



ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

GRADUATE STUDIES

Effect of Human Resource Management Practice on Project Success:

A case study on Telecom Expansion Project, Ethiotelecom

By

Abel Kidanemariam

A Research submitted to Addis Ababa University school of Commerce in partial
fulfillment of MA in Project Management

Advisor: AbrarawChane (PhD.)

June, 2019

Addis Ababa, Ethiopia

Effect of Human Resource Management Practice on Project Success:

A case study on Telecom Expansion Project, Ethiotelecom

By

Abel Kidanemariam

ID: GSE/6208/09

Approved By Board of Examiner

	Name	Signature	Date
Advisor:	_____	_____	_____
Internal Examiner:	_____	_____	_____
External Examiner:	_____	_____	_____

DECLARATION

I, Abel Kidanemariam, declare that the thesis entitled “The Effect of Human Resource Management Practices on Project Success: The Case of Telecom Expansion Project in Ethio Telecom” is my original work. I have carried out the study independently with the guidance and support of the research advisor, Dr. AbrabrawChane. Any sources used for the study have been duly acknowledged. Moreover, this study has not been submitted for the award of any Degree or Diploma Program in this or any other Institution.

Abel Kidanemariam

Signature: _____

Date: _____

Contents

List of Tables	i
Abstract	ii
Chapter One	1
Introduction.....	1
1.1 Background of the study	1
1.2 Statement of the problem	2
1.3 Basic Research Question.....	3
1.4 Research Objectives.....	3
1.5 Definition of Terms.....	4
1.6 Significance of the Study	4
1.7 Scope of the Study	4
1.8 Delimitation of the study	5
1.9 Limitation of the study.....	5
Chapter 2.....	6
Literature review	6
Theoretical Studies.....	6
2.1 Background of the Organization and the Project	6
2.2 Project Success.....	7
2.3 Human Resource Management Practice in Project Management	10
2.3.1 The project Human Resource Management Process.....	11
2.3 Skills required for a project Management and Project Team Selection Process.....	16
2.3.1 Skills required for a project management	16
2.3.2 Project Team Selection Process	18
2.4 Project Team Performance Appraisal	21
2.4.1. Features of Performance Evaluation	21
2.4.2. Elements of Performance Management Success.....	21
2.5 Training and Development.....	22
2.5.1 Benefits of Training	22
2.5.2 Effective Training Practices.....	22
2.6. Reward Management	22

2.6.1. The Elements of Reward Management	23
2.6.2. Effective Reward and Recognition program for a project	23
Empirical Studies	24
Conceptual Frame Work	26
Chapter Three.....	27
Research Methodology	27
3.1 Research Methods	27
3.2 Research Design.....	27
3.3 Source of Data.....	27
3.4 Analysis of Data.....	27
3.5 Target population and Sampling	27
3.5.1 Target Population	27
3.5.2 Sample size and Sampling method	28
Chapter Four	29
Data Analysis, Interpretation and Discussion	29
Introduction.....	29
4.1 Response rate	29
4.2 Demographic data	29
4.3 Reliability Test.....	31
4.4 Analysis of Human Resource Management practices.....	31
4.4.1 Project Team Selection Process	32
4.4.2 Project Team performance appraisal practice	34
4.4.3 Training and Development practices	35
4.4.4 Recognition and Reward practice	36
4.5 Project Success.....	38
4.6 Relationship between HRM practices and Project success.....	38
4.7 Discussion.....	41
Chapter Five.....	42
Summary of Finding Conclusion, and Recommendation	42
Introduction.....	42
5.1 Summary of the Findings.....	42
5.2 Conclusion	43

5.3 Recommendations and Further studies	44
Bibliography	45
Appendix 1.....	47
Questionnaire	47

List of Tables

Table 1: Demographic Data.....	29
Table 2: Cronbach Alpha Value.....	31
Table 3: Project team Selection Process.....	32
Table 4: Project team Performance appraisal practice.....	34
Table 5: Training and Development Practice.....	35
Table 6: Recognition and Reward Practice.....	36
Table 7: Project Success.....	38
Table 8: Correlation.....	39
Table 9: Regression Model Summary.....	40
Table 10: ANOVA.....	40
Table 11: Coefficients.....	40

Abstract

The aim of this study was to assess the effect of human resource management (HRM) practices on project success, a case study in Telecom expansion project in ethio telecom. From a distributed total 112 questionnaire, a total of 105 employees from the project participants responded to the survey. The study has found that human resource management practices on project: Project team selection, performance appraisal, training and development and reward and recognition don't have a significant effect on the project success. The results came from descriptive and exploratory survey study survey study which was done at stratified and convenience sampling technique. Even though there were statistically no significant effect by the Human resource management practice, ethio telecom need to improve the practices on team selection as well as training and development and continue on the performance appraisal practice as well as reward and recognition practice.

Chapter One

Introduction

1.1 Background of the study

The term human resource management (HRM) and human resources have largely replaced the term personnel management (people management as a description of the process involved in managing people in organizations (Armstrong, 2006). Human resource management is a strategic and coherent approach to the management of an organization most valued assets- the peoples contribute individually and collectively to the achievement of its objectives (Armstrong, 2006).

It is difficult to picture an organization without a proper human resource management practice. As important as it is for the organization, it is also an integral part of any organizations project. In the past projects have been managed as technical systems instead of behavioral systems. Relatively little attention has been paid to human resource factor. However the project management institute in its official definition of project management body of knowledge included human resource management as one of the basic functions of project management (Belout, 1998). In Project management one of the major factors to measure the performance of the project is the project success (Camilleri, 2011)

The best overall criterion for project success, regardless of industry is the satisfaction of the parties involved by most account, if the client, end-user, project manager and developer feel their expectations were met or exceeded, the project must be considered a success (Nicholas, 2004).

In projects one of the major tasks is to manage the Human resource activities and many academic and practitioners have agreed that human resource management is one of the most crucial elements in organization's success (Gauvreau, 2004).

In today's competitive environment managing people effectively can also a significant impact on the result of a project, according to (Todryk, 1990), in his study the project manager as a team builder: creating an effective team, he concluded that a well-trained project manager is a key factor linked with project success because as a team builder he/she can create an effective team.

Human resource management is one part of the key project management knowledge area (American National Standard, 2004). Project human resource management includes the process that organizes and manages the project team. The project team is comprised of the people who have assigned roles and responsibilities for completing projects.

Human resource management includes the assembly of the staff (organization chart, defining roles and responsibilities and job description and the staff workload. The project manager will also need to lead and manage the team by extracting training needs, motivation, resolve conflicts, appraise staff performance and facilitate proper decision making to work effectively. (Safakish, 2015)

In Ethiopia one of the major and monopolized industries is a telecom industry which is run by ethio telecom. Ethio telecom has executed different projects for the purpose of expanding the telecom infrastructure. During those projects a team will be assigned for the projects so as to follow and to make it happen the intended results so this research aimed to assess the effect human resource management practices on project success a specific case on telecom expansion project.

1.2 Statement of the problem

The project human resource management processes have different activities including human resource planning which include project team member planning which includes project team member selection criteria as well as human resource activities which include project team performance appraisal, training and development and incentive and rewarding (Armstrong, 2006).

According to (Mary Beth Pinto, 1993) from other human resource management practices, personal factor is the only marginal (has major effect) variable on project success and another study made by (Gauvreau, 2004) again support the previous study by concluding the personal factor is still the marginal variable on project success. even though previous studies shows that the personal factor is the only marginal variable this research is going to further study the effects of other human resource practices on project success by defining variables from human resource practice studies.

On Ethio telecom, Telecom expansion project (TEP), employees are transferred from their functional tasks to projects until the project is finalized and some of the employees are assigned on the formed new section during that time. The researcher selected this topic for two major reasons. The first one is that there are only few researches done on this body of knowledge (human resource management) in project management even though it is one of the major body of knowledge described by project management institute and secondly there were some issues the researcher observed on the four human resource practices (team selection, performance appraisal, training and development and recognition and reward practice). To mention, there were a complaints on project team selection process when the project is going to be started, some employees believed that it was not a fair selection process, and after the project is launched there were still issues on training selection for internal and out of country trainings, and also the fairness on the performance appraisal as well as recognition and incentive practices. So by including the observed issues and checking its effect on the project success would important so as to show how significant the effect of the human resource management practice is on the project success.

1.3 Basic Research Question

The following are basic research questions for this research

- 1) What is the process for assigning project team member on projects?
- 2) What is project team performance appraisal method and process?
- 3) What is the training and development practice on the project?
- 4) What are the recognition and reward system practice on telecom project?

1.4 Research Objectives

As the researcher discussed above on the statement of the problem, the general objective of this research is to assess the human resource management practices on telecom projects specifically on telecom expansion projects.

The specific objectives include the following:

- To identify the processes to be assigned as a project team member on telecom projects in ethio telecom.
- To assess the performance appraisal practices and processes on projects.

- To assess the training and development processes and practices for the project staffs.
- To assess the recognition and reward system practices during the project.

1.5 Definition of Terms

- ❖ **Human Resource Management:** Human resource management is defined as a strategic and coherent approach to the management of an organization's most valued assets. The people working who individually and collectively contribute to the achievement of its objectives. (Armstrong, 2006)
- ❖ **Project Management:** Project Management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements.
- ❖ **TEP:** TEP stands for telecom expansion project, in this research refer to a telecom expansion project done by Ethio telecom starting from 2013 with an investment of 1.6 Billion USD.

1.6 Significance of the Study

This research examined the human resource management practice on telecom expansion project done by ethio telecom and identifies the processes and its short comings and recommends solution or best practice for other projects. It would also be an input for anyone who wants to know the practices on telecom projects and make further studies on other kind of projects for a project based organization or matrix based organization. It would also be a good input for the company (ethio telecom) to know the human resource practices on the previous projects on one document and make some adjustments on those identified gaps (if any) or take the best practices for net projects to be done by the company.

1.7 Scope of the Study

This research was only concerned with the human resource management practice on the project which is the Telecom expansion projects.

Ethiotelecom has different projects completed and currently ongoing but the research is focused only to Telecom Expansion Project Phase 1.

Other researchers are done on the other aspects of the project (TEP) and could be studied further in the future but this one was focusing on the human management part of the project.

1.8 Delimitation of the study

This research is concerned with the effect of human resource practice on project success and the human resource practices for this research purpose is only limited to four variables. The Project team selection process, the project team performance appraisal, the project team training and development practices and the recognition and reward system practices.

1.9 Limitation of the study

This research was done on the project which is already completed and the respondents were trying to respond for this study in a retrospective way and the researcher might consider recall bias as a limitation. And the study is only focusing on the Addis Ababa headquarter participants which will not include sample from the whole project.

Chapter 2

Literature review

Theoretical Studies

2.1 Background of the Organization and the Project

The introduction of telecommunication in Ethiopia dates back to 1894. Ethiopian Telecommunications Corporation is the oldest public telecommunications operator in Africa. In those years, the technological scheme contributed to the integration of the Ethiopian society when the extensive open wire line system was laid out linking the capital with all the important administrative cities of the country.

After the end of the war against Italy, during which telecommunication network was destroyed, Ethiopia re-organized the Telephone, Telegraph and Postal services in 1941. In 1952 the Imperial Board of Telecommunications (IBTE) was established by proclamation No. 131/52 in 1952. The Board had full financial and administrative autonomy and was in charge of the provision and expansion of telecommunications services in Ethiopia.

The Imperial Board of Telecommunications of Ethiopia, which became the Ethiopian Telecommunications Authority in 1981, was placed in charge of both the operation and regulation of telecommunication services in the wake of the market reforms. In 1996, the Government established a separate regulatory body, the Ethiopian Telecommunication Agency (ETA) by Proclamation 49/1996, and during the same year, by regulation 10/1996, the Council of Ministers set up the Ethiopian Telecommunications Corporation (ETC). Under the supervision of the ETA, the principal duty of ETC is maintaining and expanding telecommunication services in the country and providing domestic and international telephone, telex, and other communication on services. In this respect, currently ETC is the only operator of any telecommunication related service (Bogale, 2005).

Ethiopian Telecommunication Corporation was transformed to new structure called currently Ethio telecom by 2010, which is a state owned company. Ethio telecom is the only telecom service provider in our country and provides variety products and services like internet, mobile,

land line connection, data service and ISP services like email, web site, domain name and others (Anbessie, 2017).

As part of continued effort to expand telecommunication infrastructure and service, a large scale IP-NGN project with a capital outlay of 1.5 Billion USD was launched in year 2008 and the project resulted in creating 23 Million Cellular mobile core network, and 2.4 Million fixed line capacity (Wubshet, 2017).

As per the company profile, in 2010 the mobile service subscribers reached 6.5 Million, Internet 187,346 and fixed line 1 Million. With regard to enabling citizens to benefit from universal telecommunication service access the rural kebeles (villages) who have access to telecommunication service in 5 km radius increased from 13% in 2005 to 62.14% in 2010.

After completion of the IP-NGN project, in year 2013, the government planned and executed a Telecom Expansion Project (TEP) with an investment amount of 1.6 Billion USD. The Telecom Expansion project was executed in the second half of the first 5 years Growth and Transformation Plan (GTP I). As of June 2015, the country has achieved high subscription levels by raising the number of mobile subscribers to 40 Million, and Internet users to 10 Million.

The TEP has resulted in Mobile service penetration of 44%, and Internet penetration has also reached 11%. The Country's 85% of geographic area has coverage of mobile service. If only habitable areas are considered, this can be taken as 100% coverage (Wubshet, 2017).

The mobile network coverage comprises 3G and 2G services, and 4G LTE technology deployment in the capital Addis Ababa. The government has also been working towards improving its international internet gateway capacity/bandwidth through international fiber optic links via neighboring countries Djibouti, Kenya and Sudan. The current international bandwidth capacity stands at 27.3 Gbps (Wubshet, 2017).

2.2 Project Success

A project is considered to be successful when it satisfies project objectives (the time, cost, quality, performance) and also the satisfaction of the parties involved. By most accounts, if the client, end-user, project manager, project team and developer all feel that their expectations were met or exceeded; the project must be considered successful (Nicholas, 2004).

2.2.1 The Perception of a successful Project

The word success when applied to projects is very illusive. De Wit (1988) and many other researchers make a distinction between project success and project management success. For instance, they contend that project success is measured by comparing the project outcomes to the overall objectives of the project; whereas project management success tends to be measured against the traditional measures of performance, namely, cost, time and quality. Moreover, a further distinction is made between project success criteria and project success factors.

success criteria refer to the measures by which success or failure of a project or business will be evaluated; whereas success factors are those inputs to the management system that lead directly or indirectly to the success of the project or business (Camilleri, 2011),

Another researcher Sutton (2005) identifies four distinct levels of success, each having its own discipline, tools and techniques. Thus, excellence at each level is critical for absolute success.

These levels are:

1. Project management success;
2. Repeatable project management success;
3. Project success;
4. Corporate success.

2.2.2 Project Management Causes of Project Success

1. Project participants

Two ingredients frequently identified as essential for project success are the *commitment* and involvement of key project participants such as top management (the developer), the project manager, the project team, and the user.

Top Management: Top management commitment is essential to project success because it influences acceptance or resistance from others on the project. Management shows commitment by supporting the project—allocating necessary resources, giving the project manager adequate authority and influence. approve overtime, select team personnel, relax specifications, etc.), and backing the project manager in times of crisis.

In successful projects, the project manager is confident about top management's support and satisfied with the levels of responsibility and authority conferred to him.

Project Manager: Project managers of successful projects are committed to meeting time, cost, safety, and quality goals. In successful projects, project managers are experienced and capable in administration, technology, communication, and human relations. Usually it is more important that

they have a basic understanding of the technology rather than a command of it. Good project managers have leadership styles that allow them to compensate for any “gap” between their authority and responsibility. They are able to utilize styles of leadership appropriate for their workers, even though they may only have a short time to get familiar with workers.

Project Team: In successful projects, the project team is committed both to the goals of the project and to the project management process. The whole team is involved in estimating, setting schedules and budgets, helping solve problems, and making decisions— a process that helps develop positive attitudes about the project, build commitment to project goals, and motivate the team.

In successful projects, the project team is staffed with the necessary expertise and experience. The team has the requisite skills and knowledge, and is provided adequate resources and technology to perform its functions. Also there is close teamwork, confidence, trust, and understanding of everyone’s’ roles. Team building is employed to define roles and delegate authority and responsibility. To foster good relations that carry through to the workplace, team members are encouraged to mix socially.

2. Communication and Information Sharing Exchange

Successful projects are characterized by good communication and high-quality information sharing and exchange.

Good communication implies a mechanism for effectively integrating the efforts of all project participants and for facilitating project management and the development process. In successful projects, there is continuous, clear communication between all personnel within the project/ user/top management team. Good communication is maintained throughout all stages of the project, from conception through completion.

3. Project Management and Systems Development

In successful projects, several factors relate to project management functions and to elements of the systems development process. These factors include: project definition, planning, control, and implementation.

- I. **Definition:** In successful projects, there is complete and clear definition of project scope, objectives, and work to be done. Project responsibilities and requirements are clearly defined and well-understood by everyone involved. Clarity of definition produces common expectations among the participants.
- II. **Planning:** In successful projects, plans are related to time, cost, and performance goals. The plans include scope and work definition, schedules, networks, milestones, cost estimates, cash flow analyses, labor and equipment requirements, and risk analysis.
- III. **Control:** Successful projects have a control and reporting system that provides for monitoring and feedback at all stages, and enables comparison of schedules, budgets, and team performance with project goals. The project manager and project team in successful projects are committed to the control process. The project manager looks for problems just emerging, and the team takes quick action to resolve problems. The project manager openly discusses problems with the user and the team.
- IV. **Implementation:** In successful projects, preparation for implementation is done in advance. It is addressed in the initial plan and throughout the project. There is a strong liaison between the project team and the user about implementation details. Work is paced to minimize the downstream adverse impacts on people.

From the above literature the researcher identified four Major criteria's to measure the project success

1. Time : The project was successfully completed within the expected time
2. Budget: The project was successfully completed with the planned budget
3. Goals and Objectives: The project successfully met the expected goals and objectives
4. Outcome: The project outcome has produced the intended impact on the company business strategy.

2.3 Human Resource Management Practice in Project Management

Project Human Resource Management includes the processes that organize and manage the project team. The project team is comprised of the people who have assigned roles and responsibilities for completing the project. Team members should be involved in much of the project's planning and decision-making. Early involvement of team members adds expertise during the planning process and strengthens commitment to the project. The type and number of

project team members can often change as the project progresses. Project team members can be referred to as the project's staff.

The project management team is a subset of the project team and is responsible for project management activities such as planning, controlling, and closing. This group can be called the core, executive, or leadership team.

2.3.1 The project Human Resource Management Process

The project Human resource management process includes the following:

1. Human Resource Planning: this includes identifying and documenting project roles, responsibilities, and reporting relationships, as well as creating the staffing management plan.
2. Acquire Project Team: this is obtaining the human resources needed to complete the project.
3. Develop Project Team: Obtaining the human resources needed to complete the project.
4. Manage project team: Tracking team members performance, providing feedback, resolving issues and coordinating changes to enhance project performance

Each process occurs at least once in every project, and occurs in one or more project phases, if the project is divided into phases.

2.3.1.1 Human resource Planning

Human Resource Planning determines project roles, responsibilities, and reporting relationships, and creates the staffing management plan.

The staffing management plan can include how and when project team members will be acquired, the criteria for releasing them from the project, identification of training needs, plans for recognition and rewards, compliance considerations, safety issues, and the impact of the staffing management plan on the organization.

1. Human resource Planning Inputs

I. Enterprise environmental Factors

- A. **Organizational.** Which organizations or departments will be involved in the project? What are the current working arrangements among them? What formal and informal relationships exist among them?
- B. **Technical.** What are the different disciplines and specialties that will be needed to complete this project? Are there different types of software languages, engineering

approaches, or kinds of equipment that will need to be coordinated? Do the transitions from one life cycle phase to the next present any unique challenges?

- C. **Interpersonal.** What types of formal and informal reporting relationships exist among people who are candidates for the project team? What are the candidates' job descriptions? What are their supervisor-subordinate relationships? What are their supplier-customer relationships? What cultural or language differences will affect working relationships among team members? What levels of trust and respect currently exist?
- D. **Logistical.** How much distance separates the people and units that will be part of the project? Are people in different buildings, time zones, or countries?
- E. **Political.** What are the individual goals and agendas of the potential project stakeholders? Which groups and people have informal power in areas important to the project? What informal alliances exist?

II. Organizational Process Assets

- A. **Templates:** Templates that can be helpful in Human Resource Planning include project organization charts, position descriptions, project performance appraisals, and a standard conflict management approach.
- B. **Checklists:** Checklists that can be helpful in Human Resource Planning include common project roles and responsibilities, typical competencies, training programs to consider, team ground rules, safety considerations, compliance issues, and reward ideas.

III. Project Management Plan

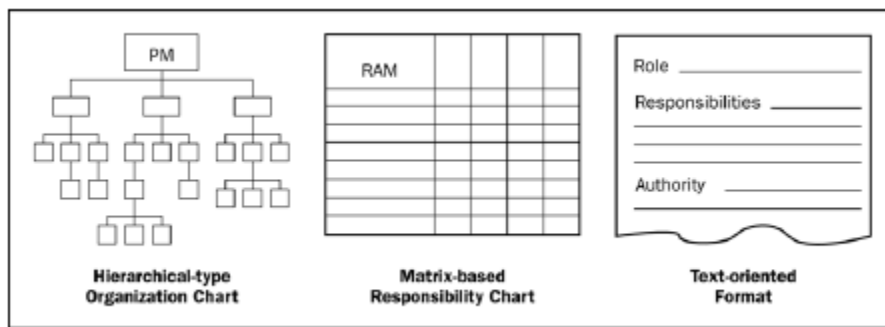
This includes the activity resource requirements, plus descriptions of project management activities, such as quality assurance, risk management, and procurement that will help the project management team identify all of the required roles and responsibilities.

- A. **Activity Resource Requirements:** These determine the human resource need for the project. The preliminary requirements regarding the required people and competencies for the project team members are refined as part the human resource planning process.

2. Human Resource Planning Tools and Techniques

- I. **Organization Charts and Position Descriptions:** Various formats exist to document team member roles and responsibilities. Most of the formats fall into one of three types: Hierarchical, Matrix, and Text oriented. The objectives of those formats is to ensure that

each work package has an unambiguous owner and that all team members have a clear understanding of their roles and responsibilities.



Source: (American National Standard, 2004)

- i. Hierarchical type charts: the traditional organization chart structure can be used to show positions and relationships in a graphic top down format. The organizational breakdown structure is arranged according to an organization's existing department, units or teams.
 - ii. Matrix-based charts: this matrix is used to illustrate the connections between work that needs to be done and project members. It is also called a responsibility assignment matrix (RAM).
 - iii. Text-oriented formats: Team member responsibilities that require detailed descriptions can be specified in text oriented formats. The document provide information such as responsibilities, authority, competencies, and qualifications.
- II. Networking: Human resources networking activities include proactive correspondence, luncheon meetings, informal conversations, and trade conferences. While concentrated networking can be a useful technique at the beginning of a project, carrying out networking activities on a regular basis before a project begins is also effective.
- III. Organizational Theory: Organizational theory provides information regarding the ways that people, teams, and organizational units behave.

Human Resource Planning Outputs

I. Roles and Responsibilities:

- i. Role: The label describing the portion of a project for which a person is accountable.

- ii. **Authority:** The right to apply project resources makes decisions, and sign approvals.
 - iii. **Responsibility:** The work that a project team member is expected to perform in order to complete the project's activities.
 - iv. **Competency:** The skill and capacity required to complete project activities. If Project team members do not possess required competencies, performance can be jeopardized. When such mismatches are identified, proactive responses such as training, hiring, schedule changes, or scope changes are initiated.
- II. **Project Organization Charts:** A project organization chart is a graphic display of project team members and their reporting relationships. It can be formal or informal, highly detailed or broadly framed, based on the needs of the project.
- III. **Staffing management Plan:** this describes when and how human resource requirements will be met. Items to consider in the staffing management plan include;
- i. **Staff acquisition:** questions arise during staff acquisition include, will the human resources come from within the organization or from external, contracted sources? Will team members need to work in a central location or can they work from distant locations? What are the costs associated with each level of expertise needed for the project? How much assistance can the organization's human resource department provide to the project management team?
 - ii. **Timetable:** this describes necessary time frames for project team members, either individually or collectively, as well as when acquisition activities such as recruiting should start.
 - iii. **Release criteria:** Determining the method and timing of releasing team members benefits both the project and team members.
 - iv. **Training needs:** if the team members to be assigned are not expected to have the required competencies, a training plan can be developed as part of the project.
 - v. **Recognition and rewards:** clear criteria for rewards and a planned system for their use will promote and reinforce desired behaviors.

- vi. **Compliance:** the staffing management plan can include strategies for complying with applicable government regulations, union contracts and other established human resource policies

2.3.1.2 Acquire Project Team

Acquire project team is the process of obtaining the human resources needed to complete the project. The project team may or maynot have control over team members selected for the project.

Inputs	Tools and Techniques	Output
1. Enterprise environmental factors 2. Organizational process assets 3. Roles and responsibilities 4. Project organization charts 5. Staffing management plan	1. Pre-assignment 2. Negotiation 3. Acquisitions 4. Virtual teams	1. Project staff assignments 2. Resource availability 3. Staffing Management plan (update)

Source: (American National Standard, 2004)

2.2.1.3 Develop Project Team

This improves the competencies and interaction of team members to enhance project performance. Objectives include:

- Improve skills of team members in order to increase their ability to complete project activities
- Improve feelings of trust and cohesiveness among team members in order to raise productivity through greater teamwork.

Some of the tools and techniques in developing Project Team include

- i. General Management Skill: By understanding the sentiments of project team members, anticipating their actions, acknowledging their concerns and following up on their issues, the project management team can greatly reduce problems and increase cooperation. Skills such as empathy, influence, creativity, and group facilitation are valuable assets when managing the project team.

- ii. **Training:** Training includes all activities designed to enhance the competencies of the project team members. Training can be formal or informal.
- iii. **Recognition and Rewards:** Part of the team development process involves recognizing and rewarding desirable behavior. The original plans concerning ways to reward people are developed during Human Resource Planning.

2.2.1.4 Manage Project Team

Managing Project Team involves tracking team member performance, providing feedback, resolving issues, and coordinating changes to enhance project performance. The project management team observes team behavior, manages conflict, resolves issues, and appraises team member performance.

Some of the tools and techniques in managing project team include the following:

- i. **Observation and Conversations:** Observation and conversation are used to stay in touch with the work and attitudes of project team members. The project management team monitors indicators such as progress toward project deliverables, accomplishments that are a source of pride for team members, and interpersonal issues.
- ii. **Project Performance Appraisal:** The need for formal or informal project performance appraisals depends on the length of the project, complexity of the project, organizational policy, labor contract requirements, and the amount and quality of regular communication. Project team members receive feedback from the people who supervise their project work. Evaluation information also can be gathered from people who interact with project team members by using 360-degree feedback principles

2.3 Skills required for a project Management and Project Team Selection Process

2.3.1 Skills required for a project management

Staffing a project team with competent people is the first stage in a team-building process.

In selecting team members, a balance of various skills and experience is sought in terms of

- **Technical Skills**
- **Decision Making Skills**
- **Administrative Skills**
- **Interpersonal Skills**

1. Technical Skills

Technical skills are the abilities and knowledge needed to perform specific tasks. They are practical, and often relate to mechanical, information technology, mathematical, or scientific tasks.

2. Decision Making Skills

Decision making is a process of identifying the situation and make the best alternative selection from the feasible set of available options. Fast decision-making help to reduce unnecessary delay time and save costs. Effective decision making helps to achieve intended outcomes. However, bad decision making could lead to unsuccessful outcomes (Yewdalem, 2017)

3. Administrative Skills

Administrative skills are those related to running a business or project and keeping the office organized. Employees in every industry and projects need strong administrative skills to handle their tasks and activities.

4. **Interpersonal Skills:** Interpersonal is a skill which the communication is made between the people. Leader need to give directives and discipline to the project team. Without guideline the project team feels confused, unappreciated, unmotivated, and frustrated (Trailer, 1998).

Generally there are 7 essential project management skills for project management this are the following:

- I. **Leadership:** a project manager lead from both strategic and operational perspectives by communicating the vision and get the team buy-in, resolving conflict, setting goals, and evaluating performance and making sure the team members have all the necessary attribute they need to get things done.
- II. **Communication:** One of the essential **skills for project management** is the ability to communicate well, understanding and being understood. Great communication is the crux of any relationship and so the effectiveness of a project manager's communication has an impact not only on the project team but the client and stakeholders too.

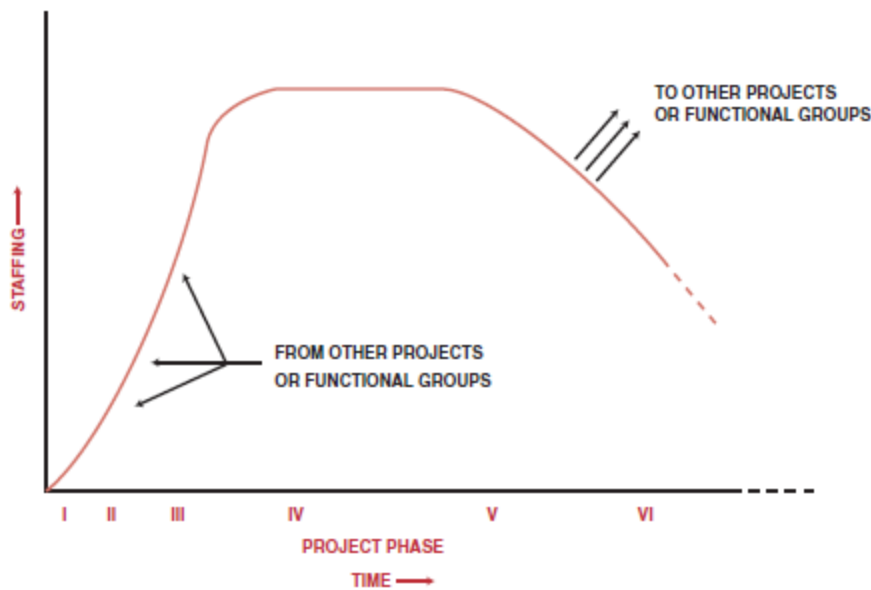
From the client's perspective, communication of project details in writing and a periodic status report is absolutely essential as it will help to reinforce the message and build rapport.

- III. **Planning Skill:** this is another essential skill so as to prepare plan for statement of work, estimates, times and resource plans. The extent to which the ability to create effective plan will directly impact the project ability to be successful.
- IV. **Time Management:** Time management mean planning the time needed to achieve the goal. Organization management and time management is not easy to achieve (Kerzner). In projects managing time is important so as to move according the the schedules since it is a time bound activity.
- V. **Risk Management:** The project management risk management skill to master is the ability to identify risks well before they become issues, and come up with effective mitigation plans so that the risk of them ever becoming issues is nullified.
- VI. **Negotiation Skills:** Discussions about budgets, resource allocation, and timelines can become adversarial and counterproductive if not handled tactfully. Successful project managers know how to find compromises where possible and how to hold a firm line without damaging their workplace relationships.
- VII. **Subject Matter Expertise:** means understanding how things work in strategy, service design, product design, creative concepting, user experience, design, content development, front end development, back end development and so on. ((Project Management Institute, 2000)

2.3.2 Project Team Selection Process

A project operates as a separate entity but remain attached to the company through company administration policies and procedures. Although a project manager can establish their own policies, procedures and rules, the criteria for selecting a project team must be based on company standards (Kerzner, 2003).

The below figure shows the typical staffing pattern as a function of time, There is a man power build up in the early phases and a man power decline in the later stages.



Source: (Kerzner, 2003),

In most project management scenarios, the project manager recruits people from different functional teams within the organization. The project manager does this, in its simplest form, by assembling some kind of schedule of the resources estimated to be required then submitting this in the form of a bid or proposal for approval by senior management. At the same time, the project manager has to negotiate with the various functional managers in order to secure the people required for the team.

A lot of different factors will to be considered within this negotiation process. Typical factors for consideration include: Immediate and Long Term availability; ability; continuity requirements; Team Working skills; special skills.

The best people within the organization will always be in greatest demand so the project manager may be able to get some of these people for part of the project duration, but few of them will be available for all of that time. The project manager would therefore have to consider the ‘trade-off’ between continuity and ability. Is it better to get the best person some of the time, or somebody less capable for all of the time? What would be the consequences of breaks in continuity? How easily could support staff cover for the highly able people when they are not available?

Another factor to consider in project team selection process is to consider is the mix of internal and external staff because if the right caliber of internal people is not available, it might be

necessary to hire an external consultant with the required qualities. This has obvious advantages and disadvantages, and it has far-reaching organizational and leadership implications.

Generally, the characteristics found in a successful project-team staffing process include the Following:

- **Staffing is generally voluntary:** in theory the project manager should ask individual functional members whether they wanted to join the project team, for this is important for the motivation of the individual. However, in most practical scenarios, people are drafted into project teams, sometimes against their wishes. In addition (depending on the internal status of the project), project managers usually do not get their entire first choice of team members.
- **The project team is staffed in relation to the value of the project:** The project manager is able to choose the most appropriate people subject to any obvious limitations on their availability. Project team members therefore know that they have been chosen because their skills and experience are important to the project's success.
- **Project teams are staffed and operated in a less formal manner than functional teams:** the bureaucracy associated with running it tends to be much less than that required by the functional units.
- **Project managers lead by example:** Project managers are generally closely integrated with the project team. They tend to work with less rigidly defined authority. They have to work in this way because of their relationship with the 'borrowed' functional resources.
- **Project teams are flexible and responsive:** They often work across both internal organizational boundaries and across the organizational boundary (where external consultants, contractors and suppliers are involved). This leads to a reduced sense of insulation from 'outside' and tends to promote a greater commercial awareness.
- **Project teams innovate and evolve:** Constant change generates a requirement for rapid problem analysis and innovation. Hence, successful project teams can identify new solutions and implement the corresponding processes quickly and effectively. Functional teams tend to be more 'set in their ways' and find it more difficult to introduce new approaches and processes. Successful project teams can identify new solutions and implement the corresponding processes quickly and effectively.

- **Functional managers who provide resources for project teams receive recognition or credit when the project team performs well:**

2.4 Project Team Performance Appraisal

Performance Management can be defined as a strategic and integrated approach to delivering sustained success to organizations by improving the performance of the people who work in them and by developing the capabilities of teams and individual contributors. (Armstrong, 2006)

The point of performance appraisal is to see if the people under contract are performing as well as they can, and also to assess whether they are being fairly rewarded (W.Kressler, 2003).

2.4.1. Features of Performance Evaluation

- I. Informal or Institutionalized: if the evaluation is run according to principles, procedures and systems it is institutionalized but if it doesn't consider the above criteria's it is said to be informal evaluation.
- II. Open or secret: the evaluation could be open or secret.
- III. Character Based: Such type of performance evaluation is based on the qualities and characteristics that are vital for efficiency and success in a particular job or organization.
- IV. Task-based: The focus of this type of evaluation is not on the person, but on the content of the task to be carried out.
- V. Target Based: such type of evaluation takes task based methods a stage further by defining a number of main realistically aims that impact on success or failure.
- VI. Result-based: the evaluation type is based on the final results over a period of time.

2.4.2. Elements of Performance Management Success

- I. Planning and expectation setting: Goals must be set, the means by which those goals will be evaluated must also be made clear and a specific time frame must be outlined and then adhered to. Performance management success requires clear goal setting.
- II. Monitoring: Performance management tools and techniques must be used in order to track the employee performance status periodically.
- III. Development and Improvement: Successful Performance management always strives for more to find a further way of stretching the capacity and potential of the employees.
- IV. Periodic Rating: it is important to assess the employee's performance periodically.

- V. Reward and Compensation: it is important to integrate recognize the good employee performance with reward and compensation.

2.5 Training and Development

Training is the use of systematic and planned instruction activities to promote learning. It involves the use of formal process to impart knowledge and help to acquire the skills necessary for them to promote their job satisfactorily (Armstrong, 2006).

2.5.1 Benefits of Training

- Improve individual team and corporate performance in terms of output, quality speed and overall productivity
- Improve operational flexibility by extending the range of skills possessed by employees (multi skilling).
- Increase the commitment of employees by encouraging them to identify with the mission and objectives of the organization.
- Help to manage change by increasing understanding of the reasons for change and providing people with the knowledge and skills they need to adjust to new situations.
- Provide higher levels of service to customers.

2.5.2 Effective Training Practices

Armstrong 2006, has summarized the below practices for effective training

- Effective training uses the systematic approach by emphasizing on skill analysis.
- The purpose of the training should be clearly defined.
- The content of the training should be related to the work context of the participants.
- The training technique used should be appropriate to the purpose of the course and to the characteristics of participants.
- A blend of different technique should be used where appropriate.

2.6. Reward Management

According to Graham (2003) as cited by Armstrong defined total reward as an element which includes all types of rewards, indirect as well as direct and intrinsic as well as extrinsic.

An employee reward system consists of an organization's integrated policies, processes and practices for rewarding its employees in accordance with their contribution, skill, competence and their market worth.

2.6.1. The Elements of Reward Management

- I. Basic Pay: it is the fixed salary or wage which constitutes the rate for the job.
- II. Individual performance related pay: This is a cash bonus determined by performance assessment and ratings.
- III. Bonuses: these are the rewards for successful performance which are paid as lump sums related to the results obtained by individuals, teams or organization.
- IV. Incentives: these are payments linked to the achievement of previously set target which are designed to motivate people to achieve higher levels of performance.
- V. Commission: this is a special form of incentive usually for sales representatives.
- VI. Skill based pay: this is a payment that varies according to the level of skill achieved by the individual.
- VII. Competence related pay: pay that varies according to the level of competence achieved by the individual.
- VIII. Allowances: these are elements of pay that are provided as a separate sum of money for such aspects of employment as overtime, shift working, project assignment and so on.
- IX. Employee Benefits: these are also known as indirect pay which include pension, sickpay, insurance covers. They comprise elements of remuneration given in addition to the various forms of cash pay.

2.6.2. Effective Reward and Recognition program for a project

The below are some of the best practices to make an effective reward and recognition program in projects.

- Reinforce the project's objectives and values.
- The reward can involve cash, non-cash or both.
- Reward and recognize in public.
- Use a combination of informal and formal rewards
- Make sure the reward and recognition is commensurate with the level of effort and results.

Empirical Studies

According to (Davies 2002) it requires answering three questions, not one, to answer the question: “What are the critical factors that ‘really’ lead to successful projects?” These three questions are:

1. “What factors are critical to project management success?”
2. “What factors are critical to the success of an individual project?”
3. “What factors lead to consistently successful projects?”

(Davies, 2002) found that an analysis of six project management bodies of knowledge suggested that anticipated benefits was a major criterion for formal and informal assessment of project success by senior management. Moreover, it was found that benefits are not delivered or realized by the project manager and project team, but require actions from operations management and close cooperation between the project team on the one hand and the sponsor or customer on the other.

(Zarina Alias, Determining critical success factors of project management practice: A Conceptual Framework, 2014) made a study in order to identify the extent of the relationship between critical success factors and project performance. The researchers develop a conceptual framework by identifying variables. A pilot study was carried out to test the relevance and comprehensiveness of the industry. Interview was also conducted to the specific target group. The study finally came up with a variable for the critical success factor for a project success. These variables include project related factors, project management action, project procedure, external issues and human factor.

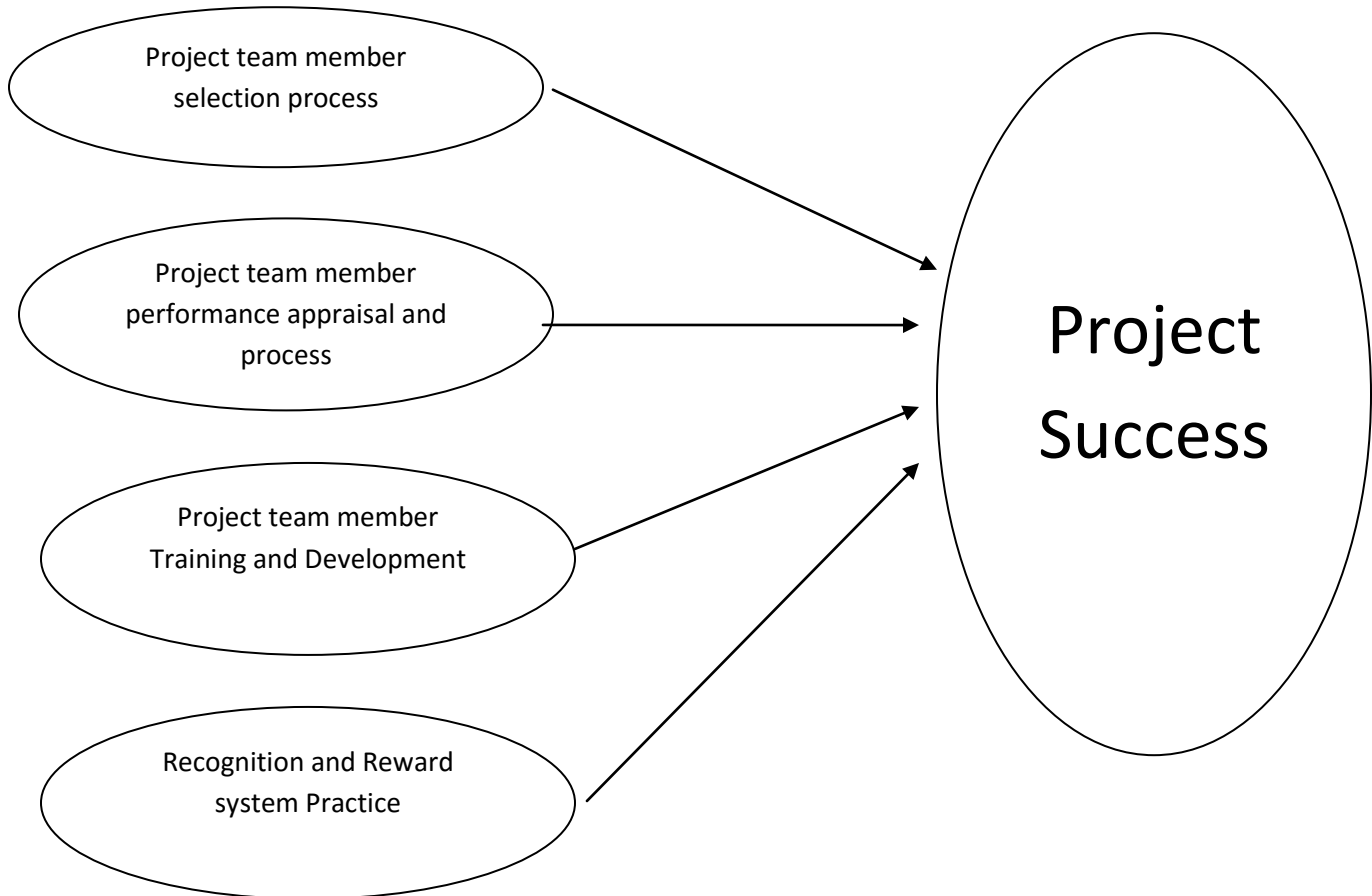
(Sjekaviea, 2017) made a study on project management success factors in order to identify what are the project management success factors with an aim to contribute to the existing knowledge and practice on project management by taking three case studies and identified the following project management success factors: project manager competencies, staff in project team, organizational structure, organizational culture, project management tools and techniques and the project management standards.

(Gauvreau, 2004) Made a research on the factors influencing project success: the impact of human resource management in order to retest Pinto and Prescott research in 1988 which concluded that the “personnel factor” was the only factor for the project success. the measurement instrument used was adapted version of Pinto and Prescott’s project

implementation profile (PIP). A pretest was also carried out with 15 project management experts in more than 10 Canadian organizations. Finally the result of their study show that Personnel factor is the only marginal variable in project success and they concluded that Human resource management in the project management context is as yet undeveloped. Publications are relatively rare and most researches simply involve case studies or expert report and suggested that future research should be aimed at redefining the Human resource management construct, taking in to account the specificity of the project management context.

Conceptual Frame Work

By considering different literatures and studies the below will be used as a frame work for this study, by identifying the major HRM practices in projects.



Source: Researcher own Constructions from Literature reviews, 2019

Chapter Three

Research Methodology

3.1 Research Methods

The purpose of this study was to assess the effect of human resource management practices on project success in ethio telecom. The study used both exploratory and also descriptive. The study used descriptive because it tried to assess the human resource management practices on the project and used exploratory to check the associations between the human resource management practices and the project success.

3.2 Research Design

This research used both quantitative and qualitative research method.

3.3 Source of Data

This research used both primary and secondary data. The primary data was collected through questionnaire, whereas the secondary data was collected from all relevant documents such as books, journal articles, published and unpublished research papers, and company project reports.

3.4 Analysis of Data

After the data collection the data analysis was done with SPSS software with the help of the SPSS application and used Frequencies, Percentages, Mean and Standard deviations. The software is one of the powerful software which can generate the statistic result by saving all the data into the software.

3.5 Target population and Sampling

3.5.1 Target Population

The population of the research includes all the staff members of ethio telecom who were participated on telecom expansion project. As per the data I got from the company a total of 1051 staffs were participated in TEP phase one from ethio telecom side out of which 175 employees were selected from Head quarter. So for this research I took the target population as 175 which were participated from headquarter since I couldn't got a respondent from regional office due to the location issues.

3.5.2 Sample size and Sampling method

In this research, the researcher used Stratified simple random sampling. The researcher selects this technique because since the project teams are selected from different section it will be best if it covers respondents from all divisions proportionally.

In order to determine the sample size the researcher will use Kothari's sample size determination technique (2004).

$$n = \frac{z^2 \cdot p \cdot q \cdot N}{e^2 (N - 1) + z^2 \cdot p \cdot q}$$

Where, p = proportion of response rate (p= 0.5)

q= non response rate (q= 0.5)

z= the score level of confidence of the estimates (95%=1.96)

e= marginal error, 5%

N= Population of the sample (N=175)

$$n = \frac{(1.96)^2 \cdot 0.5 \cdot 0.5 \cdot 175}{(0.05)^2 \cdot (175 - 1) + (1.96)^2 \cdot 0.5 \cdot 0.5}$$

n=120.

Proportionate stratified simple random sampling will be used as per the below data.

Divisions (Headquarter)	Number of participated Staffs	Number of Sample Size (proportionate Sampling)
Sourcing & Facilities	50	34
Information System	39	27
TEP Office	30	21
Residential Marketing and Sales	20	14
Customer Service	10	7
Finance	10	7
Enterprise	9	6
Human Resource	7	4

Chapter Four

Data Analysis, Interpretation and Discussion

Introduction

This Chapter discusses the data analysis, the research finding and the interpretation made to the analyzed data. It also includes the general characteristics of demographic profile in descriptive statistics and also the four major Human resource management practices discussed in descriptive way. Correlation analysis is used to indicate the relationship between dependent and independent variables and finally regression is used to determine the effect of independent variable on dependent variable.

4.1 Response rate

A total of 120 Questionnaires were distributed to respondents who are participated in TEP project from ethio telecom side and 105 questionnaires were filled completely and returned. The remaining 15 questionnaires were not returned in which the 5 of the respondents were assigned on duty for field work without filling the questionnaire on the next day and the remaining 10 due to the reluctance of the respondents.

4.2 Demographic data

The study tried to determine the demographic data in the following variables as indicated in the below table.

Table 1: Demographic data

Variable	Category	Frequency	Percent	Valid percent
Age of respondents	Less than 25	2	1.9	1.9
	26-40	92	87.6	87.6
	40-50	11	10.5	10.5
	Above 50	-	-	-
Sex of respondent	Male	76	72.4	72.4
	Female	29	27.6	27.6
Educational level	Diploma	4	3.8	3.8

of respondents	Degree	82	78.1	78.1
	Masters	19	18.1	18.1
From which functional level the respondents were selected	Sourcing and Facilities	32	30.5	30.5
	Information system	25	23.8	23.8
	Residential sales and marketing	4	3.8	3.8
	Finance	7	6.7	6.7
	TEP office	20	19.0	19.0
	Customer service	7	6.7	6.7
	Human resource	4	3.8	3.8
Role of the respondent in the project	Project Manager	3	2.9	2.9
	Project Team member	94	89.5	89.5
	Human Resource	8	7.6	7.6

Source: Survey Data (2019)

As shown in the above table 87.6% of the respondents' age is between 26 and 40 and 10.5% of the respondents is between 41 and 50 and the remaining 1.9% of the respondents age is under 25 (between 18 and 25 years). 72.4% of the respondents are Male and the remaining 27.6% of the respondents are Female.

Regarding their educational level of the respondents, 3.8% of the respondents are Diploma holder where as 78.1% of the respondents are Degree holder and the remaining 18.1% of the respondents are Masters Holders. As per the stratification the researcher tried to collect data from each division's employees who are found on headquarter which are participated in TEP projects and 32 respondents (30.5%) were from Sourcing and facilities division, 25 respondents (23.8%) were from information system division, 4 respondents (3.8%) were from residential sales and marketing division, 7 respondents (6.7%) were from finance division, 20 respondents were from the Telecom expansion office (TEP Office) and the remaining 7 and 4 respondents were from customer service and human resource division respectively.

Regarding their role in the project, 3 respondents were project managers at TEP, 94 of the respondents are participated as a project team member and 8 respondents are participated in the project as a Human resource administrators and facilitators.

4.3 Reliability Test

Reliability refers to the consistency or dependability of a measurement technique and it is concerned with the consistency or stability of the score obtained from a measure of assessment over time and across setting or conditions (Marczyk, et.al 2005). One of the most common methods to test reliability in SPSS is using Cronbach's Alpha, In which if the reliability coefficients is 0.70 or higher, it is considered "acceptable" in most research situations.

Table 2: Cronbach Alpha value

S.No	Variables	Cronbach's Alpha Value	Number of Questions
1	Project team Selection	.748	5
2	Performance Appraisal	.733	6
3	Training and Development	.806	5
4	Recognition and reward	.711	5
5	Project Success	.720	4

Source: Survey Data (2019)

According to the Cronbach's Alpha values presented in table 2, the value of individual variables range from minimum 0.711 to maximum value of 0.806. so the researcher conclude that it has internal consistency and is reliable for further analysis.

4.4 Analysis of Human Resource Management practices

Respondents were asked to rate the effect of human resource management practice on project success on a five point likert scale type ranging from 1 to 5.

(1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree), and the analysis of the mean score is based on the below assumptions;

- If the mean statistical value is between 0 to 1.5 it implies the respondents strongly disagreed.

- If the mean statistical value is between 1.5 to 2.5 it implies the respondents disagreed.
- If the mean statistical value is between 2.5 to 3.5 it implies the respondents were undecided or neutral.
- If the mean statistical value is between 3.5 to 4.5 it implies the respondents were agreed.
- If the mean statistical value is above 4.5, it implies that the respondents were strongly agreed.

Based on the above assumptions from Burns, 2008, the mean score have been computed for each components of the variables and analysis is presented for each variables. The average mean result together with their respective variables was separately presented analyzed and interpreted as follows:

4.4.1 Project Team Selection Process

Table 3: project team selection process

Variable	1=SD	2=D	3=N	4=A	5=SA	Mean	Standard deviation
	# (%)	# (%)	# (%)	# (%)	# (%)		
Platform for equal opportunity to apply for the vacant position in the project	14 (13.3%)	27 (25.7%)	41 (39%)	23 (21.9%)		2.70	.962
Selected for the project through passing formal selection process	25 (23.8%)	32 (30.5%)	23 (21.9%)	23 (21.9%)	2 (1.9%)	2.48	1.136
Selected for the project because of previous project experience	15 (14.3%)	9 (8.6%)	38 (36.2%)	37 (35.2%)	6 (25.7%)	3.10	1.114
Willingness on individuals requested prior to other steps to join the project	14 (13.3%)	7 (6.7%)	29 (27.6%)	39 (37.1%)	16 (15.2%)	3.34	1.216
Fair and transparent project team selection	4 (3.8%)	29 (27.6%)	39 (37.1%)	27 (25.7%)	6 (5.7%)	3.02	.961
Average Mean Value						2.928	1.085

Source: Survey Data (2019)

Table 3 illustrates the various practices in project team selection practices, regarding the company providing platform for the internal employees to have equal opportunities for competition on the vacant place on the project; the respondents have a mean value of 2.70 which indicates they are undecided on the company providing an opportunity for all employees to participate on the project. Majority of the respondents also disagree on the idea that project team members are selected through passing formal selection process. Regarding the project selection based on previous project participation experience, the respondents still are neutral on their response (38 respondents are neutral). Finally on asking the willingness of individuals to join the project before prior to any steps 39 respondents agree that they had been asked their willingness whether or not to join the project team prior to any other steps and 29 respondents remain neutral where as 7 respondents Disagree on this issue and 14 respondents strongly disagree and the remaining 16 respondents strongly agree. Regarding the fairness and transparency of the selection process majority of the respondents respond undecided or neutral on this issue.

Generally regarding the project team selection practice majority of the respondents are undecided whether the practices are actually practiced or not and the average mean value of the variables shows which is 2.928.

4.4.2 Project Team performance appraisal practice

Table 4: Project team performance appraisal practice

Variable	1=S D	2=D	3=N	4=A	5=SA	Mean	Standard deviation
	#(%)	#(%)	#(%)	#(%)	#(%)		
Project Performance was assessed by self, or superior		2 (1.9%)	41 (39%)	59 (56.2%)	3 (2.9%)	3.60	.582
Performance appraisal was done at regular interval without interruption		2 (1.9%)	50 (47.6%)	46 (43.8%)	7 (6.7%)	3.55	.650
Performance appraisal was based on the goals and objectives set on the projects		2 (1.9%)	44 (41.9%)	59 (56.2%)		3.54	.538
Performance appraisal parameters were clearly communicated for the employees		2 (1.9%)	39 (37.1%)	59 (56.2%)	5 (4.8%)	3.64	.606
Perception on receiving on time feedback from immediate supervisor		3 (2.9%)	49 (46.7%)	49 (46.7%)	4 (3.8%)	3.51	.622
Adequate growth & opportunities availability for those who performed well on the project		4 (3.8%)	58 (55.2%)	38 (36.2%)	5 (4.8%)	3.42	.647
Average Mean Value						3.543	.607

Source: Survey Data (2019)

Table 4 illustrates the project team performance appraisal practices which the researcher tried to assess with the above 6 questions. Regarding project performance assessment by self or superiors majority of the respondents agree that the project performance was either assessed by Self, or superiors. Again majority of the respondents agree that the performance appraisal was done at regular level without interruption with the mean value of 3.55. Regarding the performance

appraisal parameters, majority of the respondents agree that the performance appraisal parameters were clearly communicated for the employees with the mean value of 3.64. Majority of the respondents also agree that they had received on time feedback regarding their performance from their superiors with the mean value of 3.51. Regarding adequate growth and opportunities availability for those who performed well on the project, the respondents are undecided or neutral whether there is adequate growth opportunity for top performers in the project with 58 respondents respond Neutral, 4 respondents respond disagree, 36 respondents Agree and only 5 respondents who strongly agree with this practice practiced on the project.

Generally the project team performance appraisal practice on TEP project was good and respondents agree that the performance appraisal practices were well practiced on the project.

4.4.3 Training and Development practices

Table 5: Training and development practices

Variable	1=SD	2=D	3=N	4=A	5=SA	Mean	Standard deviation
	#(%)	#(%)	#(%)	#(%)	#(%)		
No Bias or Favoritism in the process of selecting employees for training	24 (22.9%)	53 (50.5%)	11 (10.5%)	17 (16.2%)		2.20	.975
Content of the training to achieve tasks and activities effectively on the project	2 (1.9%)	10 (9.5%)	51 (48.6%)	36 (34.3%)	6 (5.7%)	3.32	.803
Selection of proper trainers and trainees to meet the goal of the training	4 (3.8%)	17 (16.2%)	45 (42.9%)	35 (33.3%)	4 (3.8%)	3.17	.882
Training delivery of methods used by the trainers is relevant with the training objectives.	4 (3.8%)	11 (10.5%)	42 (40%)	46 (43.8%)	2 (1.9%)	3.30	.831
the training provided during the project played a major role for the project success	4 (3.8%)	7 (6.7%)	44 (41.9%)	42 (40%)	8 (7.6%)	3.41	.874
Average Mean Value						3.08	.873

Source: Survey Data (2019)

Table 5 illustrates the training and development practices practiced on TEP project and majority of the respondents agree that there was a bias and favoritism in the process of selecting employees for training with the mean value of 2.20. Majority of the respondents are neutral

regarding the content of the training helped to achieve the tasks and activities effectively on the project with the mean value of 3.32. Concerning the selection of proper trainers and trainees to meet the goal of the training, majority of the respondents are neutral whether the selection of trainers and trainees are properly selected or not to meet the goal of the training with the mean value of 3.17. Majority of the respondents were also neutral on the relevancy of the training method used by the trainers with the training objectives with the mean value of 3.30. Finally regarding the efficiency and effectiveness of the project towards project success majority of the respondents were undecided or neutral. Whether the training provided during the project played a major role for the project success or not.

Generally on the training and development practices described and assessed on the projects, majority of the respondents believed that the training practices were neither strongly practiced nor totally forgotten. From this study it is possible to summarize it that there was moderate training and development practice on the project.

4.4.4 Recognition and Reward practice

Table 6: Recognition and reward practice

Variable	1=S D	2=D	3=N	4=A	5=SA	Mean	Standard deviation
	#(%)	#(%)	#(%)	#(%)	#(%)		
The extent to which employees got an appreciation and recognition letter for a good performance		1 (1%)	12 (11.4%)	76 (72.4%)	16 (15.2%)	4.02	.554
The extent to which employees got financial reward for the good performance on the project		2 (1.9%)	22 (21%)	65 (61.9%)	16 (15.2%)	3.90	.658
the extent to which project teams got rewarded as a group for the achievement on the project goals and objectives			10 (9.5%)	78 (74.3%)	17 (16.2%)	4.07	.505
The reward and recognition practices motivated me to do more and perform better to meet the project goals and objectives		2 (2.9%)	14 (13.3%)	58 (55.2%)	31 (29.5%)	4.12	.703
Fair and transparent employee's reward and recognition practices.		4 (3.8%)	8 (7.6%)	67 (63.8%)	26 (24.8%)	4.10	.687

Average Mean Value	4.042	.6214
--------------------	-------	-------

Source: Survey Data (2019)

Table 6 discusses on the recognition and reward practices practiced on the project. Majority of the respondents agree that employees got an appreciation and recognition for a good performance with the mean value of 4.02. Respondents also agreed that employees have got a financial reward for the good performance on the project with 3.90 mean values. Regarding group reward respondents agreed that project team have got rewarded as a group for the achievement of the project goals and objectives with mean value of 4.07. Majority of the respondents also believe that reward and recognition practices motivated them to do more and perform better to meet the project goals and objectives with the mean value of 4.12. Concerning the fairness and transparency of the employees reward and recognition practices, still majority of the respondents agree that there was fair and transparent employees reward and recognition practices with the mean value of 4.10.

Generally on the recognition and reward practice it can be summarized as there was a strong reward and recognition practices.

This study has clearly stated the practices observed on the project by identifying four major practices as discussed above but the study wants to further check the relationship between those four practices with the project success and the project success has been measured as per the below four common variables as follows:

4.5 Project Success

Table 7: Project Success

Variable	1=S D	2=D	3=N	4=A	5=SA	Mean	Standard deviation
	#(%)	#(%)	#(%)	#(%)	#(%)		
Successfully completed within the expected time		12 (11.4%)	10 (9.52%)	74 (70.4%)	9 (8.68%)	3.76	.766
Successfully met the expected goals and objectives		4 (3.8%)	23 (21.9%)	67 (63.8%)	11 (10.5%)	3.81	.666
Successfully completed within the expected budget		4 (3.8%)	33 (31.42%)	52 (49.5%)	16 (15.28%)	3.76	.754
The project outcome has produced the intended impact on the company business strategy		1 (1%)	9 (8.57%)	66 (62.85)	29 (27.58%)	4.17	.612
Average Mean Value						3.875	.699

Source: Survey Data (2019)

The project teams agree that the project was successful by considering the above cost quality time and impact parameters with the mean value of 3.875.

The study finally wants to assess that if there is a relationship and between the HRM practices and the project success.

4.6 Relationship between HRM practices and Project success

In this study Pearson correlation were computed to determine if there were significant relationship between the dependent and independent variable. Correlations are a measure of the linear relationship between two variables. A correlation coefficient has a value ranging from -1 to 1: values closer to the absolute value of 1 indicating that there is a strong relationship between the variables being correlated whereas values closer to 0 indicate that there is little or no linear relationship. The sign of a correlation coefficient describes the type of relationship between the variables being correlated. A positive correlation coefficient indicates that there is a positive linear relationship between the variables (Field, 2009)

Table 8: Correlation

Variables		Team Selection	Performance appraisal	Training & Dev't	Reward & Recognition	Project Success
Team selection	Pearson correlation	1	.285**	3.383**	.261**	.069
	Sig. (2-tailed)		.003	.000	.007	.485
Performance appraisal	Pearson correlation	.285**		.273**	.293**	.241*
	Sig. (2-tailed)	.003		.005	.002	.013
Training & Dev't	Pearson correlation	.383**	.273**		.462**	.189
	Sig. (2-tailed)	.000	.005		.000	.053
Reward & recognition	Pearson correlation	.261**	.293**	.462**		.326**
	Sig. (2-tailed)	.007	.002	.000		.001
Project success	Pearson correlation	.69	.241*	.189	.326**	
	Sig. (2-tailed)	.485	.013	.053	.001	

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

*Correlation is significant at the 0.05 level (1 tailed).

From the above correlation test it can be summarized reward and recognition practice had a statistically strong positive correlation with the project success at ($p < 0.01$) and also performance appraisal practice had a moderate correlation with project success at ($0.01 < p < 0.05$). Whereas the project team selection and training and development doesn't have that much significant relation with the project success.

Regression

Regression analysis is a way of predicting an outcome variable from one predictor variable (simple regression) or several predictor variables (multiple regressions) (Field, 2009). So in this study the researcher observed that there is a statistically strong correlation between one independent variable and the dependent variable. So using regression analysis the researcher wants to find out the actual impact or effect on the dependent variable.

Table 9: Model Summary (Single variable (reward and recognition))

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.326 ^a	.107	.098	.49186

a. Predictors: (Constant), mean.of.Reward.and.recognition.practice

This model summary shows reward and recognition practice alone can account for 10.7% of the variation in the project success which is more than the joint variables totally accounted.

Table 11: ANOVA^a

Model	Sum of squares	Df	Mean square	F	Sig.
Regression	2.972	1	2.972	12.284	.001 ^b
Residual	24.919	103	.242		
Total	27.890	104			

Table 11: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.069	.518		3.996	.000
	mean.of.Reward.and.recognition.practice	.445	.127	.326	3.505	.001

a. Dependent Variable: mean.of.project.Success

From this table the researcher summarizes that a unit change in reward and recognition alone keeping other things constant will result in a 44.5% increase in project success with the P at 0.01% significance level but in order to say that there is a significant effect the significance level had to be below 0.01 ($P < 0.01$) and since this study focused on the joint four human resource management practices, it cannot be said there was a significant effect on the project success.

4.7 Discussion

The purpose of this study was to assess the human resource management practices on project and investigate the relationship with the project success a case study on telecom expansion project. The study identified four human resource management practices and tried to analyze the data from the respondents which were participated in the project. All the variables had an acceptable level of reliability with Cronbach's $\alpha > 0.7$.

This study indentified the practice by individually checking the variables and on the practice of project team select there is a moderate or balanced perception in which the participants thought on the project team selection practice was moderate and not a strong selection practice as compared with the scientific approach. But the practice didn't affect the project success according to the participants. Regarding the project team performance appraisal practice, the company has practiced a good and fair performance appraisal system which is indicated by the respondent's agreement on the company regular performance appraisal sessions without interruptions and the parameters were clearly known by the employees and also there was an adequate growth and opportunity for good performers in the project.

Training and development practice was one of the major essential parts of human resource management practice since it would help employees to empower themselves and perform well in the assigned tasks and activities. On telecom expansion project however the training and development practice was moderate, respondents think there was a favoritism and bias to be selected for training and also they think the training delivery methods, the trainers and trainee selection as well as the effectiveness of the training to achieve the desired goal is not as strong and effective as it had to be.

Recognition and reward practice of the company on the project was strong and respondents believe that the company provided the necessary reward and recognition practices for the employees and that helped employees to motivate them for a better performance and achievement.

Chapter Five

Summary of Finding Conclusion, and Recommendation

Introduction

In this chapter the finding that the researcher discussed and analyzed in the previous chapter will be summarized and concluded. Also based on the finding the researcher will give possible recommendation to be improved.

5.1 Summary of the Findings

The research finding shows that:

- ❖ On Team selection practice even though the findings show a moderate response, ($M=2.928$, $SD=1.085$), the company didn't provide an equal opportunity for all employees to participate on the project, and most team members on the project are selected because of their past experience and recommendation from immediate managers which didn't gave the opportunity for newly hired employees to show their capacity to work on the project. This leads to the doubt on the fairness and transparency of the project team selection.
- ❖ Performance appraisal is very well practiced in the project ($M=3.543$, $SD=.607$), the project performance was assessed by supervisors and most of the time appraisal of employees were done at regular level without interruption, the appraisal parameters were clearly communicated for the employees and they were integrated with the project goals and objectives. Employees also feel that they received immediate feedback from their supervisors. The company also provided adequate growth and opportunities for a better position for those who performed well on the project.
- ❖ On Training and development practice, even though the company didn't have a fair training and development practice as there were a bias and favoritism on selecting employees for training and there were no standard criteria for selecting employees for training, the content of the training provided and the training delivery method used by the trainers were effective to meet the goal of the project.
- ❖ The Company Recognition and reward practice is good ($M=4.042$, $SD= .621$), the company recognized an employee through letter recognition or financial reward for

the good performance on the project and also there were recognition and reward as a team for the achievement on the project goals and objectives and the study clearly observed that there were fair and transparent employees reward and recognition practices.

- ❖ There was a statistically significant correlation between reward and recognition practice with the project success at a significant level ($P < 0.01$).
- ❖ There was a moderate correlation between performance appraisal and project success at a significant level ($0.01 < P < 0.05$).
- ❖ Regarding the effect of the human resource management practices, only reward and recognition practice has a significant effect on the project success.

5.2 Conclusion

Under this study, the major Human resource management practices are identified and four research questions were developed and addressed in this research and all the dimensions were rated in between 2.5 and 3.5.

The study concluded that the company needs to work more on effective project team selection practices. The company didn't provide effective platform for its employees to have the opportunity to apply for the project, also the selection process for the project is not fixed and common. Some employees got selected without passing formal selection process while others have to go through interview. Generally the researcher doubts that there is fair and transparent selection process.

In Ethio Telecom performance was appraised by their superiors, and the appraisal parameters were clearly communicated for employees and the parameters were based on the goals and objectives of the project. Employees who performed very well had the opportunity for transfer and promotion to a better position.

On Training and Development there was a bias and favoritism for selecting an individual for training sometimes the managers decide on who to participate on training or not without clear standard and selection process but the content of the training were helpful to achieve tasks and activities on the project. Trainers were properly selected who specializes on the specific category or knowledge which was effective for the training since they provide training based on their expertise and specialization and also the training delivery methods were relevant with the training objectives.

On Regarding Reward and recognition, on the project employees got a financial as well as letter of recognition for the good performance on the project. There was also a group reward for the achievement of the project goals and objectives. There was generally a fair and transparent employee's reward and recognition practice on the project.

5.3 Recommendations and Further studies

The researcher recommends the below points.

- It would be better if ethio telecom provides a better platform for employees to have an equal opportunities for vacant places on project so that eligible employees could compete the for the position.
- It would be better if the company prepare a clear procedure and selection process so that it will communicate for its employees and every employee know the procedure and will have a transparent selection process for next or ongoing projects.
- To continue the performance appraisal management practice by clearly communicating the parameters for the employees as well as setting the parameters compatible with the goals and objectives of the task.
- There should be continuous and effective training program for eligible employees on the project by clearly identifying the criteria's for selection and clearly communicating employees on the criteria's and eligibility. So that it will help to reduce the employee's perception that there were bias and favoritism in selecting employees for training.
- Reward and recognition practice on the project was strong and the company should make such practice in a way that makes it effective for achieving the company goal and objectives.
- Even though this study tried to analyze and assess the effect of human resource management practice it didn't get any significant effect on the project success, so it would be good if another study could be done on other human resource management practices or to check which variables of the project management body of knowledge has (Nicholas, 2004)an effect on project success by taking different variables.

Bibliography

- American National Standard. (2004). *A Guide to the Project Management Body of Knowledge*. Pennsylvania: Project Management Institute.Inc.
- Anbessie, M. (2017). *Assessment on Performance and Challenges of Ethio Telecom Infrastructure Expansion project Implementatio, Monitoring and Evaluation*. Addis Ababa: Unpublished.
- Armstrong, M. (2006). *A handbook of Human Resource Management Practice*. London: Kogan Page Limited.
- Belout, A. (1998). Effect of human resource management on project effectiveness and success. *International Journal of Project Management* , 21-26.
- Bogale, W. (2005). *A Background Paper on Telecom and Telecom Statistics in Ethiopia*. Addis Ababa: Unpublished.
- C.R.Kothari. (2004). *Research Methodology, Methods and Techniques* (2nd ed.). New Delhi: New Age International Limited Publisher.
- Camilleri, E. (2011). *Project Success Critical Factors and Behaviors*. England: Gower Pubishing Limited.
- Field, A. (2009). *Discovering Statistics Using SPSS* (3rd ed.). London: SAGE Publication Ltd.
- Gauvreau, A. B. (2004). Factors Influencing Project Success: The Impact of human resource management. *International Journal of Project Management* , 1-11.
- Kerzner, H. a. (2003). *Project Management A syste Approach to Planning, Scheduling and Controlling* (8th ed.). Ohio: John Wiley & Sons, Inc.
- Mary Beth Pinto, J. K. (1993). Antecedents and Consequences of Project Team Cross Functional Cooperation . *Manageent Science* .
- Nicholas, J. M. (2004). *Project Mangement for Business and Engineering Principles and Practices*. Sydney: Elsevier Butterworth Heinemann.
- Pinto JK, S. D. (1988). Project Success, Definitions and Measurement techniques. *Project Management Journal* , 67-73.
- Project Management Institute. (2000). *Project Human Resource Management* (7 ed.). United States: Loftus Word Pro.96.
- Robert Burns, a. R. (2008). *Business research methods and statistics using SPSS*. London: SAGE Publications Ltd.
- S.Everitt, S. L. (2003). *A Handbook of Statistical Analyses Using SPSS*. London: A CRC Press Company.

Safakish, H. H. (2015). A Human resource evaluation toolkit for mega size industrial projects. *29th World congress International Project Management Association (IPMA)* (pp. 28-30). Panama: Western Piaya.

Sjekaviea, M. R. (2017). Project Management Success factors, . *Creative Construction Name* (pp. 607-615). Primoste: Procedia Engineering.

Todryk. (1990). The Project manager as a team builder: creating an effective team. *Project Management Journal* , 17-21.

Trailer, J. K. (1998). *Leadership Skills for Project Managers*. Newtown: Project Management Institute Headquarters.

W.Creswell, J. *Research Design qualitative,quantitative and Mixed methods Approaches* (3rd ed.). London: SAGE Publication.Inc.

W.Kressler, H. (2003). *Motivate and Reward, Performance Appraisal and Incentive Systems for Business Success*. Norwich: Curran Publishing Services.

Wubshet, M. (2017). *Assesment of Logistics Practice in Project Context, The case of ethiotelecom expansion project*. Addis Ababa: Unpublished.

Zarina Alias, E. Z. (2014). Determining Critical success factors of project management practice: A Conceptual Framework. *AMER International Conference on Quality of Life* (pp. 611-69). Malaysia: Procedia Social and Behavioral Science.

Appendix 1

Questionnaire

School of Commerce MA in Project Management

Survey Questionnaire

This research project entitled as *“The Effect of Human Resource Management Practice on Project Success: a case study on Telecom Expansion Project, Ethio telecom”* is designed to examine the human resource management practice and its effect on project success at Telecom Expansion Project (TEP) of ethio telecom. You are kindly requested to respond to the statements which describe a specific situation. You are to decide the extent to which you agree that the statement is typical of your judgment. To do so, tick or circle one of the descriptors beneath the statement. The research is anonymous; you do not need to disclose your personal details. The information you provide will be used purely for academic purpose and will be kept confidential. Participation in this study is absolutely voluntary. It will take 15 to 20 minutes of your time to complete the questionnaire.

Section 1: Demographic Profile of Respondents

1. Which age range do you belong to?

Less than 25 ☐

26-40 ☐

40-50 ☐

>50 ☐

2. What is your gender

Male ☐

Female ☐

3. What is the highest level of education that you completed?

Certificate ☐

Diploma ☐

☐ PHD

Degree ☐

Masters ☐

4. Please indicate your functional work unit from which you were selected to the project.

Sourcing & Facilities ☐ Information System ☐

Residential Sales ☐

Marketing ☐

Customer Service ☐

Finance ☐

Enterprise ☐

Human Resource ☐

5. Please indicate your role in the project

Director ☐

Project Manager ☐

Project Team Member ☐

Human resource ☐

Other; please specify _____

Section 2: Project Team Selection Practice

6. Think of project team selection practices of the TEP project and choose the number that best describes your agreement and disagreement to the following.

Project team selection practice	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
The company provided a platform for the internal employees to have equal opportunity for competition for the vacant place in the project based on their skills and experience.					
I was selected for the project through passing formal selection processes					
I was selected for the project because I had experience in other projects					

I have been asked my willingness whether or not I am willing to join the project prior to other steps					
The Employee Selection process for the project was fair and transparent.					

Section 3: Project Team Performance Appraisal

7. Think of project team performance appraisal practices of the TEP project and choose the number that best describes your agreement and disagreement to the following

Project team performance appraisal practice	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
Project performance was assessed by self, or superior					
The performance appraisal was done at regular interval without interruption.					
The performance appraisal was based on the goals and objectives set on the project					
The performance appraisal parameters were clearly communicated for the employees.					
I feel that I had been receiving on time feedbacks regarding my performance from my superiors.					
Adequate growth opportunities were available for those who perform well on the project.					

Section 4: Training and Development Practices

8. Think of project team training and development practices of the TEP project that you were involved in and choose the number that best describes your agreement and disagreement to the following

Project team training and development practice	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
There were no bias or favoritism in the process of selecting employees for training					
The content of the training provided helped me to achieve my tasks and activities effectively on the project.					
The Training program trainers and trainees on the project are properly Selected to meet the goal of the training.					
The training delivery methods used by the trainers were relevant with the training objectives.					
The training provided during the project played a major role for the project success					

Section 5: Recognition and Reward Practice

9. Think of project team recognition and reward practices of the TEP project and choose the number that best describes your agreement and disagreement to the following

Project team Recognition and reward practice on TEP project	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
The extent to which employees got an appreciation and recognition letter for a good performance.					
The extent to which employees got financial rewards for the good performance on the project					
The extent to which the project teams got rewarded as a group for the achievement					

on the project goals and objectives					
The reward and recognition practices motivated me to do more and perform better to meet the project goals and objectives.					
Employee's reward and recognition practice on the project was fair and transparent.					

Section 6: TEP Project Success

10. Think of the TEP project success and choose the number that best describes your agreement and disagreement to the following.

Project Success Measurements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
The Project was successfully completed within the expected time					
The project successfully met the expected goals and objectives					
The project was successfully completed within the expected budget.					
The project outcome has produced the intended impact on the company business strategy					

Thank you for your time!