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College of Business and Economics School of Commerce

Department of Project Management

**Virtual Project Management Practice: A Case Study of Food and
Agricultural Organizations of the United Nation, Sub-regional Office
for Eastern Africa**

**A Thesis Submitted to the School of Commerce in Partial Fulfillment of
the Requirements for the Award of Degree of Masters of Arts in Project
Management**

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January 2018

**ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF COMMERCE
MA PROGRAM**

**VERTUAL PROJECTMANAGEMENT PRACTICE:
THE CASE OF FOOD AND AGRICULTURAL ORGANIZATIONS OF THE UNITED
NATION SUB-REGIONAL OFFICE FOR EASTERN AFRICA**

**By
Yemesrach Kebede**

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Examiner (Internal)	Signature	Date

Statement of Declaration

I, the undersigned, declare that the project work entitled 'Virtual Project Management Practice A Case Study of Food and Agricultural Organizations of the United Nation, Sub-regional Office for Eastern Africa' is my original work and has not been presented by any other researcher on the same topic.

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STATEMENT OF CERTIFICATION

This is to certify that Yemesrach Kebede has carried out this research work on the topic entitled ‘Virtual Project Management Practice A Case Study of Food and Agricultural Organizations of the United Nation, Sub-regional Office for Eastern Africa’ under my supervision. This work is original in nature. It is sufficient for submission for the partial fulfillment for the award Degree of Masters of Art in Project and Management submitted for examination.

Worku Mekonnen (PHD)

Signature _____

Date _____

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Acknowledgments

First, I would like to express my sincere appreciation to my advisor, Dr. Worku Mekonnen, for his support, guidance and encouragements all the way.

My sincere thanks and appreciation goes to my husband Zewdie Haile who facilitated everything behind my study and shared my worries. Honestly, he encouraged me throughout the study.

It would have been very difficult for me to succeed had it not been for the love and affection from my three little kids, Mikyas Zewdie, Nolawi Zewdie and Meklit Zewdie. They are truly reason for all my success.

I thank all my families and friends who have contributed a lot to my study. I would also like to express my gratitude to my colleagues in FAO who contributed directly or indirectly and provided me the necessary support for realization of this work.

Above all, I wholeheartedly thank God for helping me succeed in my study. God has given me the strength necessary to pass all the difficulties throughout the course of my Master's Degree.

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Acronyms

FAO SFE - Food and Agricultural Organizations of the United Nation Sub-Regional Office for Eastern Africa

FPMIS - Field Programme Management Information System

PMBOK - Project Management Body of Knowledge

GRMS - Global Resources Management System

AU- African Union

UNECA - United Nations Economic Commission for Africa

Abstract

The purpose of the project work is to examine Virtual Project Management Practice a case study in FAO SFE. In order to establish a better understanding, the paper evaluates virtual team acquisition practice and virtual project management practice in the office. Primary data using questionnaire and secondary data sources were used for the study. Consequently, census study was considered, descriptive research design and quantitative approach were applied, percentages and mean were used for data analysis. The result of the study indicates that project virtual team acquisition practice is more or less good though it lacks team members' development and timely replacement. The objective of project management practice is examined from the respective of Project Management Body of Knowledge as indicated in the guide. Accordingly, encouraging results were found in project scope, cost, quality, communication, integration and stakeholders' management. On the contrary, some gaps were observed in project management practice in terms of time, risk, human resource and procurement. This study recommends area of improvement from project virtual team acquiring aspect and project management practice.

Key words: virtual, team, project, knowledge areas, management practice

CHAPTER ONE

INTRODUCTION

In this section of the study, the researcher presents back ground of the study, background of the organization, statement of the problem, research questions, general and specific objectives of the study, significance of study, scope of the study, limitation of the study and organization of the study.

1.1 Background of the Study

In light of the increasing de-centralization and globalization of work processes, many organizations have responded to their dynamic environments by introducing virtual teams, in which members are geographically disperse and coordinate their work predominantly with electronic information and communication technologies (Hertel et al., 2005). The use of virtual team enabled organizations to recruit qualified personnel across the globe without facing geographic barrier.

Virtuality has its effect upon the type of management structures put in place to deal with virtual teams. It is important for the project managers to define the project member's roles within the context of the organization's greater mission by defining their scope and responsibility. (Carter et al., 2015).

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. Managing a project typically includes identifying requirements, addressing the expectations of the stakeholders, carrying out communications among stakeholders, balancing the competing project constraints, which include, but are not limited to scope, quality, schedule, budget resources, and risks. Project management is accomplished through the application and integration of the project management process of initiating, planning, executing, monitoring and closing. These processes coincided with the project management knowledge areas.

Therefore, this study examines the virtual project management practice from the perspective of ten project management knowledge areas; project integration management, project scope management, project time management, project cost management, project quality management,

project human resource management, project communication management, project risk management, project procurement management and project stakeholders' management. The study assess how efficiently these knowledge areas are being practices in virtual projects. The study also assess the experience of acquiring virtual project team members.

1.2 Background of the Organization

The Food and Agriculture Organization Sub-regional Office for Eastern Africa (FAO SFE) was established in 2007. The Office provides technical support to eight Eastern Africa countries namely; Ethiopia, Burundi, Djibouti, Kenya, Somalia, South Sudan, Rwanda, and Uganda. In these countries, agricultural sector represents the main stay of the national economy, as well as livelihoods and income for the majority of the population in the region. In addition, FAO-SFE serves as liaison role to the African Union (AU) and the United Nations Economic Commission for Africa (UNECA).

As an advisory and technical unit, FAO-SFE is staffed with a multidisciplinary team with technical competencies in: land and natural resources management, forestry, fisheries, animal production and health, investment support, agribusiness and enterprise development, policy analysis and support and development, plant production and protection. The Office supports national governments and collaborates with development partners in the region to improve agricultural productivity, to raise levels of food security and nutrition, better the lives of rural populations and contribute to the global economic growth for sustainable development in Eastern Africa. (Strategic Framework 2011 – 2015).

FAO SFE design and implements various projects to address food security, nutrition, agriculture and rural development priorities in Eastern Africa countries. Currently, seven projects are being implemented in this region. The project team members are located virtually in various countries. The office uses globally operating systems like; Field Programme Management Information System (FPMIS), Global Resources Management System (GRMS) that enabled the virtual team function virtually and in effective and efficient manner.

1.3. Statement of the Problem

As indicated on project management body of knowledge guide, the use of virtual teams creates new possibilities when acquiring project team members. The availability of communication technology made virtual teams feasible. There are some disadvantages related to virtual teams, such as possibility for misunderstandings, feeling of isolation, difficulties in sharing knowledge experience and requires advanced technology. Communication planning becomes increasingly important in a virtual team environment. Additional time will be required to set clear expectations, facilitate communications, develop protocols for resolving conflict, include people in decision-making, understand cultural differences, and share credit in successes.

The Food and Agricultural Organization Sub-regional Office for Eastern Africa (FAO SFE) as part of technical assistance for eight East African countries, design and implements various project using virtual project team that are located in various geographic location. These team members are usually engaged in multiple project simultaneously. The assignment of virtual project team members in various projects enables FAO SFE to use its human resources more efficiently and cost effectively. However, as the preliminary discussion with key informant, groups some challenges were observed i.e. virtual team members are overburdened and they have limited time to monitor the actual project activities at the ground level. They also face feeling of isolation with team members. In addition, review of project completion trend indicates that projects were not completed within the predetermined period and hence extension was request for most of the projects. This paper will therefore examine the current virtual team acquiring practice and virtual project management practice in FAO SFE projects.

1.4. Objectives of the Study

As research is guided by its objective, this section presents the intended objective of this study. The main objective and the specific objective that elaborate the research are presented below.

1.4.1. General Objective

The main objective of the study is to examine virtual project management practice in FAO SFE.

1.4.2. Specific Objectives

- To assess the existing virtual project team acquisition practice of FAO SFE.
- To assess the virtual project management practice in FAO SFE projects
- To identify gaps in project management practice that needs to be addressed

1.5. Research Questions

The main theme of the research is to examine project virtual team management practices in FAO SFE. The following basic research questions will be addressed in this study.

- What is project virtual project team acquiring practice of FAO-SFE?
- How the organization does practice the project management knowledge areas in its virtual projects
- What are the gaps in the project management practice that needs to be addressed?

1.6. Significance of the Study

The finding of this study will benefit the following stakeholders at different levels;

- *For FAO SFE:* The finding of this research provide an outlook of existing virtual project team selection practice in FAO SFE. It also indicates area of improvement in project management knowledge practice.
- *For virtual project team members:* This study also provide project team members on how best they can deliver from their location using the existing information communication tools for better project implementation.
- *For other researchers:* This study serve as an input for other researcher those who want to conduct further study in the area of virtual team.

1.7 Scope of the Study

The scope of the study is limited to examine virtual acquiring trend and virtual project management practice in FAO SFE. The study mainly focused on virtual team selection and project management practice in FAO SFE virtual projects with respect to the generally accepted project management knowledge areas as defined in guide to the project management body of knowledge.

1.8 Limitations of the Study

The study focused FAO SFE employees located in Addis Ababa in order to make the data collection easy and manageable. Moreover, the study did not consider the inputs from support staff because the researcher believed that they have limited information in project team selection and project performance.

1.9 Organization of the Study

This study is organized in five chapters. The chapter one deals with the introduction part includes the background of the study, background of the organization, statement of the problem, research questions, objectives of the study, significance, scope and limitation of the study, and organization of the study. Chapter two includes related literature review where detail discussion about the topic discussed. Chapter three describe the research design and methodology. Chapter four discusses data presentation, analysis and interpretation. Chapter five contains the summary of major findings and conclusions drawn from the findings and also the possible recommendations forwarded by the researcher.

CHAPTER TWO

Review of Related Literature

This Chapter is concerned with the discussion on literatures related to the topic under the study. It contains over view of virtual team, typology in virtual team, and benefit & challenges of virtual team. In addition, project team acquiring, critical success factors and project management practices were also discussed in this section.

2. 1 Overview of Virtual Team

As described by Gilson et al, (2014), virtual teams have emerged as a powerful structure in the contemporary business environment, characterized by the use of information and communication technologies, brining radical changes in organizational design, and the deployment of a multicultural workforce

The term virtual team defined by various authors, as per Shen et al, (2014), virtual team is used to cover a wide range of activities and forms of technology-supported working. Virtual teams, Clear and MacDonell, (2011) suggest, are work groups whose members spread over geographic and/or organizational boundaries but linked together via computer and communication technologies. Huang et al. (2010) posit that virtual teams are technology-enabled, and consist of members who can span different organizations, time zones, geographic locations, and cultures. Virtual project teams, according to Purvanova and Bono (2009) characterized by temporary lifespan and membership, spatial dispersion, and the use of predominantly computer-mediated communication infrastructures. (Morley et.al 2015).

The rapid development of new communication technologies such as the Internet has accelerated the trend that today; most of the larger business organizations employ virtual teams to some degree (Gibson et.al 2003). According to a recent survey among 376 business managers from different branches in Germany (AFW, 2002) revealed that about 20% of the managers worked predominantly as a member of a virtual team, and about 40% worked at least temporarily in virtual teams. Similar numbers have been reported for other countries (Gibson et.al 2003). Virtual teams can be found in various fields, such as research and development, problem solving

task forces, or customer services, and they exist in non-economic organizations such as virtual co-laboratories in sciences. (Hertel et al., 2005)

2.2 Virtual Teams Typology

As described by Coleman & Levine, (2008) in the figure below, virtual teams reside within the interaction of three larger systems: people, processes and technology. These are the components of virtual teams and as such, need to be addressed in order to have a successful collaborating team.

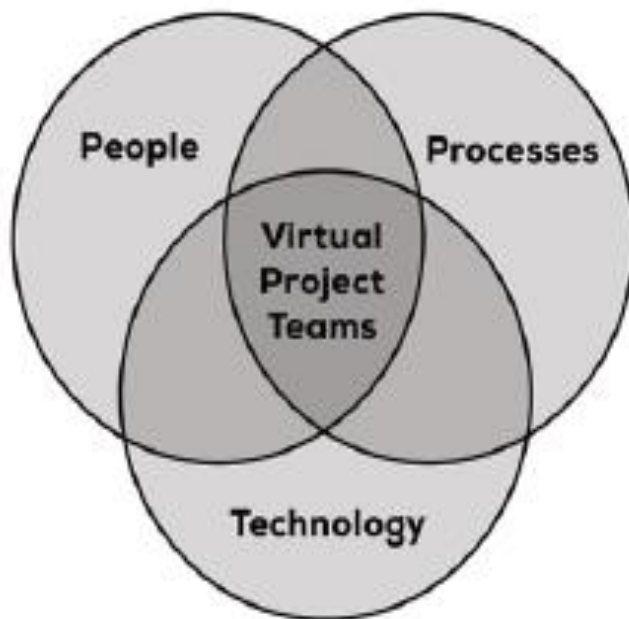


Figure 2.1; Virtual teams typology

Source: Adapted from Coleman & Levine 2008

In different degrees of interactions, this model could be translated and applied to traditional teams. Virtual teams' main characteristic derives from the lack of physical proximity (Bell & Kozlowski, 2002). The tasks, goals, or missions that they intend to accomplish do not introduce necessary differential aspects, however, it is the way these tasks are accomplished, and the unique constraints they face differentiate virtual teams from traditional ones.

2.3 Benefits of Virtual Team

Virtual teaming has been associated with a number of important benefits and advantages over collocated teams. They have been found to facilitate increased participation, as the nature of the communication technology used allows members to contribute based on their own schedules (Shen et al., 2014). Virtual teams are noted for providing firms with advantages, such as increased utilization of employee-time, round-the-clock workforce availability, and the opportunity to leverage knowledge and expertise around the world (Clear and MacDonell, 2011). At the individual level, potential advantages of high virtuality include higher flexibility and time control together with higher responsibilities, work motivation, and empowerment of team members (Morley et al., 2015).

The creation of virtual teams also enables team leaders to access a greater pool of employees with the required expertise to address a wider range of problems. Virtual team leaders and members have access to a wider range of social contacts than would typically be available in more collocated teams (Zaccaro and Bader, 2003).

As described by Dušan, et al., (2014), the advantages are very much and they eliminate the shortcomings of traditional organizational forms. For example, when creating a new working group of classical type, first we need to create a workplace organization, which is related to spending resources on the new location, and sometimes with certain risks of moving the family members of employees. In virtual teams or groups a similar way of organization in the workplace does not exist as it comes to a way of organizing work around goals, skills, tasks, not locations

A number of advantages of virtual teams can be listed:

- They are flexible and adapt quickly to changes in the external environment.
- They are open systems that lack classical mechanistic structure, which means that they are open to innovation and quickly implement changes.
- They gain experience in different geographical areas.
- They are composed of representatives of different cultures, which ensure different perspectives when discussing problems.
- They are relevant to the globalized business environment, as their communication networks 'leap across' international boundaries.

- They can provide the experience and know-how in disadvantaged and marginalized geographic areas.
- The organizations themselves within which virtual teams operate, acquire extensive experience from geographically distant sources.
- Virtual teams save shipping costs and the costs of office premises.
- Virtual teams save the time of its members.

2.4 Challenges of Virtual Project Teams

Many organizations realized the benefit of having virtual team as it allows the opportunity to hire talented workers regardless of geography; a “round-the-clock” workday; reduced costs; and increased speed to market. Correctly, designed and implemented virtual teams improve productivity, and improve customer service (Akkirman and Harris, 2005). On the other hand, Project Managers, when working with virtual teams, must overcome a number of barriers, such as: lack of face to face communication; cultural issues, geographical and temporal distances; trust issues; different communication styles; and technology challenges. Consequently, managing virtual teams is different and more complex than managing traditional teams. Effective management of virtual teams requires the knowledge and understanding of the fundamental principles of team dynamics regardless of the time, space, and communication differences between virtual and face-to-face environments (Berry, 2011).

According to the study of Binder (2007) managers experience many challenges while working in global projects and some of them are:

1. Amount of Distance Locations – In global projects, team members are separated and often working in different time zones. In such circumstances, use of ICT communication by Project Managers and teams is essential to achieve a high level of communication effectiveness.
2. Number of different organizations – Project team members can work for a single department in a company, for more than one department or even for multiple companies. Therefore, Project Managers must adapt team and leadership skills to cater for the multiple policies, procedures and organizational cultures.

3. Country Cultures – different cultures of team members participating in projects can sometimes be the source of conflict and misunderstanding and Project Managers must apply some basic rules and practices to take advantage of the cross-cultural communication.

4. Different Languages – international organizations usually establish a common language for their communication, however, the way people communicate is highly dependent on their own native language.

The number of challenges continues to expand, as researchers identify new problems faced when managing virtual project teams. According to the research of Zofi (2011) managers face the following challenges while leading virtual project teams: the challenge of building virtual relationships; and the challenge of observing, evaluating, measuring and assessing the work being done, together with each virtual team member's skills development. (Wojcik 2014)

2.5 Critical Success Factors for Virtual Team

As stated by Morley et.al (2015), critical factors that attribute to the success of virtual teams are grouped into three main areas; organizational structure, team processes and virtual environment, and people.

- *Organizational Structure*

According to Germain and McGuire, (2014), requirements for successfully supporting virtual teams includes: human resource policies to recognize, support, and reward virtual team members and leaders; training both during the initiation of a virtual team and on a continuous basis; a receptive organizational culture; and continued management support. Rosen et al., (2007) emphasize the requirement to provide teams with the robust, responsive service they need to do their work efficiently. Shen et al., (2014) focus on collaboration and technology readiness, positing previous experience as a critical factor prior to implementation of the virtual team. They highlight the need for the organization to have some experience in collaboration technology before implementing virtual teams. This includes collaboration readiness, and technology readiness.

- *Team Processes and the Virtual Environment*

As recommended by Rezgui (2007) face-to-face interaction with team members whenever possible during the virtual team lifecycle and in particular during its inception is one of the success factors for virtual team. Also, Zigurs (2003) stresses the importance of face-to-face communication with virtual meetings to help to build relationships and commitment that can enhance team performance. Maznevski and Chudoba (2000) also suggest that virtual team meetings should follow a ‘temporal rhythm’ by holding ‘regular, intense face-to-face meetings, followed by less intensive, shorter interaction incidents using various media’.

Rezgui (2007) also recommends the following for successful virtual team; give equal access to information, including project status and progression; develop strong communication and collaboration protocols, including code of conduct, standards for availability and acknowledgement; and establish trust and cohesion among both leaders and team members. Griffith et al. (2003) emphasize the need to verbalize rules, terminologies, and descriptions, along with the development of strategies and technologies that support the transfer of knowledge within virtual team settings from individuals, through the group and eventually to organizational-level knowledge. Kirkman and Mathieu (2005) highlight team empowerment defined as an increased task motivation that is due to team members’ collective, positive assessments of their organizational tasks. Chinowsky and Rojas (2003) believe that teams should be given the power to make independent decisions, with teams receiving the greatest independence functioning as better teams, and reducing the likelihood that geographic separation will affect the project outcome.

- *People*

A consideration of the interaction of personnel that comprise the virtual team and the virtual team’s support system is also essential for success. Trust, for example, has been found to be crucial in virtual teams (Schiller et al., 2014; Germain and McGuire, 2014), as many tasks are carried out independently and team members must rely on each other’s expertise to carry out these tasks successfully. As members of virtual teams often have different work, discipline, and culture-related cognitive schemata and expectancies of each other’s behavior, these tend to act as ‘filters’ that team members can use when they are operating in a context, trying to achieve a result and perceiving each other’s behavior; so that these differences in perception may become a source of misunderstanding and conflict in a virtual team (Rusman et al., 2010). Instilling all

members of a virtual team with a sense of cultural awareness is seen as a vital means of creating trust and openness, particularly in a multi-national organization in which team members may be widely dispersed (Germain and McGuire, 2014). Johnson et al. (2001) outline specific qualities required in good virtual team members, including self-discipline, individual accountability, excellent team participation skills, and trust. Rezgui (2007) suggest that it is important to involve project coordinators experienced in virtual team management; and that virtual project managers should exhibit a number of essential attributes that include being: a leader, a 'results catalyst', a facilitator, a 'barrier-buster', a business-analyzer, a coach, and a living example. Minas et al., (2014) suggest that the personality characteristics and psychological profile of virtual team members should also be considered when establishing virtual teams.

2.6 Project Management and Knowledge Area

As per the PMBOK guide, a knowledge area represents a complete set of concepts, terms, and activities that make up a professional field, project management field, or area of specialization. These ten Knowledge Areas are used on most projects most of the time. Project teams should utilize these ten Knowledge Areas as appropriate for their specific project. The Knowledge Areas are: Project Integration Management, Project Scope Management, Project Time Management, Project Quality Management, Project Human Resource Management, Project Communications Management, Project Risk Management, Project Procurement Management and Project Stakeholder Management.

The table below indicates how these knowledge areas are integrated with project management process; initiating, planning, executing, monitoring & controlling and closing.

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work	4.4 Monitor and Control Project Work 4.5 Perform Integrated Change Control	4.6 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Time Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Resources 6.5 Estimate Activity Durations 6.6 Develop Schedule		6.7 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
8. Project Quality Management		8.1 Plan Quality Management	8.2 Perform Quality Assurance	8.3 Control Quality	
9. Project Human Resource Management		9.1 Plan Human Resource Management	9.2 Acquire Project Team 9.3 Develop Project Team 9.4 Manage Project Team		
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Control Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses		11.6 Control Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	12.4 Close Procurements
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Management	13.3 Manage Stakeholder Engagement	13.4 Control Stakeholder Engagement	

Table 2.6 Project Management Process Group and Knowledge Area Mapping

Source: PMBOK 5th Edition

2.6.1 Project Integration Management

As defined in PMBOK guide, Project Integration Management includes the processes and activities required to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups. The following are the main activities indicated in the guide that ensure project integration management in any project.

- *Develop Project charter.* It is the process of developing a document that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities.
- *Develop Project Management Plan.* It is process of defining, preparing, and coordinating all subsidiary plans and integrating them into a comprehensive project management plan.
- *Direct and Manage Project Work.* It is the process of leading and performing the work defined in the project management plan and implementing approved changes to achieve the project's objectives.
- *Monitor and Control Project Work.* It is the process of tracking, reviewing, and reporting project progress against the performance objectives defined in the project management plan.
- *Perform Integrated Change Control.* It is the process of reviewing all change requests; approving changes and managing changes to deliverables, organizational process assets, project documents, and the project management plan; and communicating their disposition.
- *Close Project or Phase.* It is the process of finalizing all activities across all of the Project Management Process Groups to formally complete the phase or project.

2.6.2 Project Scope Management

As described in the guide to PMBOK, project scope management includes the processes required to ensure that the project includes all the work required, and only the work required, 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. Project scope management processes include the following;

- *Plan Scope Management*- the processes of creating a scope management plan that documents how the project scope will be defined, validated, and controlled.
- *Collect Requirements*- the process of determining, documenting, and managing stakeholder needs and requirements to meet project objectives.
- *Define Scope*- the process of developing a detailed description of the project and product.
- *Create WBS*- the process of subdividing project deliverables and project work into smaller, more manageable components.
- *Validate Scope*- the process of formalizing acceptance of the completed project deliverables.
- *Control Scope*- the process of monitoring the status of the project and product scope and managing changes to the scope baseline.

2.6.3 Project Time Management

Project Time Management includes the processes required to manage the timely completion of the project. The main purpose of this knowledge area, as its name suggests, is to build processes and outputs into the project that assist the manager and team to complete the project in a timely manner.

According to PMBOK, project time management incorporates the following activities;

- *Plan Schedule Management*- It is the process of establishing the policies, procedures, and documentation for planning, developing, managing, executing, and controlling the project schedule.
- *Define Activities*- It is the process of identifying and documenting the specific actions to be performed to produce the project deliverables.
- *Sequence Activities*- It is the process of identifying and documenting relationships among the project activities.
- *Estimate Activity Resources*- It is the process of estimating the type and quantities of material, human resources, equipment, or supplies required to perform each activity.
- *Estimate Activity Duration*- It is the process of estimating the number of work periods needed to complete individual activities with estimated resources.
- *Develop Schedule*- It is the process of analyzing activity sequences, durations, resource requirements, and schedule constraints to create the project schedule model.

- *Control Schedule*- It is the process of monitoring the status of project activities to update project progress and manage changes to the schedule baseline to achieve the plan.

2.6.4 Project Cost Management

Project Cost Management includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so that the project can be completed within the approved budget. According to PMBOK cost management includes process like developing an estimate financial requirement, aggregating the estimated cost to work packages, monitoring the status of the project to update the project costs and developing policies, procedures managing, expending, and controlling project costs

2.6.5 Project Quality Management

As stated in the guide to project management body of knowledge, project quality management includes the processes that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. Project quality management works to ensure that the project requirements including product requirements are met and validated. These involves three processes; planning quality management i.e., identifying quality requirements and/or standards for the project and its deliverables; auditing the quality requirements to ensure that appropriate quality standards and operational definitions are applied and; monitoring and recording results of executing the quality activities.

2.6.6 Project Human Resource Management

The project team is comprised of the people with assigned roles and responsibilities for completing the project. They may have varied skill sets may be assigned full or part-time and may be added or removed from the team as the project progresses. Thus, project human resource management includes the processes that organize, manage, and lead the project team.

As per the guide to PMBOK, project human resource management involves processes such as;

- Identifying and documenting specific project roles, responsibilities, required skills, reporting relationships, and creating a staffing management plan

- Confirming human resource availability, acquiring team member
- Improving competencies, team member interaction, and overall team environment to enhance project performance
- Developing team member i.e., providing feedback, resolving issues, and managing changes to optimize project performance

2.6.6.1 Project Team Acquiring

As per the guide to Project Management Body of Knowledge, acquire project team is the process of confirming human resource availability and obtaining the team necessary to complete project activities. The key benefit of this process consists of outlining and guiding the team selection and responsibility assignment to obtain a successful team. It is important that the following factors are considered during the process of acquiring the project team:

- The project manager should effectively negotiate and influence others who are in a position to provide the required human resources for the project.
- Failure to acquire the necessary human resources for the project may affect project schedules, budgets, customer satisfaction, quality, and risks. Insufficient human resources or capabilities decrease the probability of success and, in a worst case scenario, could result in project cancellation.
- If the human resources are not available due to constraints, such as economic factors or previous assignments to other projects, the project manager or project team may be required to assign alternative resources, perhaps with lower competencies, provided there is no violation of legal, regulatory, mandatory, or other specific criteria.

These factors should be considered and planned during the planning stages of the project. The project manager will be required to reflect the impact of any unavailability of required human resources in the project schedule, project budget, project risks, project quality, training plans, and the other project management plans. The followings are tools and techniques used to acquire project team member;

Pre-assignment - when project team members are selected in advance, they are considered pre-assigned. This situation can occur if the project is the result of specific people being identified as

part of a competitive proposal, if the project is dependent upon the expertise of particular persons, or if some staff assignments are defined within the project charter.

Negotiation - staff assignments are negotiated on many projects. For example, the project management team may need to negotiate with functional manager to ensure project receives appropriately competence staff.

Acquisition - when the performing organization is unable to provide the staff needed to complete a project, the required services may be acquired from outside sources, for examples hiring individual consultants or subcontracting work to another organization.

Multi-criteria decision analysis - selection criteria are often used as a part of acquiring the project team. By use of a multi-criteria decision analysis tool, criteria are developed and used to rate or score potential team members. The criteria are weighted according to the relative importance of the needs within the team. Some examples of selection criteria that can be used to score team members are shown as follows;

- *Availability* - Identify whether the team member is available to work on the project within the time period needed.
- *Cost*- verifies if the cost of adding the team member is within the prescribed project budget.
- *Experience* - verifying that the team member has the relevant experience that will contribute to the project success.
- *Ability* - verifying that the team member has the competencies needed by the project.

2.6.7 Project Communications Management

Project Communications Management includes the processes that are required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information. Effective communication creates a bridge between diverse stakeholders who may have different cultural and organizational backgrounds, different levels of expertise, and different perspectives and interests, which affect or have an influence upon the project execution or outcome. Project communication includes planning, managing, controlling of communication in the project.

2.6.8 Project Risk Management

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

As described in guide to PMBOK, project risk management incorporates processes such as; how to conduct risk management; determining risks may affect the project; performing qualitative and quantitative analysis and developing options to enhance opportunities and to reduce threats. It also includes implementing risk response plans i.e., tracking identified risks, monitoring residual risks, identifying new risks, and evaluating risk process effectiveness throughout the project.

2.6.9 Project Procurement Management

Project Procurement Management includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team. The organization can be either the buyer or seller of the products, services, or results of a project. Project Procurement Management includes the contract management and change control processes required to develop and administer contracts or purchase orders issued by authorized project team members. It also includes controlling of any contract issued by an outside organization (the buyer) that is acquiring deliverables from the project performing organization (the seller), and administering contractual obligations placed on the project team by the contract. Project Procurement Management includes activities like; planning, conducting, controlling and closing of project procurement.

2.6.10 Project Stakeholder Management

According to PMBOK, project stakeholder management includes the processes required to identify the people, groups, or organizations that could influence 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.

Stakeholder management also focuses on continuous communication with stakeholders to understand their needs and expectations, addressing issues as they occur, managing conflicting interests and fostering appropriate stakeholder engagement in project decisions and activities.

Stakeholders' management incorporates activities like;

- Identifying the stake holders i.e., identifying the people, groups, or organizations that could impact or be impacted by a decision, activity, or outcome of the project; and analyzing and documenting relevant information regarding their interests, involvement, interdependencies, influence, and potential impact on project success.
- Developing appropriate management strategies to effectively engage stakeholders throughout the project life cycle, based on their needs, interests, and potential impact on project success.
- Managing stakeholder engagement; communicating and working with stakeholders to meet their needs/expectations, address issues as they occur, and foster appropriate stakeholder engagement in project activities throughout the project life cycle.
- Control stakeholder engagement this involves monitoring overall project stakeholder relationships and adjusting strategies and plans for engaging stakeholders.

2.7 Conceptual Framework

As indicated in PMBOK guide, there are ten project management knowledge areas coincide with the process groups that are; project initiation, project planning, project execution, monitoring and controlling and project closing. The knowledge areas take place during anyone of these process groups. This research used these knowledge areas to examine the project management practice in FAO SFE virtual projects. In addition, project team acquiring practice in the office was also assessed in the study.

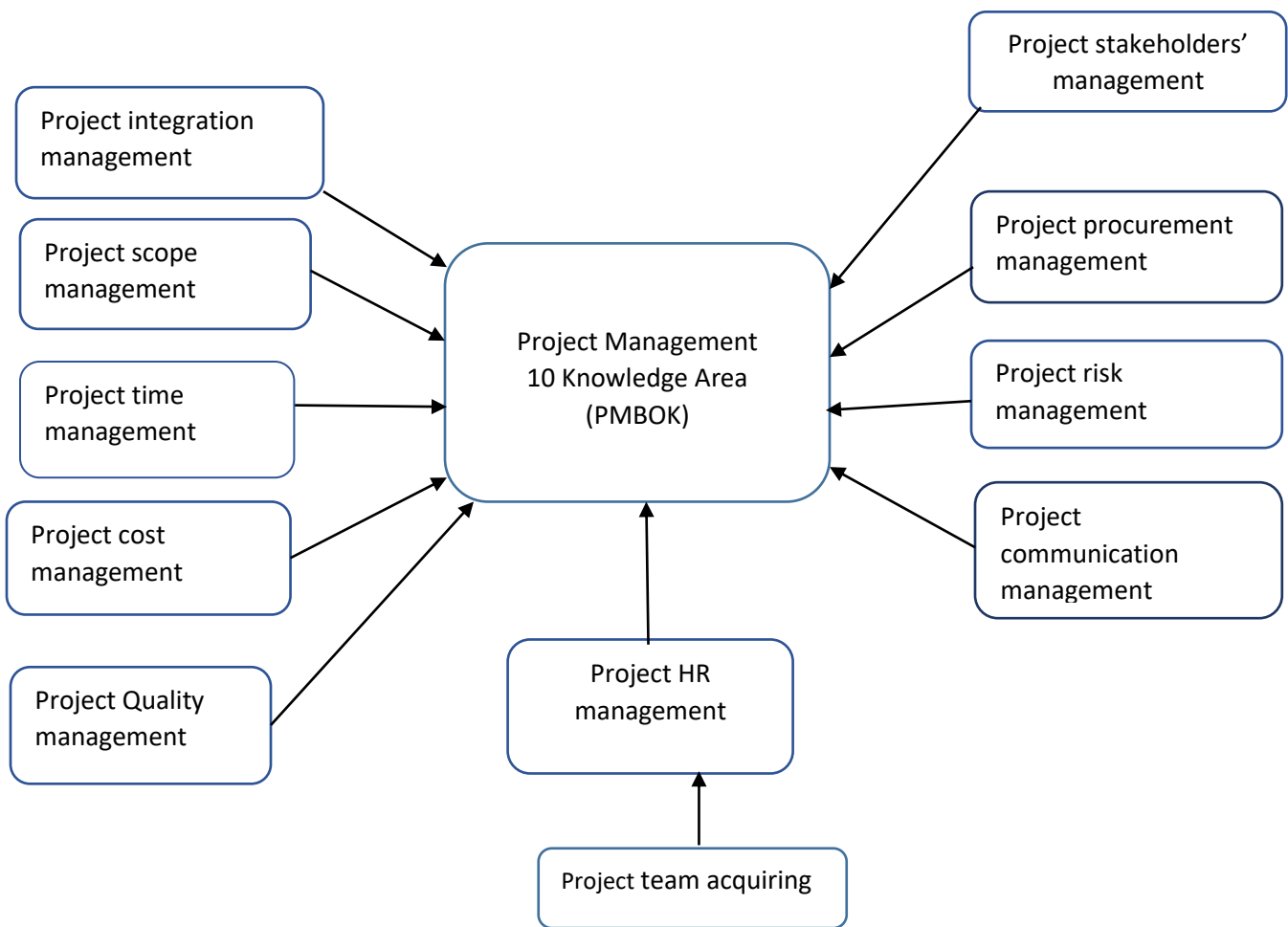


Figure 2.7: Conceptual framework

Source: Own source

Chapter Three

Research Design and Methodology

The objective of this research is to examine virtual project management practice a case study in FAO SFE. To this end, this chapter aims to describe the research design and methodology used to address the research problems. In addition, population of the study, the sampling method, the data sources, data collection and analysis method also discussed in this chapter.

3.1 Research Design and Approach

In order to fulfill objective of the study, the research used descriptive research type by applying quantitative approach. The rationale behind selection of descriptive design is that it describes the state of affairs as it exists at present, the researcher has no control over the variables and hence can only report what has happened or what is happening (Kothari 2004). Thus, this study examines the existing the virtual team acquiring and project management practice in FAO SFE.

3.2 Population of the Study and Sampling Method

Population of the study refers to the total of items about which information is desired Kothari (2004), in this study the population is employees of FAO-SFE, 38 employees. These include project managers, technical staff and project team members. The researcher uses census study and considers and all the staff were participated in the study.

3.3 Sources of Data

The researcher used primary data source i.e. questioners based on literature review were developed and distributed to the selected respondents. In addition, secondary data source, articles journal, different books, the organizations' fact sheet and online resources were used in study.

3.4 Methods of Data Collection

In this research, primary data source i.e., questioner was used to collect relevant information from project managers, technical officers, program staff. Thus, questionnaires were distributed to

38 respondents who are involved in various project implementations. Additionally, secondary data were reviewed from the organization's online resources.

3.5 Method of Data Analysis

The data collected using questioners were analyzed using table, and percentage. Excel was used to analysis the data to provide meaningful insight for each question that addresses the respective research objectives.

3.6 Data Validity and Reliability

Validity expresses the degree to which a measurement measures what it purports to measure. Bolarinwa (2015). The questioner's validity was checked to ensure that it fully covers the issues and problems described in the research question. Thus, the questioner address the issues indicated in research problem.

Reliability refers to the degree to which the results obtained by a measurement and procedure can be replicated though reliability importantly contributes to the validity of a questionnaire.

The questioners were pre tested to ensure that they are clear comprehensible to the respondents. To this end, questions were communicated to four respondents and more clarifications were made using the feedback from respondents.

3.7 Research Ethics

The respondents in this research were informed about the objectives of the study emphasizing that the data will be used for the intended academic purpose only. In the questioner, it was indicated the information provided will remain confidential and will be used as input for the study.

Chapter Four

Data Presentation, Analysis and Discussion

This chapter is about the presentation, analysis and interpretation of data collected using questionnaire regarding Virtual Project Management Practice a case study in FAO SFE. A total of 38 questionnaires were distributed and all of them were returned, which accounts 100% a response rate.

4.1 Background Information of the Respondents'

Table 4.1 Demographic information of the respondents'

Background Information	Frequency	%
Gender Profile		
Male	25	66%
Female	13	34%
Total	38	
Age Bracket		
Below 30years	-	-
31-40 years	14	37%
41 -50 years	15	39%
Above 50 years	9	24%
Total	38	
Educational level		
Bachelor	16	42%
Masters degree	8	21%
above Masters	14	37%
Total	38	
Experience in projects		
Less than 5 years	-	-
5 to10 years	24	63%
More than 10 years	14	37%
Total	38	

Source: Questionnaire

The table showed the characteristics of the respondents in terms of gender, age, educational background and working experience in projects.

With regard to gender, 66% of the participants are male and the rest 34% are female. In relation to age bracket, the result indicate that 37% fall within the age range 31 to 40 years, 39% of the respondents found between the range 41 to 50 years and the remaining 24% are above 50 years.

The next category is about the educational qualification. Respondents with bachelor degree account 42% of the total participants. They are followed by 21% respondents with masters' degree and the rest 37% respondents have above masters.

The last variable is about work experience in projects. Majority of the respondents, 63% of them have 5 to 10 years experience, 37% have more than 10 years' experience.

The result illustrates that most of the respondents are well experienced working in project and have very good educational background.

4.2 Assessing the Existing Project Virtual Project Team Acquiring Practice

Table 4.2 Project Team Acquiring Practice

	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.2.1	Pre-assignment i.e., project team members were selected in advance	4	10	19	50	4	11	11	29	0	0	38	100	3.4
4.2.2	Negotiation for the assignment of specific responsibility in a given project were made in advance	0	0	20	53	0	0	18	47	0	0	38	100	3.1
4.2.3	Project team members' other responsibility in the organization is assessed prior to the assignment (to avoid multiple assignments)	0	0	4	11	5	13	24	63	5	13	38	100	2.2
4.2.4	There is timely replacement of appropriate project team members in case of withdrawal	0	0	5	13	0	0	23	61	10	26	38	100	2
4.2.5	The roles and responsibilities of virtual team members are clearly define and every team member is aware of it.	0	0	18	47	4	11	13	34	3	8	38	100	3
Average														2.7

Source: Questionnaire

Table 2 shows current virtual team acquisition practice in the office. Regarding pre-assignment of virtual project team members, 10% of respondents strongly agreed and 50% agreed on prior assessment of project team members. 11% respondents do not have clear information on pre-assignment assessment of team acquisition process and the remaining 29 % does not support the idea of prior arrangement.

Concerning the negotiations made on the assignment of specific responsibilities, 53% respondents agreed that duties were assigned among project team members based on negotiations. However, 47% disagree on the consideration of prior negotiations.

Regarding to prior assignment assessment of the project team member, more than half of the respondents disagreed and 13 % strongly disagreed. 13% respondents are neutral and 11 % support prior duty assessment. This indicates that, project team members' other duties in the function organization are not considered while they are being appointed to take assignments in virtual projects.

In line with the timely replacement of project team members in case of withdrawal, 13% agreed that timely replacement were made. However, most of the respondents disagreed indicating there is no timely replacement of team members in case of departure.

The last key issue requested was the awareness on roles and responsibilities, 47% agreed that roles are clearly defined and every team member is aware of it. Nevertheless, 11% are neutral and, 34% disagreed and 8 % strongly disagree.

4.3 Assessment of Projects Management Practice in Virtual Project

The project management practice in FAO SFE projects were assessed with respect to project management body of knowledge area. The results from each respondent are discussed in detail in the following sections. The mean for each factor is interpreted by adopting the criteria suggested by (Scott, 1999). For application of Likert type scale range from 1 (Strongly Disagree) to 5

(Strongly Agree), interpretation considered; mean up to 2.8 is considered as disagree, from 2.9 to 3.2 means neutral or neither disagree nor agree and mean above 3.2 is considered as an agree.

4.3.1 Assessment of Projects Scope Management Practice

Table 4.3.1 Projects Scope Management Practice

	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.1.1	Projects scope management plans were developed i.e., the scope of projects were defined, validated, and controlled.	4	11	22	58	0	0	12	31	0	0	38	100	3.5
4.3.1.2	Changes to projects scope were controlled all the time	4	11	20	53	4	10	10	26	0	0	38	100	3.5
4.3.1.3	All the requirements (stakeholders' need) were collected in advance	0	0	13	34	8	21	17	45	0	0	38	100	2.9
4.3.1.4	Projects work breakdown structure was developed (projects work were put in to smaller manageable components)	0	0	24	63	0	0	14	37	0	0	38	100	3
Average														3.2

Source: Questionnaire

SA= Strongly Agree, A=Agree, N= Neutral, SD=Strongly Disagree, N= Total number of respondents, n =frequency, M= Mean

As shown in the above table, 11% of the respondents strongly agreed and 58% agreed that projects scope management plan were developed and few of them disagreed on projects scope plan development. In response to control over the scope change, most of the respondents agreed indicating that changes to projects scope were controlled. With respect to in advance, stakeholders' need collection, 21% are neutral, 45% of the respondents disagree on requirement collection and only 34% agreed in requirement collection.

The last item checked in project scope management is the work breakdown structure, more than half of the respondents agreed that projects breakdown were developed. The overall scope management practices in FAO projects indicate that projects scope is managed properly

4.3.2 Assessment of Projects Time Management Practices

Table 4.3.2: Projects Time Management practice

4.3.2	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.2.1	Projects schedule management plan were developed	0	0	23	61	0	0	13	34	2	5	38	100	3.2
4.3.2.2	Projects activities were clearly defined and appropriately sequenced	5	13	10	26	7	18	16	42	0	0	38	100	3.1
4.3.2.3	Changes to projects' schedules were controlled	0	0	6	16	4	11	24	63	4	11	38	100	2.3
Average														2.86

Source: Questionnaire

The above table illustrates projects time management practices of FAO SFE projects, with respect to project schedule management, most of the respondents (61%) agreed that project schedule management plan were developed. 34 % disagreed and 5 % strongly disagreed on project schedule development.

Another key issue request was project activity definition and sequencing, 13% strongly agreed and 26 % agreed that project activities were clearly defined and appropriately sequenced. 18% are impartial, 42% disagree on appropriate project activity sequencing and activity definition.

In the intent to know whether schedule changes were controlled in projects, 16 % agreed stating schedule changes were under control. 10% of the respondents are neutral and the majority of the respondents are disagreed on controlling of schedule change. Overall, as the mean also indicates, project time management is not being practiced satisfactorily.

4.3.3 Assessment of Projects Cost Management Practices

Table 4.3.3 Projects Cost Management Practice

4.3.3	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.3.1	The project's monetary resource needs were clearly determined at the beginning	24	63	8	21	6	16	0	0	0	0	38	100	4.5
4.3.3.2	Projects' budget were used according to budget lines	13	34	16	42	4	11	5	13	0	0	38	100	4
4.3.3.3	Project budget utilization were controlled	0	0	16	42	12	32	10	26	0	0	38	100	3.2
Average													3.9	

Source: Questionnaire

The above table shows the project's cost management practice in FAO SFE projects. Almost all respondents agreed that projects financial needs were clearly determined at the initial stage.

Regarding project's budget utilization, 42 % of respondents agreed and 34% strongly agreed indicating that projects budgets were used accordingly. Lastly, with respect to project budget utilization, 32% are impartial and 26% disagree on the control to project budget utilization and 42 % agreed on project budget control. The above result describes that there is very good projects financial management practice in FAO SFE projects. This result also supported with desk review made on Field Programme Management Information System (FPMIS).

4.3.4 Assessment of Projects Quality Management Practice

Table 4.3.4: Projects Quality Management Practice

4.3.4	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.4.1	Quality standards of the projects were identified	12	32	13	34	13	34	0	0	0	0	38	100	4
4.3.4.2	Projects' quality assurances clearance were done properly	8	21	21	55	9	24	0	0	0	0	38	100	4
4.3.4.3	Project performance was evaluated on regular basis	0	0	29	76	0	0	9	24	0	0	38	100	3.5
Average														3.8

Source: Questionnaire

The above result illustrates the project quality management practices in FAO SFE virtual projects. As indicated, the mean value for all the factors in relation to project quality practice shows greater than 3.2 and this depicts the organization has good quality management practices.

4.3.5 Assessment of Projects Human Resource Management Practices

Table 4.3.5 Projects Human Resource Management Practice

4.3.5	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.5.1	Project personnel roles, responsibilities and required skills were identified	0	0	33	87	5	13	0	0	0	0	38	100	3.87
4.3.5.2	Projects' team performance were assessed, to ensure optimal performance and development	0	0	6	16	3	8	24	63	5	13	38	100	2.26
Average														3.07

Source: Questionnaire

The table showed project human resource management practices in FAO SFE. Most of the respondents have agreed on the identification of project personnel roles and responsibilities. However, the majority of the respondents disagree (63%) and strongly disagree (13%) on project team assessment and development. The mean result of the factors with respect to human resource development practice indicates that human resource management is not practiced to the fullest.

4.3.6 Assessment of Projects Risk Management Practice

Table 4.3.6: Projects Risk Management Practices

4.3.6	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.6.1	Projects risk were identified and their characteristics documented	5	13	25	66	0	0	8	21	0	0	38	100	3.7
4.3.6.2	Quantitative risk analysis were made (the numerical analysis of the effect of identified risk on the over project were developed)	0	0	10	26	4	11	18	47	6	16	38	100	2.5
4.3.6.3	Projects risk management plans were developed for every project	0	0	13	34	0	0	25	66	0	0	38	100	2.7
4.3.6.4	Project risk response plan were made (options and actions to enhance opportunities and to reduce threats to project were developed)	0	0	15	39	0	0	23	61	0	0	38	100	2.8
Average													2.9	

Source: Questionnaire

The survey result of the risk management practice in FAO SFE projects presented on table 8 table. Concerning the practice of risk identification 13 % strongly agree and 66% agreed saying

that projects risks identified and documented. The remaining 21 % disagreed in risk identification practice.

Regarding quantitative risk analysis preparation, 47 % disagreed and 16% strongly disagree on the practice of quantitative risk analysis, 11 % are neutral and only 26 % support this practice.

To the issue of development of risk management plan, the majority of the respondents (66%) disagreed indicating no risk management plan and remaining 34 % of the respondents agreed the preparation of risk management plan.

The last issue raised was project risk response plan preparation 39% agreed and most of the respondents disagreed on the preparation of risk response plan. Over all, the above result revealed that project risk management practice is not being practices to the fullest.

4.3.7 Assessment of Projects Procurement Management Practice

Table 4.3.7 Projects Procurement Management Practice

4.3.7	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.7.1	Projects' contract requirements were identified ahead of time	0	0	18	47	7	19	13	34	0	0	38	100	3.1
4.3.7.2	Project contracts were completed and settled on time	0	0	5	13	7	19	16	42	10	26	38	100	2.2
4.3.7.3	Project procurement management plan was developed	0	0	10	26	6	16	15	39	7	19	38	100	2.5
Average														2.6

Source: Questionnaire

Table 9 shows the survey findings of project procurement management practice in FAO SFE. 47% respondents agreed that projects contract requirements are identified, 19% are do not have clear information and the remaining 34% disagreed on prior project contract requirement identification.

Concerning timely completion of contracts, 42% disagree and 26% strongly disagreed that contacts were not completed and settled on time. Only 13% support the idea of timely completion of contracts.

With respect to procurement management plan, 39% of respondents disagreed and 19 % strongly disagreed on the development of project procurement plan and only 26% agreed with the development of project procurement plan. Overall, as their mean also proves, FAO SFE projects lack proper project procurement management practice.

4.3.8 Assessment of Projects Communication Management

Table 4.3.8: Projects Communication Management Practice

4.3.8	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.8.1	Appropriate plan for projects communications based on stakeholder information needs were developed	0	0	24	63	10	26	4	11	0	0	38	100	3.5
4.3.8.2	Collecting, distributing, storing, retrieving and the ultimate disposition of projects information in accordance with the communications management plan were conducted	0	0	26	68	6	16	6	16	0	0	38	100	3.5
Average														3.5

Source: Questionnaire

Table 10 discusses the factors that describe the project communication practices of FAO SFE projects. As the result illustrate, most of the respondents agreed specifying that project communication plan address stakeholders' information need. Moreover, they also agreed that communication is made in accordance with the communication plan. This revealed that the office has good project communication practices.

4.3.9 Assessment of Projects Stakeholders' Management

Table 4.3.9 Projects Stakeholders' Management Practice

4.3.9	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.9.1	Project stakeholders were identified	5	13	28	74	5	13	0	0	0	0	38	100	4
4.3.9.2	Stakeholders engagement management plan was developed	0	0	25	66	5	13	8	21	0	0	38	100	3.5
4.3.9.3	Project progress were reviewed jointly with concerned stakeholders	4	10	20	53	9	24	5	13	0	0	38	100	3.6
Average														3.7

Source: Questionnaire

Table 11 illustrates the result of stakeholders' management practice in FAO SEF virtual projects. With respect to project stakeholders' identification, 13% strongly agreed and 74 % agreed saying stakeholders were identified. 13% of the respondents are neutral on this issue.

With the issue of stakeholder's management plan, 66% agreed specifying management plans are developed. 13% of the respondents are impartial and 21% disagreed on this practice. Finally, concerning joint progress review, most of the respondents agreed indicating that project progresses were jointly reviewed. 13 % of the respondents disagreed while the remaining 24 are neutral. This result indicates there is good project stakeholder's management practice in the office.

4.3.10 Assessment of Projects Integration Management Practices

Table 4.3.10 Projects Integration Management Practice

4.3.10	Factors	SA		A		N		DA		SD		N	%	M
		n	%	n	%	n	%	n	%	n	%			
4.3.10.1	Projects charter were developed at the beginning (document that formally authorizes the existence were developed)	5	13	19	50	14	37	0	0	0	0	38	100	3.8
4.3.10.2	Monitor & control project work (projects activities were monitored and controlled regularly tacked, reviewed, and reported)	4	11	29	76	5	13	0	0	0	0	38	100	4
4.3.10.3	Projects change requests reviewed, approved and documented and assets were processed disposed.	6	16	26	68	6	16	0	0	0	0	38	100	4
Average														3.9

Source: Questionnaire

The last but not the list issue assessed was project integration management practice. As can be observed from the table, FAO SFE has very good project integration management practices. Most of the respondents have agreed with the issues raised with reference to integration management. The mean score for reach factors as shown above is greater than 3.2 that depict the existence of good project integration practice. This is result also reinforced with desk review conducted using online resources. Field Programme Management Information System serves as project monitoring and controlling tool for all projects implemented in the office. Thus, the above proves that the office has good project integration management practices.

Chapter Five

Finding, Conclusion and Recommendation

This chapter comprises of the summary of findings, conclusions, and recommendations of the research study.

5.1 Summary of findings

This study aimed to examine virtual project management practice in FAO SFE projects. The following are the summary of the findings:

The background information of the respondents indicates that most of the respondents are well experienced working in project and have very good educational background.

One of the objectives of the research is to assess virtual project team acquisition practice in the organization. As per the response from the respondents, more or less pre-assignment assessments of project team members were made in advance and also negotiation were made specific assignment specific responsibility even though it is not done to the fullest. However, there is some gap in prior assessment made to identify of the prior assignment of virtual team members and there is also gap in timely replacing team members in case of withdrawal from the specific project

The other objective of the research was to assess the virtual project management practice in FAO SFE. In order to answer this question, the researcher assesses each of the project management practices described on PMBOK. The followings results were observed from the study;

- The analysis drawn from the response of the respondents signifies there is appropriate project scope, cost and quality management practice in office.
- The response of the respondents' points out that project communication, integration and stakeholder's management practices are being practices properly in the office.
- Regarding to project time management, as per the response from the respondents project schedule were developed but there is some gap in handing changes to the schedule.
- The result of the human resource management assessment reveal that projects team were assigned base on relevant skill but project team members were not developed.
- With respect to risk management practice, projects risks were identified but it lacks qualitative risk analysis, it also lacks risk management plan and risk response plan.

- The finding from the respondents concerning project procurement practice indicates that project contracts were identified a head of time but there is a gap on monitoring and timely closure of project contracts.

5.2 Conclusions

Virtual project team with the use of information and communication technologies brings changes in organizational design, and the deployment of a multicultural workforce (Gilson et al, 2014). FAO SFE having virtually located project team members implements projects in Eastern African Countries. This study revealed that there is good virtual project team acquisition practice even though some gaps were observed in development and timely replacement of project team members. These delays with other factors contributed to project period extension.

The study examined project management practice in FAO SFE virtual projects from the point of view of project management knowledge areas. The study points out that project cost management is being practiced properly in FAO SFE projects. The research also confirms that project's scope and quality management practice are being appropriately implemented in projects. Further, the study illustrates that project communication, integration and stakeholders' management practices are being executed properly.

The study showed that project contracts were not completed timely and projects lack procurement management plan, this indicated project procurement management was not sufficiently practiced in projects and hence it is one of the challenge that hinder timely completion of projects. The research finding also showed that project risks management practice has gap interims of developing mitigation plan and risk management plan.

Moreover, the result also specified that project schedule changes were not managed and this illustrates project time management is not practiced satisfactorily. Generally, the project management practices in FAO SFE projects are good despite of the gaps observed in terms of project time, procurement, risk and human resource management.

5.3 Recommendations

Based on the findings of the study, the researcher suggests the following recommendations for the better virtual team acquiring and effective project management practice.

- FAO SFE designs and implements projects in eight Eastern African Countries using virtual project team members. To make best use of human resources, prior assessment of team member responsibility in the organizational functional set-up should be made avoid workload and ensure timely delivery. In addition, the office should make timely replacement of project team member to minimize delays in project output.
- Project schedule changes should be addressed timely to prevent delay in project output. In addition, project procurement management practice should be improved to effectively manage contracts and timely settle contracts.
- In relation to project risks, risks were identified and documented for every project. However, risk management plan should be developed for each project to facilitate risk response process in case the identified risk occurs.

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APPENDICE

Addis Ababa University

College of Business and Economics School of Commerce

Department of Project Management

Questionnaire to be filled by project team members

This questionnaire is part of to a research being conducted on the topic *virtual project management practice: the case study of Food and Agricultural Organizations Sub-regional Office for Eastern Africa (FAO-SFE)*'. The purpose of the study is for the partial fulfillment of the requirement of MA degree in Project Management. The information that you provide is strictly confidential and will be used only for academic purpose. Thus, you are kindly requested to genuinely fill the questionnaire.

Please do not write your names.

Thank you for spending your valuable time!

Part I: Demographic information of the respondents'

1. Gender Male Female

2. Age below 30years' old 31-40 30 years' old 41 -50 years' old

 > 50 years' old

3. Educational level Bachelor Masters above Masters

4. Experience in virtual project (being team member or manger)
 Less than 5 years 5 to10 years More than 10 years

Part II: Questions on existing project's virtual team selection practices

From your experience with FAO SFE projects, to what extent do virtual project teams (which includes project managers, Project Staff, National Focal Point) consider the following

parameters. Place a check mark to indicate your response for each question as follows: 5= Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=strongly Disagree.

	Factors	1	2	3	4	5
2.1	Pre-assignment i.e., project team members were selected in advance					
2.2	Negotiation for the assignment of specific responsibility in a given project were made in advance					
2.3	Project team members' other responsibility in the organization is assessed prior to the assignment (to avoid multiple assignments)					
2.4	There is timely replacement of appropriate project team members in case of withdrawal					
2.5	The roles and responsibilities of virtual team members are clearly define and every team member is aware of it.					

Part III: Questions on the existing project management practices of FAO-SFE virtual projects

From your experience with projects in FAO-SFE, please indicate to what extent these parameters are practiced in these projects. Place a check mark to indicate your response for each question as follows: 5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=strongly Disagree.

	Questions	1	2	3	4	5
3.1	<i>Project Scope Management</i>					
3.1.1	Project scope management plans were developed i.e., the scope of project were defined, validated, and controlled.					
3.1.2	Changes to project scope were controlled all the time					
3.1.3	All the requirements (stakeholders need) were collected in advance					
3.1.4	Project work breakdown structure was developed (project work were put in to smaller manageable components)					
3.2	<i>Project Time Management</i>					

3.2.1	Projects schedule management plan were developed					
3.2.2	Projects activities were clearly defined and appropriately sequenced					
3.2.3	Changes to projects' schedules were controlled					
3.3	<i>Project Cost Management</i>					
3.3.1	Projects' monetary resource needs were clearly determined at the beginning					
3.3.2	Projects' budgets were used Projects' budget were used according to budget lines					
3.3.3	Changes to the project budget utilization were controlled					
3.4	<i>Project Quality Management</i>					
3.4.1	Quality standards of the projects were identified					
3.4.2	Projects' quality assurances clearance were done properly					
3.4.3	Project performance was evaluated on regular basis					
3.5	<i>Project Human Resource Management</i>					
3.5.1	Project personnel roles, responsibilities and required skills were identified					
3.5.2	Projects' team performance were assessed, to ensure optimal performance and development					
3.6	<i>Project Risk Management</i>					
3.6.1	Projects risk were identified and their characteristics documented					
3.6.2	Quantitative risk analysis were made (the numerical analysis of the effect of identified risk on the over project were developed)					
3.6.3	Projects risk management plans were developed for every project					
3.6.4	Project risk response plan were made (options and actions to enhance opportunities and to reduce threats to project were developed)					
3.7	<i>Project Procurement Management</i>					
3.7.1	Projects' contract requirements were identified ahead of time					
3.7.2	Project contracts were completed and settled on time					

3.7.3	Project procurement management plans were developed					
3.8	<i>Project Communication Management</i>					
3.8.1	Appropriate plan for project communications based on stakeholder information needs were developed					
3.8.2	Collecting, distributing, storing, retrieving and the ultimate disposition of project information in accordance with the communications management plan is done					
3.9	<i>Project Stakeholder Management</i>					
3.9.1	Project stakeholders were identified					
3.9.2	Stakeholders engagement management plan was developed					
3.9.3	Project progress were reviewed jointly with concerned stakeholders					
3.10	<i>Project Integration Management</i>					
3.10.1	Projects charter were developed at the beginning (document that formally authorizes the existence were developed)					
3.10.2	Monitor & control project work (projects activities were monitored and controlled regularly tacked, reviewed, and reported)					
3.10.3	Projects change requests reviewed, approved and documented and assets were processed disposed.					