects at Dot Ethiopia. The research questions were: -

1. What types of risks appear and the types of cases exposed to the risks?
2. What is the effect of risk management on project performance?
3. What are the challenges of handling the risks?

4.2. Response rate

The primary data that was collected through the questionnaire consists of 32 questions distributed to 30 individuals and a semi-structured interview with the program officer. Out of the 30 individuals, 25 of them properly filled and returned.

4.3. General information of the respondents

The general information consists the age, sex, educational level, occupational level, years of experience in the organization. The responses of the respondents are presented below.

4.3.1. Age

As presented in the chart below among the 26 respondents 15.4% (4) of the respondents were the age of 27, 7.7% (8) of the respondents were between the age of 25, 27-29 and 29-33, 3.8% (7) of the respondents were between the ages of 25-27 and 33-52.

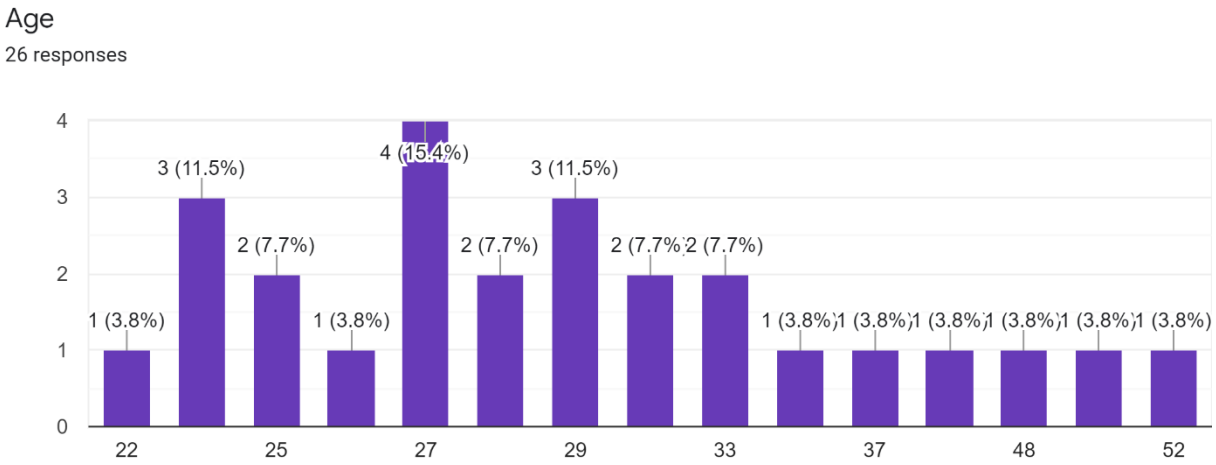


Figure.4.1 respondent's age

4.3.2. Gender

Among the respondents 52% (13) were male and 48% (12) were female. This can show us equal number of respondents.

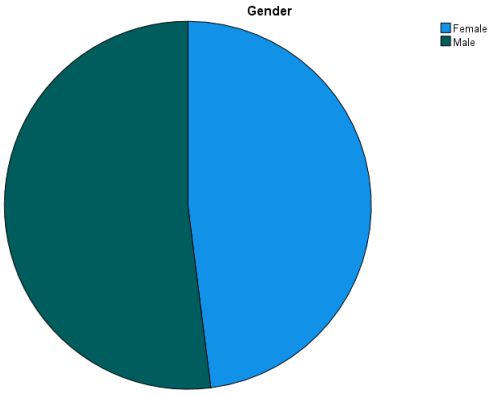


Figure.4.2 Gender distribution

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	12	48.0	48.0	48.0
	Male	13	52.0	52.0	100.0
	Total	25	100.0	100.0	

Table.4.2 Gender distribution

4.3.3. Educational level

From the chart below we can see the educational level of the respondents. There was no respondent with a Ph.D. degree, 32% (8) of the respondents have an MA degree, 60% (15) of the respondents have a BA/BSC degree and 8% (2) of the respondents have a diploma.

Educational Background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	2	8.0	8.0	8.0
	First Degree	15	60.0	60.0	68.0
	Second Degree	8	32.0	32.0	100.0
	Total	25	100.0	100.0	

Table.4.3 Educational background

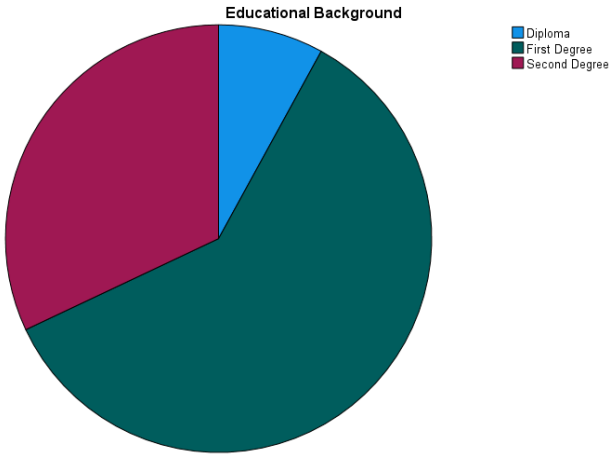


Figure.4.3 Educational Level

4.3.4. Years of working in the organization

We can also see from the chart below the years of experience the respondents have in the organization. If we take the majority, some of the members working in the organization are below year five. 15.4% (4) of the respondents worked 2 year and below, 50% (13) of the respondents has

an experience of 2-5 years, 15.4% (4) of the respondents has 5-8 years of experience, 19% (5) of the respondents has an experience of above 8 years of experience.

How long have you been working with Dot Ethiopia?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 - 5 years	12	48.0	48.0	48.0
	5 - 8 years	4	16.0	16.0	64.0
	Above 8 years	5	20.0	20.0	84.0
	Less than 2 years	4	16.0	16.0	100.0
	Total	25	100.0	100.0	

Table.4.4 Years of experience

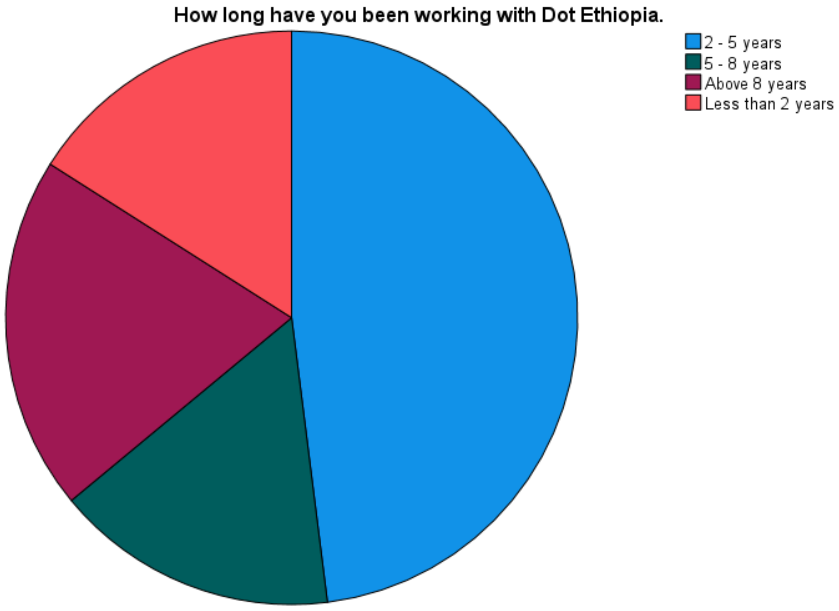


Figure.4.4 Years of experience

Levels of Staff Positions	**Population**	**Percentage of Total**
Senior Level Staffs	5	20.0%
Middle Level Staffs	16	64%
Other Level Staffs	4	16 %
TOTAL	25	100%

Table.4.4.1 Level of staff positions

4.4. Project risk management planning areas

Project risk management planning	Strongly agree 5		Agree 4		Neutral 3		Disagree 2		Strongly disagree 1	
	F	%	F	%	F	%	F	%	F	%
1. Risk management plan was developed.	3	12.0	14	56.0	1	4.0	7	28.0	0	0
2. Project risk were analyzed before it started.	3	12.0	13	52.0	4	16.0	5	20.0	0	0
3. The organization's risk management program is consistent with company strategy and planning (the company strategy and planning include risk management).	4	16.0	13	52.0	4	16.0	4	16.0	0	0.0
4. The organization do research and studies to analyze the risk in the projects.	3	12.0	9	36.0	3	12.0	10	40.0	0	0.0
5. Risks were prioritized and their implication on the project was estimated.	5	20.0	18	72.0	1	4.0	1	4.0	0	0.0
6. The organization does not proceed to implement any project without a proper risk	7	28.0	16	64.0	2	8.0	0	0.0	0	0.0

management strategy in place.										

Table.4.4.2 Project Risk management planning

The result from the above table indicates that 12% (3) of the respondents strongly agree that the Risk management plan was developed, 56% (14) of the respondents agree that the Risk management plan was developed, and 4% (1) of the respondents were neutral regarding the project plan, 28% (7) of the respondents disagree. And for the question Project risk were analyzed before it started was managed 12% (3) of the respondents strongly agree that the project risk was analyzed, 52% (13) of the respondent agree, 16% (4) of the respondents were neutral and 20% (5) of the respondents were disagreed. The organization's risk management program is consistent with company strategy and planning (the company strategy and planning include risk management) 16% (4) of the respondent strongly agree that the company strategy and planning include risk management, 52% (13) of the respondent agree, 16% (4) of the respondents were neutral and 16% (4) of the respondents were disagree. And for the question, the organization do research and studies to analyze the risk in the projects 12% (3) of the respondents strongly agree, 36% (9) of the respondents agree, 12% (3) were neutral and 40% (10) of the respondents disagree. And for the question, Risks were prioritized and their implication on the project was estimated 20% (5) of the respondents strongly agree, 72% (18) of the respondents agree, 4% (1) were neutral and 4% (1) of the respondents disagree. And for the question, the organization does not proceed to implement any project without a proper risk management strategy in place.28% (7) of the respondents strongly agree, 64% (16) of the respondents agree, 8% (2) were neutral. We can see from the above answers regarding the questions listed the organization has a good **project risk management plan** but has an issue on the question of that the organization do research and studies to analyze the risk in the projects which score 40 percentiles. And from interviewing the officer, I have learned that the project risk management plan that is done in different project of the organization faces some level of effectiveness on the implementation time.

4.5. Awareness of Risk

Awareness of Risk	**Strongly agree 5**		**Agree 4**		**Neutral 3**		**Disagree 2**		**Strongly disagree 1**	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
1. Organization has good communication, leadership, competency and risk perception.	**7**	**28.0**	**15**	**60.0**	**1**	**4.0**	**2**	**8.0**	**0**	**0**
2. The areas of risk identified and mitigated for each project.	**3**	**12.0**	**19**	**76.0**	**2**	**8.0**	**1**	**4.0**	**0**	**0**
3. The organization usually refer to previous projects in order to prevent risks or to take action.	**4**	**24.0**	**18**	**72.0**	**1**	**4.0**	**0**	**0.0**	**0**	**0.0**
4. The organization has a customized checklist to evaluate the risks of the project and the checklist is objective.	**5**	**20.0**	**18**	**72.0**	**1**	**4.0**	**1**	**4.0**	**0**	**0.0**
5. Interviews are conducted with personnel, managers and stakeholders to check their qualification and whether or not they received proper training.	**12**	**48.0**	**13**	**52.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**

6. Members of the organization communicate with each other to discuss possible risks.	**9**	**36.0**	**15**	**60.0**	**1**	**4.0**	**0**	**0.0**	**0**	**0.0**

Table.4.5 Awareness of Risk

The result from the above table indicates that 28% (7) of the respondents strongly agree that the Organization has good communication, leadership, competency and risk perception, 60% (15) of the respondents agree that the Risk management plan was developed, and 4% (1) of the respondents were neutral regarding the project plan, 8% (2) of the respondents disagree. And for the question the areas of risk identified and mitigated for each project 12% (3) of the respondents strongly agree that the project risk was analyzed, 76% (19) of the respondent agree, 8% (2) of the respondents were neutral and 4% (1) of the respondents were disagreed. The organization usually refer to previous projects in order to prevent risks or to take action 24% (6) of the respondent strongly agree that the company strategy and planning include risk management, 72% (18) agree, 4% (1) of the respondents were neutral. And for the question, the organization has a customized checklist to evaluate the risks of the project and the checklist is objective 20% (5) of the respondents strongly agree, 72% (18) of the respondents agree, 4% (1) were neutral and 4% (1) of the respondents disagree. And for the question, Interviews are conducted with personnel, managers and stakeholders to check their qualification and whether or not they received proper training. 20% (5) of the respondents strongly agree, 72% (18) of the respondents agree, 4% (1) were neutral and 4% (1) of the respondents disagree. And for the question, Members of the organization communicate with each other to discuss possible risks. 36% (9) of the respondents strongly agree, 60% (15) of the respondents agree, 4% (4) were neutral. We can see from the above answers regarding the questions listed the organization has a good **Awareness of Risk**. From interviewing the employees showed good awareness of risks that might happen in the project implementation, and we can notice that there is a difference of the level risk awareness between different projects in the organization. And it would be wise if the organization treats all the projects fairly, in order to have a balanced outcome amongst all the different projects.

4.6. Risk Management Culture

Risk Management Culture	Strongly agree 5		Agree 4		Neutral 3		Disagree 2		Strongly disagree 1	
	F	%	F	%	F	%	F	%	F	%
1. A review of project management systems, policies and procedures is regularly conducted to ensure that it is up to date.	6	24.0	16	64.0	1	4.0	2	8.0	0	0
2. The organization provides training and development in risk planning and management.	19	76.0	4	16.0	1	4.0	1	4.0	0	0
3. Past experiences are documented to learn lessons.	6	24.0	16	64.0	1	4.0	2	8.0	0	0.0
4. The organization responds to the risks in the projects on time and resolve the risk on time.	1	4.0	11	44.0	4	16.0	9	36.0	0	0.0
5. Risk audits are performed at every stage of a project lifecycle.	3	12.0	17	68.0	3	12.0	2	8.0	0	0.0
6. The organization conducts follow up audits to see that the recommendations suggested in the audit analysis were being followed through.	6	24.0	18	72.0	1	4.0	0	0.0	0	0.0

Table.4.6 Risk management culture

The result from the above table indicates that 24% (6) of the respondents strongly agree that A review of project management systems, policies and procedures is regularly conducted to ensure that it is up to date, 64% (16) of the respondents agree, 4% (1) of the respondents were neutral, and 8% (2) of the respondents disagree. And for the question the organization provides training and development in risk planning and management 76% (19) of the respondents strongly agree that the project risk was analyzed, 16% (4) of the respondent agree, 4% (1) of the respondents were neutral and 4% (1) of the respondents were disagreed. Past experiences are documented to learn lessons 24% (6) of the respondent strongly agree that the company strategy and planning include risk management, 64% (16) agree, 4% (1) of the respondents were neutral and 8% (2) of the respondents were disagree. And for the question, the organization responds to the risks in the projects on time and resolve the risk on time 4% (1) of the respondents strongly agree, 44% (11) of the respondents agree, 16% (4) were neutral and 36% (9) of the respondents disagree. And for the question, Risk audits are performed at every stage of a project lifecycle 12% (3) of the respondents strongly agree, 68% (17) of the respondents agree, 12% (3) were neutral and 8% (2) of the respondents disagree. And for the question, the organization conducts follow up audits to see that the recommendations suggested in the audit analysis were being followed through 24% (6) of the respondents strongly agree, 72% (18) of the respondents agree, 4% (1) were neutral. From the above illustration, we can understand that the majority of the respondents agree on the **Risk Management Culture,** we can also understand that the question "the organization responds to the risks in the projects on time and resolve the risk on time" showed detectable percentiles. Which implies that the organization has an issue in this area.

4.7. Risk Identification

Risk Identification	**Strongly agree 5**		**Agree 4**		**Neutral 3**		**Disagree 2**		**Strongly disagree 1**	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**

1. The organization has methods to identify risks in the projects.	**2**	**8.0**	**18**	**72.0**	**2**	**8.0**	**3**	**12.0**	**0**	**0**
2. The organization has a **separate** department to manage risks that the organization may face.	**4**	**16.0**	**2**	**8.0**	**17**	**68.0**	**2**	**8.0**	**0**	**0**
3. The organization regularly conducts a risk management review session to identify comments and recommendations that can be learned.	**7**	**28.0**	**17**	**68.0**	**1**	**4.0**	**0**	**0.0**	**0**	**0.0**
4. Risks were identified and registered.	**1**	**4.0**	**22**	**88.0**	**2**	**8.0**	**0**	**0.0**	**0**	**0.0**
5. The organization regularly documents the lessons learned in the review session in a report format.	**5**	**20.0**	**18**	**72.0**	**2**	**8.0**	**0**	**0.0**	**0**	**0.0**

Table.4.7 Risk identification

The result from the above table indicates that 8% (2) of the respondents strongly agree that The organization has methods to identify risks in the projects, 72% (18) of the respondents agree, 8% (2) of the respondents were neutral, and 12% (3) of the respondents disagree. And for the question the organization has a **separate** department to manage risks that the organization may face 16% (4) of the respondents strongly agree, 8% (2) of the respondent agree, 68% (17) of the respondents were neutral and 8% (2) of the respondent disagree. The organization regularly conducts a risk management review session to identify comments and recommendations that can be learned 28% (7) of the respondent strongly agree, 68% (17) agree, 4% (1) of the respondents were neutral. And for the question, Risks were identified and registered 4% (1) of the respondents strongly agree,

88% (22) of the respondents agree and 8% (2) were neutral. And for the question, The organization regularly documents the lessons learned in the review session in a report format 20% (5) of the respondents strongly agree, 72% (18) of the respondents agree and 8% (2) were neutral. We can see from the above answers regarding the questions listed the organization has a good **Risk Identification**. From interviewing the officer, I have learned that the risks are identified by the employees at project execution and presented on timely meetings.

4.8. Project performance

Project performance	**Strongly agree 5**		**Agree 4**		**Neutral 3**		**Disagree 2**		**Strongly disagree 1**	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
1. The baseline schedule maintained for each project.	**20**	**80.0**	**4**	**16.0**	**1**	**4.0**	**0**	**0.0**	**0**	**0**
2. The planned schedule available for all project teams via web or email.	**18**	**72.0**	**7**	**28.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0**
3. The systems / tools you currently use to manage your project cost - practices for resource planning, time and budgeting.	**3**	**12.0**	**14**	**56.0**	**6**	**24.0**	**2**	**8.0**	**0**	**0.0**
4. Clear policies, procedures, and documentation in the company for project cost management.	**3**	**12.0**	**14**	**56.0**	**7**	**28.0**	**1**	**4.0**	**0**	**0.0**
5. There are performance/quality	**8**	**32.0**	**16**	**64.0**	**1**	**4.0**	**0**	**0.0**	**0**	**0.0**

standards used to identify and measure project's output quality.										

Table.4.8 Project performance

The result from the above table indicates that 80% (20) of the respondents strongly agree that The baseline schedule maintained for each project, 16% (4) of the respondents agree and 4% (1) of the respondents were neutral. And for the question The planned schedule available for all project teams via web or email 72% (18) of the respondents strongly agree and 28% (7) of the respondent agree. The systems / tools you currently use to manage your project cost - practices for resource planning, time and budgeting 12% (3) of the respondent strongly agree, 56% (14) of the respondent agree, 24% (6) of the respondents were neutral and 8% (2) of the respondent disagree. And for the question, Clear policies, procedures, and documentation in the company for project cost management 12% (3) of the respondents strongly agree, 56% (4) of the respondents agree, 28% (7) were neutral and 4% (1) of the respondents disagree. And for the question, There are performance/quality standards used to identify and measure project's output quality 32% (8) of the respondents strongly agree, 64% (16) of the respondents agree and 4% (1) were neutral. The **Project performance** also shows from the above answers regarding the questions listed the organization has a good project performance. But, on these two "The systems / tools you currently use to manage your project cost - practices for resource planning, time and budgeting 24% and Clear policies, procedures, and documentation in the company for project cost management 28%" questions the respondents answered neutral. I have learned that there are some gaps in the project performance.

4.9. Correlation

Correlation concerns the extent to which the relations of the independent variables with dependent variable. The correlation of the variable is determined using the significant level. The correlation of the variables has been checked and when correlation is 1it is perfect correlation, when it is between 0.75 – 1 it is higher degree, if it is between 0.5 - 0.75 is moderate, when it is between 0.25 - 0.5 low degree, if it is between 0 - 0.25 no relation." As the correlation: project risk management planning has a correlation with project performance significant level of 0.26 (low degree correlation), risk

management culture has a correlation with project performance significant level of 0.74 (high degree), risk identification has a correlation with project performance significant level of 0.42 (low degree).

4.10. Regression

linear regression models equate the expected value of the dependent variable to a linear combination of independent variables and their corresponding parameters, generalized linear models equate the linear component to some function of the probability of a given outcome on the dependent variable. In linear regression, parameters are estimated using the method of least squares by minimizing the sum of squared deviations of predicted values from observed values. This involves solving a system of N linear equations each having N unknown variables, which is usually an algebraically straightforward task.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.050	1	2.050	27.575	<.001[b]
	Residual	1.710	23	.074		
	Total	3.760	24			

a. Dependent Variable: Project performance

b. Predictors: (Constant), RMC

Table 4.10 Regression analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.115	.408		5.181	<.001
	RMC	.533	.101	.738	5.251	<.001

a. Dependent Variable: Project performance

Table 4.10.2 regression analysis RMC on Project performance

As shown on the table the risk management culture has a direct effect on the project performance. Which indicates having a good risk management culture will create a good project performance. The culture of an organization determines how individuals will behave in particular circumstances. Risk culture is the values, beliefs, knowledge and understanding about risk shared by the employees of the organization or teams or groups within an organization. Risk management culture shows the organization's risk acceptance, tolerance and risk management practices as demonstrated by its employees. The absence of healthy risk management culture is the cause of the organizational failures, therefore in order to be successful in managing project risk organizations need to build a culture of risk management. Development of risk culture might be fundamental tool for effective risk management.

Behavioral rules are created workplace by the organization's leadership. The tone that the management set will be reflected on employees of the company. An organization that has strong risk management culture has people that look into what could go wrong and know the difference between theoretical risk and practical risk. Practical risk is risk that has high probability of happening while theoretical risk is risk that could happen.

An organization with good risk management culture has certain characteristics. Some help as precautions to avoid risk and some help handle the risk successfully while others train the employees for any possible risk. Some of the distinct characteristics are: members of the organization communicate with each other to discuss possible risk, the organization refer to previous projects in order to prevent risks or act, the risk management program is consistent with company strategy and planning, provides training and development in risk planning and management, past experiences are documented to learn lessons, the organization rewards management and staff for predicting and successfully manage risk. These characteristics can easily distinguish organization with good risk management culture for organizations with bad risk management culture.

The elements that are fundamental for development of strong risk culture are: the mission, vision and values should be clearly aligned and communicated throughout the firm, the risk outcomes

should be articulated in strategy, the senior management should lead by example and the risk should be taken into consideration in decision making.

Building an effective risk culture is a journey, requiring several resources and supported by consistent communication, education and management.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

This last chapter of the thesis work will have two main sections. First, conclusion of the major findings will be presented. Then the recommendations made based on the conclusions. And finally, recommendation for further studies will be provided.

This study captured predictor variables that had significant effects on the project performance and for project success of the organization. The model fit results indicated project risk management plan, risk awareness, risk identification and risk management culture statistically significant factors influencing the project performance and more specifically, the result of the model (regression analysis) reveal that the risk management culture has high direct relation with project performance of the organization.

In most projects of the organization the PM will reference previous projects (which are documented and stored) in order to look at lessons learned from their mistakes, prevent risks or to act. This trend helps the PM to easily identify the risk they might be facing in their project. It will also help to see how the previous project assessed, monitored, and mitigated the risk and take lessons from it. Based on their experiences on three different projects the answers given on the questionnaires have reflected that the organization has fairly good risk management culture. It can be seen that the members communicate with each other to discuss risks but not that frequently. They are vigilant enough to refer to previous projects to prevent risks or act. The company planning includes risk management, past experiences are documented properly for future reference and the organization has a training and development in risk planning and management. Also, the culture

of the organization on risk management and planning seems to be satisfactory culture is an ongoing project that should grow, be maintained and supported; hence, it is recommended that the organization starts working on constantly providing training and development in risk planning and management. In all three projects the organization has no well drafted methods to identify risks except for one response from WEDP project. This has an effect on the projects and to the organization. The response time for risks in the project and analysis of the organization is poor as the questionnaire results showed.

Risk Response Measure

The projects face small and infrequent risks which are not expensive and require little effort. As strategies risk acceptance is chosen as option because most of risks outweigh the cost of the risk itself. That means development agent organization prefers to accept the risk rather than spending time and mitigating it. As the research found out from the interview response the organization is willing to accept the risk to the advantage of itself. In addition to that small development projects prefer to accept rather than avoid or transfer because can't afford avoid and transfer.

How effective

The appropriateness of the risk response strategies for the identified risks is measured by questions for three projects and the result showed that the adopted strategy (Accepting and Transferring) to the risk is effective. The project manager and the project teams decided to accept the risk and agreed to address the risk when it occurs.

How risk is managed

With a single organizational unit responsible for managing risk, a company has a strong foundation for a successful risk-management process and culture. The centralized risk management function can develop a common risk framework, policies, and measurement methodologies. In this regard our respondents expressed that the organization does not have a dedicated department/unit that specifically deals with risks. But rather that each project manager is responsible for handling this task.

Lesson Learned

From the answers gained from the questionnaire, the researcher was able to deem that while all three projects conducted lesson learned meetings to assess the risk management process they were

not done regularly. Still, for those times when the meetings were held, proper documentation was generated and reported to top management.

Risk Audit

When conducting a risk audit, one of the main criteria for an auditor is that he/she be an independent party outside of the project. Only one of the projects, namely Women Entrepreneurs Development Project, said they steadily followed this requirement. They also stated that the risk audits were conducted at each lifecycle of the project and that they regularly interviewed team members to check their qualifications. The Women Entrepreneurs Development Project also conducted regular follow up on the recommendations suggested by the analysis done on the risk audits. The other two projects (Employability Youth in Ethiopia and the Entrepreneurship and Business Growth Project), however, indicated that they were not as consistent in following best practices when conducting risk audits.

From these the research was able to deduce that while the organization does practice holding lessons learned meetings and risk audits for its projects, there is a lack of set standards on how often they should be conducted, who conducts them, whether or not an analysis is done and finally how to conduct a follow up on the recommendations of that analysis. This variation can lead to ineffective risk management strategies and misalignment with the company's project objectives.

5.2. Recommendation

Generally speaking, there are no projects that are without risk. What differs from project to project is the likelihood of running into trouble, the readiness of the project team to appropriately deal with it and the severity of the consequences that may befall as a result of the aforementioned trouble. In a nutshell the first important step in a being well equipped to deal with risks is being aware of the nature of the operating environment. This means understanding the government regulations, topographic conditions, climatic conditions, way of living of target community and many other variables. To that end Digital Opportunity Trust (DOT) uses its own experience as a guiding tool on how to operate in the Ethiopian environment. The fact that they keep record of their endeavors and achievements, which can be referred to in the future is commendable.

Besides having documents that describe what the organization had to go through, it is also important to have a system to brief newcomers into the team on what the main takeaways are. Meaning, having some form of training can prove to be very vital in bringing the whole team on to the same page in a short time.

So, the researcher do recommend that:

- Structured brainstorming and evaluation are a proven technique for identifying risks and getting a clear view of their relative significance. It relies on a carefully planned and executed workshop process. Its strengths are that it can be managed to fit a schedule, it covers the ground systematically and it delivers cost-effective output, making good use of scarce resources.
- Probabilistic modelling complements the brainstorming technique, using the identified risks to ensure that all significant influences on a project's cost and schedule are realistically incorporated into a view of the project's overall performance. This provides a sensible basis for setting targets and agreeing contingencies.
- The organization should have methods to identify risks because unidentified risks are risks by themselves and if the organization doesn't have the methods the risks will have drawbacks to the projects and it will also have an effect on the outcome of the projects. Identifying the risks and assessing the risks will give the organization a chance to improve drawbacks and get a better result of the projects.
- The culture of the organization on risk management and planning seems to be satisfactory culture is an ongoing project that should grow, be maintained and supported. The research prefers to limit the risk response to three strategies such as Avoid, transfer and accept due to time limitation. The risk can be avoiding, transfers, reduce, accept when the risk have threats otherwise can be share, exploit, enhance or rejection.
- **Avoid the Risk**: Some risks aren't worth it. For instance, a particular type of trading or business acquisition may be too risky. In general, if the downfall from risks is too detrimental to move forward, then remove the threat or abandon the activity. The key advantage of this technique is that it's the most successful method of mitigating risk. You eliminate the possibility of suffering losses by stopping the threat altogether. This strategy

is best used as a last resort after you've exhausted your other risk mitigation strategies and found the risk level is still too high.

- **Accept the Risk**: It may be best to accept small threats in certain situations. If you do want to mitigate them, look for simple, low-cost options. Or simply continue as business as usual. The advantage to accepting risks is that there are no costs, and it frees up your budget for higher priority, more severe threats. Just be sure to continue monitoring even the smallest of hazards to reduce any unwanted surprises.
- **Transfer the Risk**: Project can transfer risk to a third party, typically by buying insurance. You can also transfer financial risks through hedging strategies, futures contracts, and derivatives. Or you can pool risks, where a group decides to spread the risk among its members. If any of the group members suffer a loss, everyone contributes to the restitution (similar to traditional insurance). The advantage here is that you can take some or most of the burden from risks and share it with a third party.
- **Mitigate the Risk**: If, after assessing the risk, you decide you don't want to eliminate it, you can take measures to mitigate or reduce it. This strategy aims to reduce the likelihood that the threat will occur or minimize the impact in the chance it does happen.
- The organization should have methods to identify risks because unidentified risks are risks by themselves.
- Having the dedicated department/unit to risk management would be a great help as it can take the responsibility to organize the necessary information and train the specific members concerned with the appropriate set of materials.
- Having a formal training platform can result in a more robust and resilient team that understands what its goals are and what hurdles might impede its journey.
- If a lesson learned review be held shortly after project end when all the information is still fresh on the team members' minds. The review should focus on key risk issues or topics that help to capture the risks inherent in the project.

Overall, I evaluate that DOT has a good risk management practice, but revision must be done on the effect of risk management practice for the project performance based on the feedback I received. But no organization is ever going to achieve the goal of building a perfect system. As

such I recommend DOT needs to look at the recommendations I have described in this paper and also discuss with its employees to guide its path to a better risk management system.

5.3. Recommendations for Further Studies

The study focused on the Effect of risk management on project performance-the case of Dot Ethiopia in Community Development work. In the course of work, I found the following variables need further research - Leadership and project management, Project Monitoring and evaluation and Supply Chain effectiveness and project management.

References

- Ahmadi, M., Behzadian, K., Ardeshir, A., & Kapelan, Z. (2017). Comprehensive risk management using fuzzy FMEA and MCDA techniques in highway construction projects. Journal of Civil Engineering and Management, 23(2), 300-310.
- Aiyer, M., Panigrahi, J. K., & Das, B. (2018). Successful customer relationship management in business process integration and development of applications for project management. International Journal of Mechanical Engineering and Technology, 9(2), 637-643.
- Humanitarian Outcomes (February, 2016) "Focusing on a participant-sample group of 14 major international NGOs.
- PMI (2008).A Guide to the Project Management Body of Knowledge, (4th Edition), Project Management Institute, Newtown Square.
- PMI (2013).A guide to the Project Management Body of Knowledge, (5th edition), Newton Square.
- PMI (2017).A guide to the Project Management Body of Knowledge, (6th edition), Newton Square, Pennsylvania.
- Forsberg, K., Mooz, H., Cotterman, H. (2005), Visualizing Project Management; Models and Frameworks for Mastering Complex Systems (3rd ed.), John Wiley & Sons, Inc.
- Ethiopia's 2009 Proclamation.
- Franz, B., & Messner, J. (2019). Evaluating the impact of building information modeling on project performance. Journal of Computing in Civil Engineering, 33(3), 04019015.
- Ghadge, A., Dani, S., Ojha, R., & Caldwell, N. (2017). Using risk sharing contracts for supply chain risk mitigation: A buyer-supplier power and dependence perspective. Computers & Industrial Engineering, 103, 262-270.
- Gruden, N., & Stare, A. (2018). The influence of behavioral competencies on project performance. Project Management Journal, 49(3), 98-109.

- Mojtahedi, M., & Oo, B. L. (2017). Critical attributes for proactive engagement of stakeholders in disaster risk management. International Journal of Disaster Risk Reduction, 21, 35-43.
- Nader Sh. Kandelousi, Ooi. J., Abdollahi. A (2011), Key Success Factors for Managing.
- Projects, World Academy of Science, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering 5(11).
- Naeem, S., Khanzada, B., Mubashir, T., & Sohail, H. (2018). Impact of Project Planning on Project Success with Mediating Role of Risk Management and Moderating Role of Organizational Culture. International Journal of Business and Social Science, 9(1), 88-98.
- Nederhand, J., & Klijn, E. H. (2019). Stakeholder involvement in public–private partnerships: Its influence on the innovative character of projects and on project performance. Administration & Society, 51(8), 1200-1226.
- Njeri, D. N., & Were, S. (2017). Determinants of project performance in non-governmental organizations in Kenya, a case study of hand in hand EASTERN AFRICA. International Journal of Project Management, 1(4), 61-79.
- Oufkir, L., & Kassou, I. (2018, March). Measuring knowledge management project performance. In World Conference on Information Systems and Technologies (pp. 72-81). Springer, Cham.
- Pratono, A. H. (2018). Does firm performance increase with risk-taking behavior under information technological turbulence? The Journal of Risk Finance.
- Peral, J., Maté, A., & Marco, M. (2017). Application of data mining techniques to identify relevant key performance indicators. Computer Standards & Interfaces, 54, 76-85.
- Schneiker, A. (2018). Risk-Aware or Risk-Averse? Challenges in Implementing Security Risk Management Within Humanitarian NGOs. Risk, Hazards & Crisis in Public Policy, 9(2), 107-131.
- Srinivas, K. (2019). Process of Risk Management. In Perspectives on Risk, Assessment and Management Paradigms. IntechOpen.
- Um, K. H., & Kim, S. M. (2018). Collaboration and opportunism as mediators of the relationship between NPD project uncertainty and NPD project performance. International Journal of Project Management, 36(4), 659-672.

- Unterhitzenberger, C., &Bryde, D. J. (2019). Organizational justice, project performance, and the mediating effects of key success factors. Project Management Journal, 50(1), 57-70.
- Vanhanen, J., Lehtinen, T. O., & Lassenius, C. (2018). Software engineering problems and their relationship to perceived learning and customer satisfaction on a software capstone project. Journal of Systems and Software, 137, 50-66.
- Zhu, J., & Mostafavi, A. (2017). Discovering complexity and emergent properties in project systems: A new approach to understanding project performance. International Journal of Project Management, 35(1), 1-12.
- Cooper, R.G. (1999), from experience: the invisible success factors in product innovation, Journal of Product Innovation Management, Vol. 16 pp.115-33
- Cooper and Schindler (2003).

Appendix 1

Addis Ababa University School of Commerce Graduate Program

Master of Project Management

Questionnaire prepared for the participants

Dear respondents,

First of all, I would like to express my gratitude in advance for your willingness to spend your valuable time to respond to this research questionnaire. I am conducting research on — The Effect of risk management on project performance-the case of Dot Ethiopia in Community Development work. And all the information provided is used purely for academic purposes and will be treated with utmost confidentiality. The final result of this research shall be used for academic purpose and the final recommendation and finding shall be forwarded to the respective office of Dot Ethiopia for their preventive measure and actions.

Each of your genuine reply to the research questions is very important in assessing major factors affecting successful implementation of Dot Ethiopia projects and I really appreciate your willingness to help. I will be pleased to discuss any concerns you may have about the participation in this research.

Thank you very much for your cooperation and valuable time.

Yours sincerely,

Mesgana Manchlot.

Instructions

- No need to write your name
- If you have any questions, please contact me through my cell phone number 0924313105 or email me mesganaman@gmail.com

Kindly answer the following questions either by ticking the appropriate box and or giving your answer or suggestion on the space provided when appropriate.

Part 1 Background Information

1. What is your gender?

☐ Male ☐ Female

2. In what age bracket do you fall?

☐ 18 – 2 ☐ 26 – 35 ☐ 36 – 45 ☐ Above 46

3. What is the level of Education that you attained?

☐ Diploma ☐ First Degree ☐ Second degree ☐ PHD

Others, please specify ……...

5. How long have you been working with Dot Ethiopia?

☐ less than 2 years ☐ 2-5 Years ☐ 5-8 Years ☐ Above 8 years

Part 2

Based on your experience in the Dot Ethiopia funded projects, please feedback to what extent you have Project risk management planning to the project performance.

(Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)

Project risk management planning	**Strongly agree 5**	**Agree 4**	**Neutral 3**	**Disagree 2**	**Strongly disagree 1**
1. Risk management plan was developed.					
2. Project risk were analyzed before it started.					
3. The organization's risk management program is consistent with company strategy and planning (the company strategy and planning include risk management).					
4. The organization do research and studies to analyze the risk in the projects.					
5. Risks were prioritized and their implication on the project was estimated.					
6. The organization does not proceed to implement any project without a proper risk management strategy in place.					
Awareness of Risk					
1. Organization has good communication, leadership, competency and risk perception.					
2. The areas of risk identified and mitigated for each project.					

3. The organization usually refer to previous projects in order to prevent risks or to take action.					
4. The organization has a customized checklist to evaluate the risks of the project and the checklist is objective.					
5. Interviews are conducted with personnel, managers and stakeholders to check their qualification and whether or not they received proper training.					
6. Members of the organization communicate with each other to discuss possible risks.					
Risk Management Culture					
1. A review of project management systems, policies and procedures is regularly conducted to ensure that it is up to date.					
2. The organization provides training and development in risk planning and management.					
3. Past experiences are documented to learn lessons.					

4. The organization responds to the risks in the projects on time and resolve the risk on time.					
5. Risk audits are performed at every stage of a project lifecycle.					
6. The organization conducts follow up audits to see that the recommendations suggested in the audit analysis were being followed through.					
Risk Identification					
1. The organization has methods to identify risks in the projects.					
2. The organization has a **separate** department to manage risks that the organization may face.					
3. The organization regularly conducts a risk management review session to identify comments and recommendations that can be learned.					
4. Risks were identified and registered.					
5. The organization regularly documents the lessons learned in the review session in a report format.					

Project performance					
6. The baseline schedule maintained for each project.					
7. The planned schedule available for all project teams via web or email.					
8. The systems / tools you currently use to manage your project cost - practices for resource planning, time and budgeting.					
9. Clear policies, procedures, and documentation in the company for project cost management.					
10. There are performance/quality standards used to identify and measure project's output quality.					