Addis Ababa University School of Commerce

Assessment of Project Management Maturity Level in GIZ Ethiopia Educational Projects

By

Tsion Girum

Advisor: -Dr.BAHRAN.A

A Thesis Submitted to Addis Ababa University School of Commerce

In Partial Fulfillment of the Requirements for the Award of Master of Arts Degree in Project Management

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Addis Ababa, Ethiopia

June 2022

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Declaration

I, Tsion Girum have conducted independently a research work on the topic entitled "Assessment of Project Management Maturity Level in GIZ Ethiopia Educational Projects " in partial fulfillment of the requirement for the Degree of Masters of art in Project Management with the guidance and support of my research advisor Bahran Asrat (PhD). This study is my own work that is not submitted for any degree or Master program in this or any other institutions.

Name of the student Tsion Girum, Signature————————Date: ————————

Statement of Certification

This is to certify that Tsion Girum has conducted this research work on the topic entitled "Assessment of Project Management Maturity Level in GIZ Ethiopia Educational Projects" undermy supervision. This work is original in nature and it is sufficient for submission for the partial fulfillment for the award of Degree of Masters of Art in Project and Management.

Name of the Principal Advisor Dr.Bahran Asrat (PhD)

Signature: ———

Date: ———

Approvals

The under signed to certify that they have read here by recommending to Addis Ababa University College of Business and Economics Master's Program of Project Management to accept the thesis submitted by Tsion Girum entitled ""Assessment of Project Management Maturity Level in GIZ Ethiopia Educational Projects" undermy supervision. This work is original in nature and it is sufficient for submission for the partial fulfillment for the award of Degree of Masters of Art in Project and Management.

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Name ofAdvisor Bahran Asrat (PhD Signature……

Date……

Internal Examiner…… Signature…… Date……

Mesfin Tesfaye, Ph.D. 07/07/2022

External ExaminerSignature Date

Abstract

Assessment of Project Management Maturity Level in GIZ Ethiopia Educational Projects is the title of the project. Its goal is to determine GIZ Ethiopia's level of project management maturity in educational projects, as well as to identify the gaps in project management practices and expertise. As a case study, the project area looked at the present operational program known as the Sustainable Training and Education Program (STEP).The research method used was descriptive statistics, assessed qualitatively and quantitatively. To collect primary data, 50 structured standard questioners distributed to project managers, advisors and project team leaders at the corporate STEP program offices.5 Project managers directly associated to the project also interviewed. Secondary data gathered through the company's evaluation reports and beneficiary analysis. According to the collected data, the maturity level of GIZ Ethiopia educational projects is level four, characterized by processes that are integrated with corporate processes; management mandates compliance, solid analysis of project performance, and management decisions. But a gap in human resource management and risk management is recognized As a result, the study recommended that GIZ Ethiopia continue to improve project performance and integrate all 10 knowledge areas in a way that is comparable to what was envisaged, and not only maintain level 4 But also upgrade to level 5 maturity level.

Acknowledgement

First, I want to express my gratitude to the Almighty God for his guidance throughout my life. My heartfelt gratitude goes out to my advisor, Dr. Bahran Asrat, for his invaluable advice and assistance throughout this study. I would like to express my gratitude to MR. Tesfaye and MR. Abebe, employees of the GIZ Ethiopia STEP program office, for their assistance and participation in the data collection process, which contributed to the study's valuable conclusion and recommendations. I would also like to express my gratitude to my family for their encouragement and inspiration.

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List of Acronyms

CMM Capability Maturity Model

CMMI Capability Maturity Model Integrated

EU European Union

GIZ German Agency for International Cooperation

NORAD North American Aerospace Defense Command

OPM3 Organizational Project Management Maturity Model

PM Project Management

PMBOK Project Management Body of Knowledge

PMI Project Management Institute

PMM Project Management Maturity

PMO Program/Project Management Office

POO project oriented organization

STEP Sustainable Training and Education Program

TVET Technical and Vocational Education and Training

CHAPTERONE

INTRODUCTION

According to PMI's project, management statistics from 2022, about 10% of every dollar spent on a project wasted owing to poor project performance. To increase project success, several firms employ project management models. The main advantage of

analyzing present project management procedures with the project management maturity model is that it can help to lay a solid basis for future growth. This chapter covers the following topics: the study's background, problem, and goal; the study's importance; the study's scope; the study's limitations; and the study's organization.

1.1 Background of the study

In recent years, projects have evolved into a means of completing certain tasks and objectives. The Project Management Institute (PMI) as "any temporary undertaking with a known beginning and finish" defines the term "project". Because project management has become the main method for completing work, organizations are aiming to manage projects effectively and productively (Grant and Penny packer, 2006). Organizations can determine ways to improve project performance by measuring project management maturity (Brookes et al., 2014).

The concept of project maturity has also been gaining popularity, as it is a measure of an organization's ability to manage its projects. A corporation with a higher level of project maturity has a better likelihood of completing the project than one with a lower level of project maturity. As a result, Hillson believes that companies should be interested in understanding about their project maturity level (2003). PMMMs (Project Management Maturity Models) are a structured framework for monitoring, benchmarking, and strategizing about how to improve project management methods (Yazici, 2009).

The German Agency for International Cooperation or (GIZ) is a global organization owned by the German Federal Government, running in lots of fields across greater than a hundred thirty international locations. The organization is a federal corporation supported by the German Government in achieving its goals inside the area of international cooperation for sustainable improvement. GIZ gives demand-pushed, tailored and powerful offerings for sustainable improvement. GIZ operates in lots of fields: monetary improvement and employment advertising, governance and democracy, protection, reconstruction, peace-building and civil conflict transformation, food safety, health and primary schooling, environmental protection, aid conservation, and weather change mitigation.

As a service issuer inside the area of international cooperation, GIZ Ethiopia is devoted to shaping a future well worth dwelling round the world. It has over 50 years of enjoy in a huge variety of areas, consisting of economic development, teen employment promotion, energy and the surroundings, and peace and protection. The various expertise of its federal company is in demand around the world – from the German Government, European Union establishments, the United Nations, the personal region, and governments of other nations. The agency additionally paintings with corporations, civil society actors and studies establishments, fostering a hit interaction between development policy and different coverage fields and areas of hobby. The foremost commissioning birthday party is the German Federal Ministry for Economic Cooperation and Development (BMZ).

GIZ operates in Ethiopia on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and different national and international partners. In line with the Ethiopian Government's goals, Germany's improvement cooperation with Ethiopia makes a specialty of 3 precedence regions like financial development and vocational education and schooling, agriculture and meals and nutrients security, conservation and sustainable use of natural sources (biodiversity).

GIZ's different fields of hobby in Ethiopia consists of helping the youthby offering services for displaced humans, According to the corporation's website at the cease of 2018, it was website hosting over 900,000 registered refugees. In addition to this, it offers support to sell fitness, renewable power, and social and environmental standards in enterprise. It additionally works in conjunction with the Civil Peace Service in the region of struggle control and is concerned in development partnerships with the personal region in Ethiopia.

The employer additionally features in the country with the aid of collaborating with distinct corporations like Africa union. GIZ's portfolio on the African Union (AU), based inside the capital of Addis Ababa, performs an essential function for the paintings in Ethiopia. On behalf of BMZ and the German Federal Foreign Office (AA) as lead commissioning parties, GIZ is enforcing numerous tasks with the AU, specializing in agriculture, training, peace and security, local monetary integration and appropriate

governance.

The Ethio-German Sustainable Training and Education Program referred to as STEP, which aims at creating higher employment prospects for TVET, higher schooling graduates by means of selling pleasant, and demand pushed training and talents development.

STEP is a project funded by the German Federal Ministry of Economic Cooperation and Development (BMZ) and co-funded by the Norwegian Agency for Development Cooperation and the European Union that helps Ethiopian authorities build a modern schooling machine geared toward employment and socio-economic growth by establishing strong links between education and the personal region

STEP strengthens selected TVET colleges, universities, and organizations, employer and chamber institutions, public training, and enterprise government, according to information from the business company's e-book. The Ethiopian Ministry of Science and Higher Education (MoSHE), as well as its organizations and institutions, ensure the long-term viability of this system's interventions and the scaling-up of innovative and best practices at the federal level. With a budget of 24.400 EUR from July 1, 2018 to June 30, 2021. According to Callahn and Brooks (2004), PMOs are becoming a particularly popular solution for the firm's project management afflictions due to the problems given by the nature of projects and experience. Because it has the potential to influence project outcomes.

Project Management Offices are currently responsible for tasks such as project support, consulting and mentoring project managers and project teams, developing project management methods and standards, providing software tools, providing training, and managing both human and material resources for projects (Crawford, 2010). Hill (2008) classifies these and other PMO responsibilities as practice management. Project Tools, Project Management Methodology, Standards and Metrics, and Project Knowledge Management are all part of practice management, (Wysocki, 2014). Increased project management maturity indicates the creation and execution of increasingly more full and comprehensive project management processes and practices (Hill, 2008). An understanding of how to raise maturity levels, hence, various means of assessing the

maturity level of an organization formulated and being implemented. Mateen (2015) stated that various models are in use to assess maturity levels in project management, this project work tried to measure the project management maturity level of GIZ Ethiopia's PMO. It also attempted to look into possible ways of improving project management practice and forward recommendations as a means of improvement.

1.2 Statement of the Problem

Project management in developing countries Ethiopia as a developing country faced with project management challenges both technical and non-technical. Yosuzifi (2009),"Project maturity reflects an organization's ability to handle its projects," Project success is higher for a corporation with a high level of project maturity."

The purpose of a project management maturity model is to provide a model of progressive improvement in project management systems and processes that can be used to assess an organization's capabilities and to provide an improvement path (Pennypacker 2001, 6). Despite a growth in the number of projects undertaken by a variety of organizations in Ethiopia, project management is carried out on an ad hoc basis (Abadir, 2011). Studies made by different schollars This, in turn, has an impact on the project's success. GIZ Ethiopia, as a development agency, works on a variety of programs and initiatives, focusing on critical sectors like as the economy, education, agriculture, and food security. However, the maturity level of the organization has not been extensively explored.

Regardless of studies by scholars such as Miraf Endle and Abreham Ejigu examining the maturity level of Ethiopian organizations, there aren't enough studies assessing the maturity level of developmental organizations like GIZ Ethiopia. The goal of this study is to analyze GIZ Ethiopia's project management maturity in its educational programs. As a case study in the Sustainable Training and Education Program (STEP) program. Studies on The maturity levels of project management are. Likewise hard to come by. Furthermore, the study aims to address a vacuum in the current literature by presenting possible recommendations for improving the organization's maturity.

1.3 Objectives of the Study

1.3.1 Main Objective

The overall goal of this research is to determine the level of project management used by GIZ Ethiopia in its educational programs.

1.3.2 Specific Objectives

1. To determine the level of project management maturity in GIZ Ethiopia's educational projects.

2. To identify gaps in project management practices and knowledge areas, and make recommendations

3. To recommend ways to improve the company's project maturity for better results\

1.4 Research Questions

By assessing the maturity of PMO of GIZ Ethiopia, the project work tried to answer the following questions.

1, what is GIZ Ethiopia's project management maturity level in educational projects?

2, what knowledge areas is a gaps recognized in project management maturity of the program?

3, is the project management knowledge area being practiced in the program office?

1.5 Significance of the Study

Theoretical significance

A project management maturity model is a road map that shows a company how to gradually improve its performance and do it in a more effective and efficient manner. Following an objective assessment, project-driven organizations in Ethiopia will gain a better understanding of their project management maturity level; identify strengths and weaknesses, and set goals for improving the capability of their processes. They will also

be able to track progress against their project management improvement plan, create a culture of project management excellence, and contribute more at the national and international levels.

Practical significance

Companies with a high level of project maturity seen to have a better likelihood of project success than those with a lower level of project maturity. As a result, businesses should be interested in understanding about their project maturity level. GIZ Ethiopia will be able to assess its project management maturity, identify strengths and weaknesses, create goals for improving process capabilities, and measure progress against its project management improvement plan. The findings and recommendations will aid in the development of evaluation methods and frameworks that are appropriate for project-based organizations.Researchers could use it to undertake in-depth analyses of project management maturity in a variety of companies. Overall, as a project-driven organization, GIZ Ethiopia faces challenges and needs to improve its project maturity in order to succeed.

1.6 Scope of the Study

The paper is to be conducted in assessment of educational project of GIZ Ethiopia For the sake of quality of the research and time as well as resource constraints, this study focused on measuring project management maturity of STEP Project ,program Office of GIZ Ethiopia. The time is bound to be finished in a 3-month time. Using structured questionnaires and thebased on the ten project managementknowledge areas.

1.7 Definitions of Key Terms

Program Management: - Program management is the application of information, skills, tools, and strategies to a program in order to achieve program requirements and gain benefits and control not accessible when managing projects separately." P. R. is a fictional character (2003). A detailed assessment instrument is the project maturity model. At the PMI® Global Congress, a paper was presented.

Portfolio Management: - "To achieve strategic objectives, portfolio management refers to the centralized management of one or more portfolios (projects, programs, and sub-

portfolios administered as a group)." p.617 in Webster (1988).

Program Management:- "Program management is the application of information, skills, tools, and procedures to a program in order to achieve program requirements and obtain benefits and control not attainable through individual project management." P. R. is a fictional character (2003). A detailed assessment instrument is the project maturity model. At the PMI® Global Congress, a paper was presented.

Developmental organizationsare semi-government enterprises that collaborate with the government E. S. Andersen and S. A. Jessen (2003). Organizational project maturity. 457-461 in International Journal of ProjectManagement.

1.8 Limitations of the study

There are bound to be flaws in any study project. This survey necessitates a significant amount of time and effort from participating organizations, and it is possible that not all responders will offer correct data. To reduce this, other strategies used, such as asking for a suitable date and time, and clarifying the research findings' importance to the respondent organization. Some project managers who are new to the company may not have a thorough understanding of the project management system. This may reduce the data's findings slightly.so in order to reduce this data was gathered through interview and crosschecked with data gathered from reports using data triangulation method where the use of a variety of data sources, including time, space and persons, in a study.

1.9. Organization of the Thesis

The research divided into five sections. The first chapter introduces the study's context. The second chapter looked at a variety of relevant literatures in order to have a better knowledge of the subject at hand. The theoretical frameworks of the investigation discussed in this chapter. The study's methodological section is covered in the third chapter. The fourth chapter contains the analysis, discussions of important findings, and a summary of the findings. The study's recommendations and consequences will be addressed in the fifth and final chapter conclusions. At the end of the study report, there is a list of sources used as well as appendices.

CHAPTER TWO

LITERATURE REVIEW

This chapter serves as preliminary information on the chapter it contains the conceptual, theoretical and empirical framework of reviewed literature

2.1 Conceptual Literature review

Project is a short-term task to create a one-of-a-kind product or service (PMI, 1996, p.4).The first Program Evaluation and Review Technique (PERT) is claimed to have signaled the birth of project management as a formal managerial discipline in the middle of the twentieth century. According to Hamilton (2004), modern project management has risen to prominence and has been evolving for the past 40-50 years. During the 1950s, 1960s, and 1970s, project management emerged in a small number of engineering-based sectors (Morris, 1994). As more and more businesses realized the benefits of arranging work around projects, tools, strategies, and processes became standard across industries and businesses. The application of information, skills, tools, and procedures to project activities in order to achieve project requirementsis characterized as project management.

Project management maturity;- The steady development of an enterprise-wide project management approach, methodology, strategy, and decision-making process is referred to as project management maturity. Each organization's proper level of maturity will differ based on its unique goals, strategies, resource capabilities, scope, and demands. (From the 5th edition of the PMBOK) According to Kerzner (2003), project management maturity is defined as the application of a standard methodology and associated processes with a high possibility of repeat success. Maturity, according to Andersen and Jessen (2003), is "a state in which an organization is in perfect condition to realize its objectives."

The organization would then be perfectly conditioned to deal with its projects due to project maturity." Maturity;- Many writers describe maturity in a variety of ways that are all closely linked. The following are some of the definitions provided. "Maturity refers to how well a process has been explicitly specified, managed, measured, controlled, and executed. Maturity demonstrates the richness of an organization's (Project Management) process as well as the consistency with which it is applied in projects

across the organization." (1993) Paulk, Curtis, Chrissis, and WeberOrganizational Maturity is "the extent to which an organization has explicitly and consistently deployed processes that are documented, managed, measured, controlled, and continually improved." [(CMMI Product Team, 2002, p. 582).cited by (Cooke-Davies, 2005)] "Maturity is the level of sophistication that indicates organizations current project management practices and processes". "The degree to which an organization practices project management measured by the ability of an organization to successfully initiate, plan, execute, monitor and control individual projects." (Project Management Institute (PMI), 2003). According to (Chrissis, Konrad, &Shrum, 2003), a matured process is well understood throughout a mature organization; usually through documentation and training, and the process is continually being monitored and improved by its users. The capability of a mature process is known. Process maturity implies that the productivity and quality resulting from an organization's use of the process can be improved over time through consistent gains in the discipline achieved by using its process .A mature organization has an organization-wide ability for managing initiatives based on standardized and defined management processes. In such organizations, activities are carried out according to defined processes and plans. Roles and responsibilities are well defined and understood.

2.2 Theoretical frame work

2.1 Project Management Process Groups

According to PMI (2013), the project team should pick relevant processes required to accomplish the project objectives in order for the project to be successful. These procedures ensure that the project runs well throughout its entire life cycle. The processes cover the tools and techniques used to put the project management knowledge areas' skills and capabilities into practice. In the life cycle of each project, there are five process groups.

The initiating process group: This process group includes the procedures for defining a new project or a new phase of an existing project, as well as the procedures for gaining authorization to begin the project or phase. The initial scope is determined and initial

financial resources are committed during the initiating processes (PMI, 2013). During this period, no actual project activities is carried out (Wysocki, 2014).

The planning process group: This process group includes the procedures for determining the overall scope of the activity, defining and refining the objectives, and developing the plan of action needed to achieve those goals (PMI, 2013). According to Kerzner, activities in this group include defining work requirements, defining quality and quantity of work, defining resources required, scheduling activities, and evaluating various hazards (2009).

The executing process group: According to PMI, this refers to the procedures used to fulfill the tasks outlined in the project management plan in order to meet the project's requirements. This process group is responsible for coordinating people and resources, managing stakeholder expectations, and integrating and carrying out project operations in accordance with the project management plan (PMBOK, 2013).

The monitoring and controlling process group: This process category includes processes for tracking, reviewing, and orchestrating the project's progress and performance; identifying any areas where changes to the plan are required; and initiating the necessary changes (PMI, 2013). The project team (Kerzner, 2009) falls under this category and is responsible for assessing progress, comparing actual results to expected results, analyzing deviations and impacts, and making modifications.

The closing process group: The closure process group encompasses all operations performed to formally complete the project, phase, or contractual responsibilities across all project management process groups. When completed, this process group confirms that all prescribed procedures are accomplished within all process groups to close the project or project phase, as applicable, and formally establishes that the project or project phase is complete (PMI, 2013).

2.2 Project Management Knowledge Areas

Knowledge Area represents a complete set of concepts, terms, and activities that make

up a professional field, project management field, or area of specialization and they are used on most projects most of the time (PMI, 2013). The ten PM Knowledge Areas are discussed below.

Project integration management: Within the Project Management Process Groups, it covers the processes and activities for identifying, defining, combining, unifying, and coordinating the numerous processes and project management activities (PMI, 2013). This Knowledge Area is concerned with the glue that holds all of the deliverables together. from the Process Groups into a unified whole (Wysocki, 2014).

Project time management: Project time management refers to the procedures that must be followed to ensure that the project is completed on time (PMI, 2013). It calculates the duration of a project work as well as the actual effort or labor time required to perform the task. It also entails comparing estimated and actual times, as well as scheduling and cost variance management (Wysocki, 2014).

Project cost management: Project cost management encompasses all of the operations involved in planning, estimating, budgeting, financing, funding, managing, and controlling expenses so that the project can be completed within the assigned budget (PMI, 2013).

Project quality management: Project quality management refers to the processes and actions taken by the performing organization to establish quality policies, objectives, and responsibilities so that the project satisfies the needs for which it was created (PMI, 2013).

Project human resource management: Project human resource management, according to PMI (2013), focuses on actions linked to the project's human side and includes strategies for organizing, managing, and leading the project team.

Project communication management: The methods that must be followed to ensure that project information is collected, developed, distributed, saved, retrieved, managed, controlled, monitored, and finally disposed of in a timely and appropriate manner are referred to as project communications management (PMI, 2013).

Project risk management: Project procurement management, according to PMI, refers to the procedures for acquiring items, services, or results from sources other than the project team (PMI, 2013).

Project procurement management: Project procurement management, according to PMI, refers to the procedures for acquiring items, services, or results from sources other than the project team (PMI, 2013).

Project stakeholder management: Identifying the people, groups, or organizations who may have an impact on or be impacted by the project, analyzing stakeholder expectations and their impact on the project, and developing appropriate management strategies for effectively engaging stakeholders in project decision-making and execution are all part of project stakeholder management (PMI, 2013).

2.3 Project Management Maturity Models

In order to measure project management maturity of a project organization, one can use a variety of models, some of which include:

2.3.1 Capability Maturity Model Integrated by Software Engineering Institute (SEI-CMMI)

The latest version of CMMI (2.1) released in 2006, according to SEI (2006). The CMMI designed to help businesses improve performance by giving them everything they need to generate better goods and services on a continuous basis. However, the CMMI is a behavioral model as well as a process model. Businesses can use the CMMI to address the practicalities of improving performance by setting measurable benchmarks, but it can also be used to create a structure for fostering productive, efficient behavior across the firm.

Maturity Levels in the CMMICMMI's Maturity Levels are:

Maturity Level 0 – Incomplete:- Work "may or may not get done" at this point. At this point, no goals have been set, and processes are either incomplete or do not suit the demands of the organization.

Maturity Level 1 – Initial: Processes are thought to be unpredictably reactive. "Work is done at this stage, however it is frequently delayed and beyond budget." This is the most dangerous stage for a company to be in: an unpredictably unstable environment that raises risk and inefficiency.

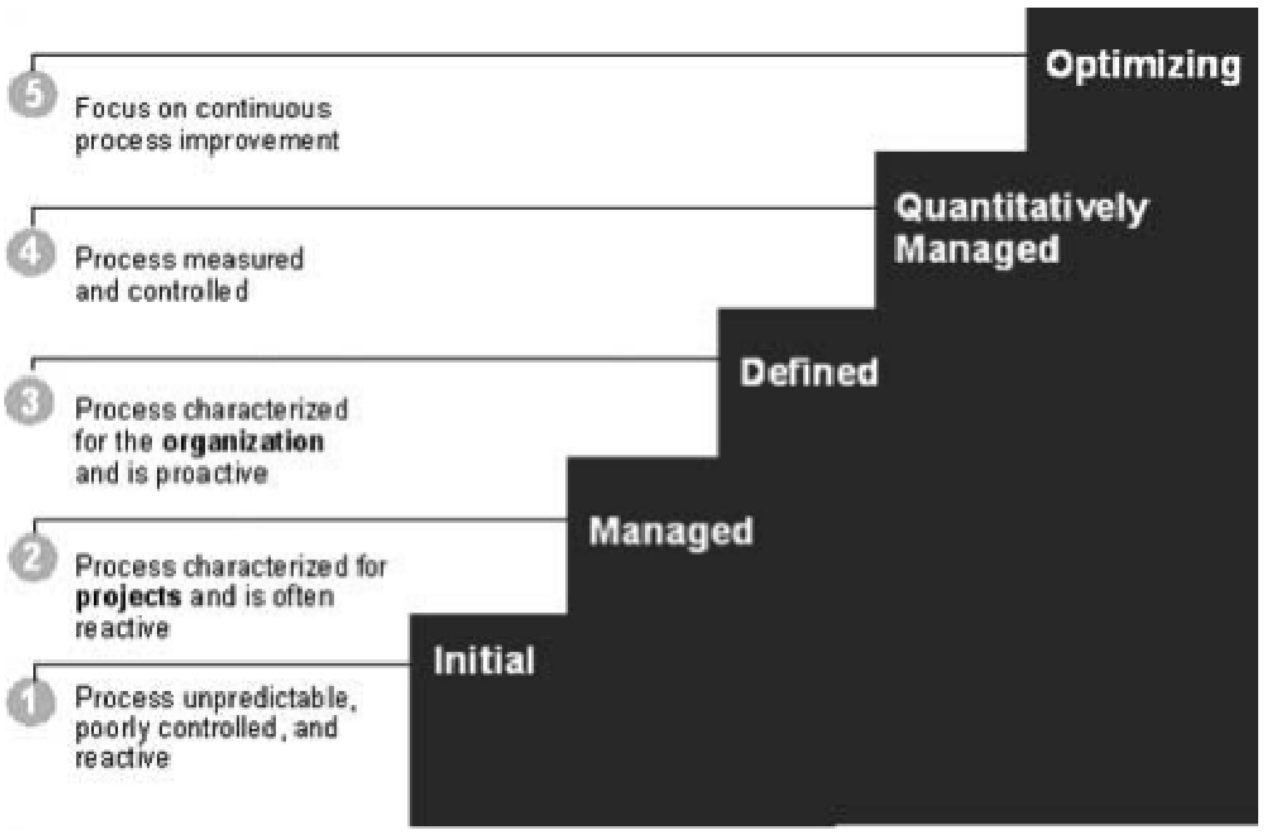
Maturity Level 2– Managed: A certain level of project management has been achieved. At this stage, projects are "planned, performed, measured, and controlled," yet there are still many difficulties to address.

Maturity Level 3– Defined: Organizations are more proactive than reactive at this point. To "offer guidance across projects, initiatives, and portfolios," there is a set of "organization-wide standards." Businesses are aware of their flaws, how to fix them, and what their improvement objectives are.

Maturity Level 4– Quantitatively managed: -This level is more controlled and measured. The company to determine predictable processes that are in line with stakeholder needs is using quantitative data. With more data-driven insight about process flaws, the company is ahead of the game.

Maturity Level 5 – Optimizing: The procedures of an organization are both stable and adaptable here. An organization will be constantly improving and responding to changes or other opportunities at this stage. In a predictable setting, the organization is stable, allowing for more "agility and invention."

Organizations is called high maturity when they reach Levels 4 and 5, when they are "constantly evolving, adapting, and growing to fulfill the needs of stakeholders and customers." The CMMI's purpose is to build trustworthy environments in which goods, services, and departments are proactive, efficient, and productive.



CMMI's Evolution

The CMMI was created to bring together many business maturity models into a single framework. It grew out of the Software CMM concept, which was created between 1987 and 1997. In 2002, CMMI Version 1.1 was released, followed by Version 1.2 in 2003.

The approach was customized to software engineering in its first version as the Software CMM. The CMMI became more abstract and universal in later editions, allowing it to be used to hardware, software, and service development in virtually any business. The CMMI originally addressed three areas of interest, including product and service development, service establishment, and product and service acquisition, but they have all been integrated into one single model with the introduction of V2.0.The CMMI has evolved with each iteration.

2.3.2 Project Management Maturity Model by H. Kerzner

Kerzner (2014) claims that models can help companies execute strategic planning for project management and achieve maturity and excellence in a reasonable amount of time, The project management maturity model (PMMM), which may be utilized as a

foundation for obtaining excellence in project management, is the best way to express the foundation for achieving excellence in project management. The concept is divided into five stages, each representing a distinct level of project management maturity.

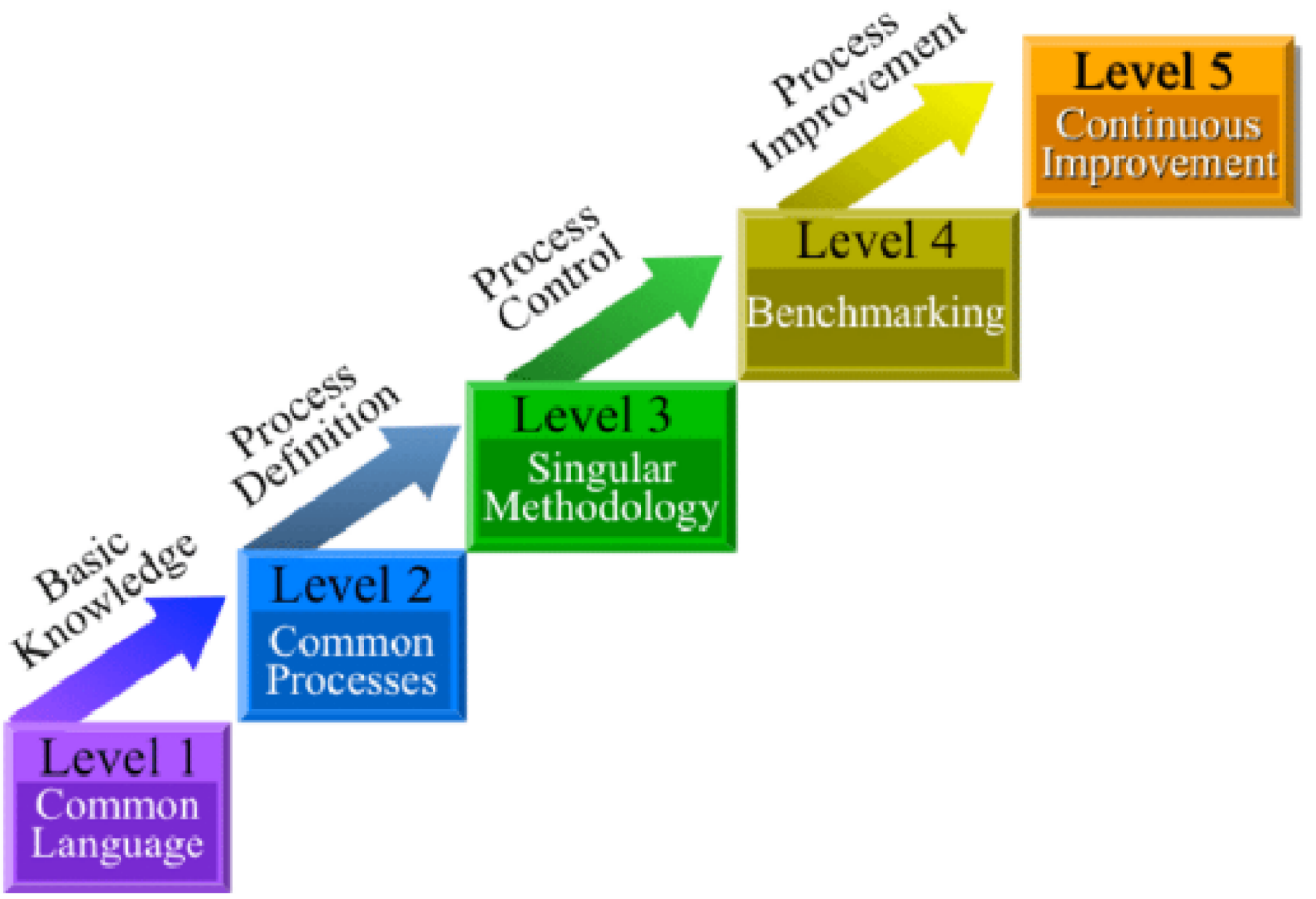


Figure 2, Project Management Maturity Model by H. Kerzner

Level 1-Common Language: At this level, the organization understands the value of project management and the necessity for a thorough understanding of project management fundamentals, as well as the language/terminology that goes with it..

Level 2- Common Processes: At this stage, the organization realizes the need to identify and develop common processes so that project accomplishments can be replicated on other projects. This level also includes the understanding that project management principles can be applied to and supported by the company's other approaches.

Level 3- Singular Methodology: At this stage, the organization realizes the synergistic

value of merging all corporate techniques into a single methodology, with project management at its heart. Process control is also easier with a single approach than with many methodologies because of the synergistic effects.

Level 4**Benchmarking**: This level acknowledges the importance of process improvement in maintaining a competitive advantage. Benchmarking should be done on a regular basis. The organization must pick who and what it will benchmark..

Level 5-**Continuous Improvement**: At this level, the organization assesses the data gathered from benchmarking and determines whether or not it will benefit the unique process (Kerzner, 2014). Kerzner (2014) claims that these levels do not have to be completed in order; rather, some of the aforementioned levels can and do overlap.

2.3.3 Project Management Maturity Model by PM Solutions

The approach, like Kerzner's CMM and PMMM, follows the Project Management Institute's PMBOK guide's five degrees of process maturity and PM knowledge domains. The model can be used to assess a company's project management maturity and to point them in the direction of key PM competencies that they need develop in order to achieve project management growth and excellence.

Below are the five tiers of PM Solutions (2014b).

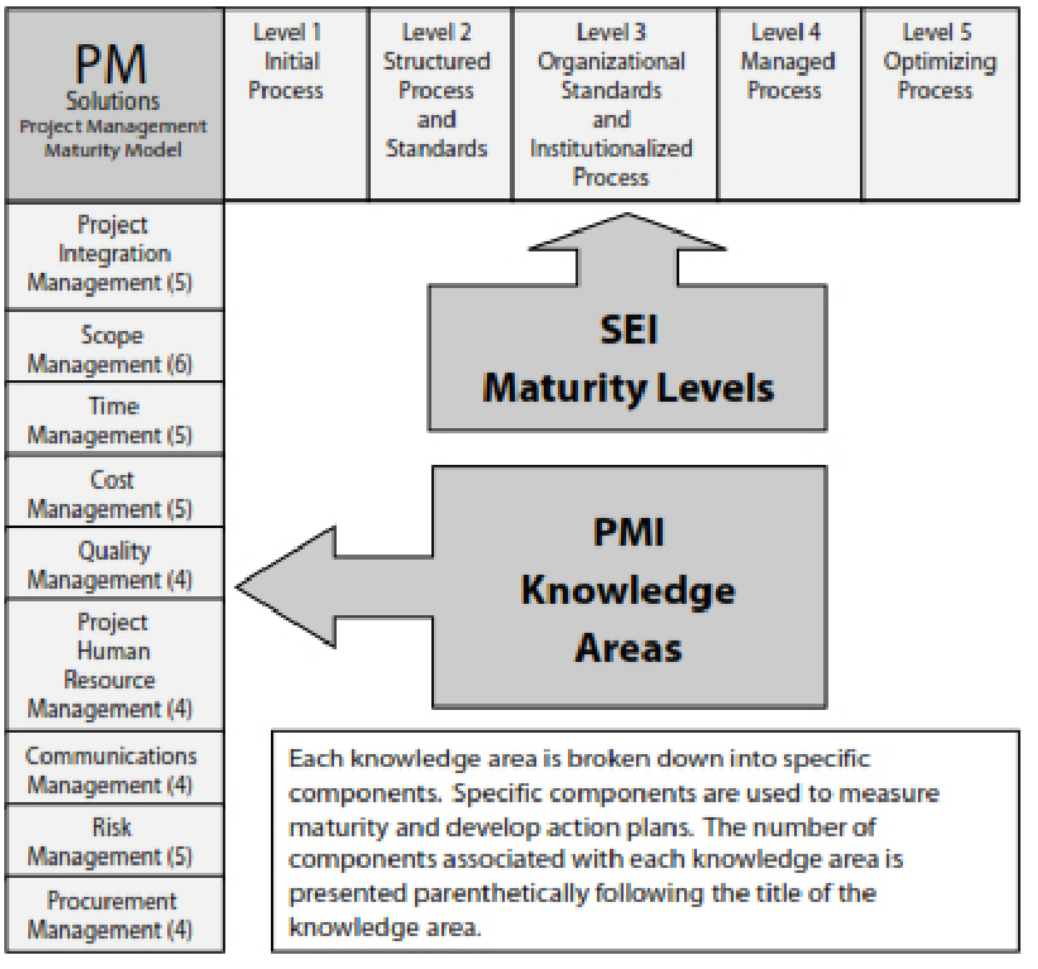


Figure 3, Project Management Maturity Model by PM Solutions

Level 1: Initial Process - There are no set procedures or standards. Metrics and project documentation are gathered informally.

Level 2:Structured Process and Standards - Although basic measurements and project documents are available, no organizational standard has been established.

Level 3:Organizational Standards and Institutionalized Process - All initiatives adhere to established standards that have been institutionalized inside the business.

Level 4:Managed Process - To improve overall organizational performance, metrics are utilized to oversee projects and incorporated into other corporate systems.

Level 5:Optimizing Process - Lessons Learned are regularly examined in order to improve PM procedures.

2.3.4 Organizational Project Management Maturity Model by Project Management Institute

The Organizational Project Management Maturity Model (OPM3), developed by PMI, is a framework that gives an organization-wide view of portfolio management, program management, and project management to promote best practices in each of these areas (PMI, 2008). An OPM3 evaluation assesses an organization's capacity to fulfill its strategic objectives through successful execution of portfolios 18 of programs and projects using recognized Best Practices (PMI, 2008).Acquire KnowledgeThis stage of the OPM3 cycle necessitates planning for the assessment of project management maturity. Before beginning the assessment, it is necessary to gain a thorough understanding of the contents of OPM3. Also developed is an awareness of organization for project management procedures (PMI, 2008).

Perform Assessment - entails acquiring all of the data necessary for maturity assessment measurement. The PMI has developed a series of self-assessment method (SAM) questionnaires for this purpose, allowing a company to conduct a high-level and thorough assessment of its project management practice. The data is presented in the form of a graph, which illustrates the organization's level of project, program, and

portfolio management maturity (PMI, 2008).

Manage Improvements - The outcomes of the perform assessment stage are compared to project, program, and portfolio management best practices. PMI's best practice guideline serves as a foundation for progress. The result of comparing present procedures to best practices allows for improvement recommendations (PMI, 2008).

Acquire knowledge, do assessment, manage improvements, and repeat the process are the steps in the OPM3 framework cycle for assessing maturity.

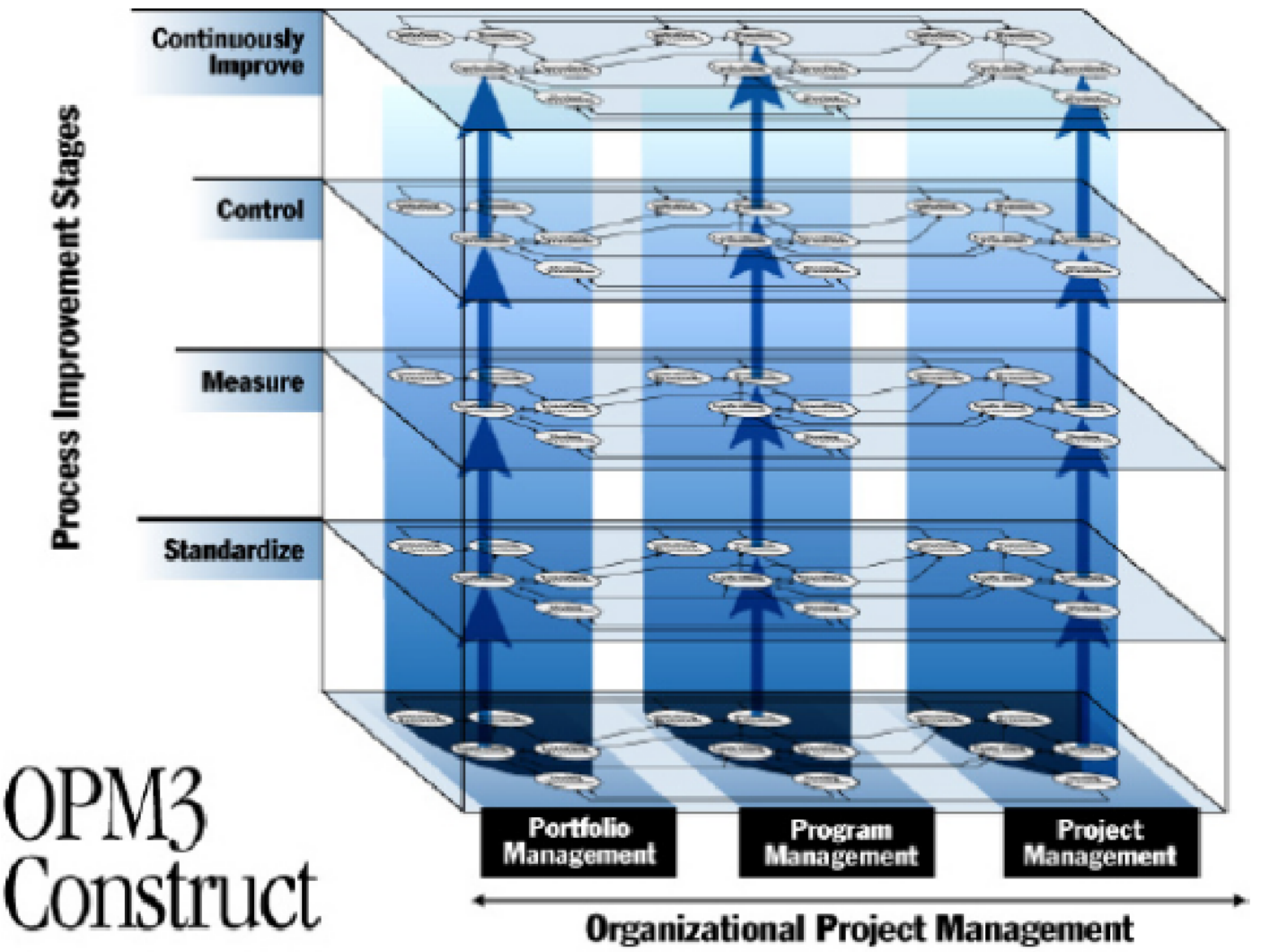


Figure 4, Organizational Project Management Maturity Model by Project

2.4 Empirical review

2.4.1 Studies of different scholars

Worldwide the study did not identify widespread variations across project management

maturity levels when comparing across industries, according to James S. Pennypacker and Kevin P. Grant, Ph.D., PMP, University of Texas at San Antonio. On the contrary, there was no reason to believe there was a difference in 37 of the 42 main component areas studied. This outcome could be explained by the industry's low level of project management maturity. It does, however, indicate that there is always room for progress, regardless of the industry. Authors such as Daniel F. Ofori and Eric Worlanyo Deffor in Africa investigated Project Management Maturity in Africa from a Ghanaian Perspective and came to the conclusion that no company can be considered mature.

When it comes to our own country, Ethiopia, organizations do not place a high priority on the concept. In her study, Assessment of Project Maturity Level Orthodox Christian Charity, Frehiwot Abebe found that a low maturity score indicates that the organization executes knowledge areas without following a defined approach or guideline, relying only on the project team's expertise and experience. Other Ethiopian studies on this topic in the construction sector and mega projects confirmed her findings, meaning that projectmanagement is not given the attention it requires and those organizations' project maturity levels are low. Furthermore, there is a scarcity of published literature on the subject.

2.4.1 Uses and benefits of Project Management Maturity Models

It is common knowledge that businesses that enhance their maturity level reap numerous benefits, including increased customer satisfaction with project outcomes, increased return on project investments, and greater schedule and budget sustainability. Itchell, S., Linger, H., & Owen, J. (2008) maturity models provided organizations with a mechanism of analyzing and developing their organizational project management capabilities.

(Backlund et al, 2014, citing Jugdev & Thomas, 2002; Mittermaier & Steyn, 2009). The value of employing PM maturity models and assessments, according to Backlund, et al (2014), is as follows: Rather than just identifying, the current level at which a company is performing, to determine direction, prioritize actions, and begin cultural transformation. To benchmark project maturity relative to others by comparing project

capacity between organizations or between a single organization and industry norms. PM maturity assessments can be used as a "checkup" tool to track progress and determine the next logical steps forward, allowing organizations to see PM as a strategic enabler.2.4 choosing a Model for Project Management Maturity Assessment

A project management maturity model (PMMM) is a matrix that depicts the evolution of a company's project management process through time. Your project management style must evolve in the same way that your organization does as it grows. The premise is that a corporation does not expand at random; rather, it grows for a specific reason. The model used to assess a company's project management maturity and to point them in the direction of key PM competencies that they need develop in order to achieve project management growth and excellence. GIZ Ethiopia is a large organization, and in light of its knowledge, the project maturity management model (PMM) was chosen as an evaluation model utilizing the framework below.

	LEVEL 1 Initial Process	LEVEL 2 Structured process and standards	LEVEL 3 Organizational standards and institutionalized processes	LEVEL 4 Managed processes	LEVEL 5 Optimizing process
Project integration management					
Scope management					
Time management					
Cost management					
Quality management					
Resource management					
Communication management					
Risk management					
Procurement management					
Stakeholder management					

Figure 5, conceptual model of the study (PMM) model

Project maturity model, this model is developed as a tool to be used to conduct a structured interview or a content review of the project, program, or company's written plans, processes, and artifacts. Seesing, P. R. (2003). The instrument, or portions of it, should be made available to the project/program/company team ahead of time so that they can prepare their responses and locate the necessary written documentation. And it is found to be suit our case scenario rather than the other project maturity models in its character that Project Maturity Model integrates all of project management knoweledge area concepts in the general context of generic project management.

CHAPTER THREE

3.0 Research Methodology

This part of the research report outlines the research methods used to determine the level of project management maturity in GIZ Ethiopia's educational programs. It covers the research design, data sources, sample methodologies, data collection instruments, and data analysis methods and procedures3.1 Research Design

3.1 Research design

Research design, which is a plan for identifying the sources and types of data relevant to the research questioners, provides the main direction for carrying out a research project to get answers to research questions (Zikgmund et al., 2010). The study is purely descriptive in nature. The data was analyzed using a hybrid approach that includes qualitative comparisons with theoretical and empirical findings as well as quantitative comparisons of calculated average maturity levels to standard project maturity levels. The case study approach is more appropriate for the research since it allows for the collection of very precise data on the topic issue.

Variables in research are any attributes with multiple values, such as height, age, temperature, or test scores. In order to accomplish the study goals, study variables with the goal of analyzing the project maturity degree of GIZ Ethiopia educational project management knowledge areas were chosen. 3.2 Description of study area and target population

The case study was GIZ Ethiopia's educational projects, specifically the present program in operation known as STEP. Aubrey, et al. (2008), who claimed that PMO is a complex phenomenon that can be understood as part of a historical process within an organizational setting because it is embedded in the host organization and both evolve at the same time, bolstered the idea of case studies. Employees of the organization who are directly or indirectly involved in the organization are the target population. Project managers, program officers, support officers, development consultants, and other professionals, for example...

3.3 Data Collection Methods

Data collecting is one of the most crucial stages in conducting a study, and it is critical to the achievement of the study's goal. Primary and secondary data sources is employed to gather all relevant information for the study. To obtain relevant primary data for the study, a self-completed questionnaire and an interview were employed as data collection instruments. The surveys were delivered to a sample of project managers and project officers who are directly involved with the STEP program and were chosen from GIZ Ethiopia's current educational programs. The questionnaire was created based on a review of the literature and was adjusted to the investigation's case based on observations of operational actions and documents. The questionnaire is validated by looking at these and other sources of information.The questioner's initialsection intended to collect general information about the responders. The second section contains literature-based questions. Since STEP 2018–2021 is a continuation of the previous phase; it builds on its successes in developing effective processes to improve the quality of technical and vocational education and training (TVET) and higher education (HE). The project focuses on building capacity in the institutional set-up developed during the first phase of the project to enable Ethiopia's TVET and HE sub-sectors to achieve their mandate and provide tangible job possibilities for its graduates. The project management Maturity Model (PMM) discovered to be the best model for assessing a company's maturity.

3.4 Sampling and sampling techniques

Despite the fact that the organization is involved in a variety of projects, this study focuses on a contemporary educational program called STEP (Sustainable Training and Education Program). Currently, roughly, 60 of the company's employees participate in this project, AddisAbaba program offices. at various professional levels through the STEP program office; hence, the study's population is the 60 project candidates. Purposive sampling is used to choose a sample of 50 team members from the 60 candidates. "Purposive or judgmental sampling allows for the application of judgment to select cases that will best enable the researcher to answer the research question(s) and achieve the research goals." The researcher assumed that using the 50 candidates, as a sample would provide the essential information, according to Black, K.

(2010) .besides the remaining 10 candidates are staffs, whichdo not have direct relation with project of the program and where found needless for data source.

In addition, the chosen projects are operational (in the execution phase) and have well-established project teams. The STEP program's third phase is still in the initiation (bidding) and planning phases, making it impossible to collect significant data on project management practice. As a result, the questionnaire only distributed to 50 participants from existing initiatives. The researcher was able to obtain valuable data by selecting project managers who were familiar with the project activities and the PMO.

In addition to the questioner, secondary data sources were also consulted in order to collect the essential information and make useful recommendations. The researcher distribute the questionnaires to the respondents (project managers and teams) in person at their separate project offices once the samples were drawn, and they were collected in person.

3.5 Data Analysis Methods

Descriptive analytics is the first step in data analysis. The goal of descriptive analytics is to find out *what happened*it is the first layer of information that you can get from the data you have collected, either with or without adding data from other sources.Wolvius,Carmen (2009). Descriptive statistics is used in determining average maturity level the responses from the questionnaires .data from Interviewsis analyzed categorically against the five levels of the selected maturity model by PM Solutions. In order to evaluate the PM maturity level of Giz Ethiopia both qualitative and quantitative analysis were used be in practice. Qualitative analysis was conducted by comparing the findings with theoretical and empirical findings from the literature. Data was quantitatively analyzed by computing the average values of all the knowledge areas and taking their average project management maturity levels. Then the average computed values were compared with standards proposed by PMI PMBOK guidelines. Structured leveling questionnaires are used as a data collection tool. SPSS software was used for analysis

3.6 Validity and Reliability

Validity relates to a measure's accuracy, or whether the results truly represent what they are supposed to assess, while reliability refers to a measure's consistency, or whether the results can be replicated under the same conditions.

The data gathering instrument's validity is evaluated against existing literature. The respondents' data was gathered using a variety of approaches, including questioning and interviews. According to Creswell (2009), using various data gathering technologies allows information to be cross-checked. As a result, secondary data gathered through various methods aided in data triangulation and ensured data trustworthiness.

3.7 Ethical Considerations

Ethical Considerations, according to Pritha Bhandari (2022), are a collection of principles that influence your study designs and procedures. Voluntary involvement, informed consent, anonymity, secrecy, risk of damage, and results communication are among these principles. They noted that the concerns are about participant privacy and consent, as well as data confidentiality and anonymity. Before delivering questionnaires, the researcher got the agreement of selected respondents from the organization through letter. Because the researcher used questionnaires to collect data from respondents, their privacy was not jeopardized, and the data they provided was kept private and solely used for the research project. Furthermore, except for the purpose of clarifying questions, the researcher did not intervene while respondents filled out the questionnaires.

CHAPTER FOUR

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Introduction

Experts believe that maturity models aid businesses in evaluating their existing effectiveness and determining what competencies they need to acquire next to improve their performance. The aim of this study is to determine the level of project management maturity of GIZ Ethiopia educational programs, identify gaps, and provide potential remedies. The results or findings on the data collected and analyzed, the results of descriptive analysis, and the outcomes of quantitative and qualitative analyses are all included in this chapter.

4.2 Data Presentation and Analysis

Appropriate data acquired through surveys and interviews, as well as personal observation.In addition,distributed to project managers, program officers, and specialists directly associated to the project and from various reports and project materials. The 50 questioners, suggesting a 90 percent response rate, returned 45 questionnaires. Each of the five project managers, as well as one program officer, is interviewed. The data collected from the distributed questionnaires and analyzedusing SPSS 20 and descriptive statistics used to explain the results. The information acquired through document examination was statisticallyand qualitatively and assessed. The following are the major findings summarized and presented.

Demographic Information of respondents

4.2.1 Profession of respondents

According to the pie chart below, 11 percent of the 45 respondents are project managers, 54 percent are business and economics graduates, 13 percent are human resource

graduates, and 8% are IT graduates, while the other 14 percent did not specify their current occupation.

Figure 6, profession of respondents, source own survey 2022

4.2.2 Departments of respondents

The distribution of departments that responded to questionnaires is shown in the table below. GIZ Ethiopia has various project offices for various projects; the STEP program's target area is where data is collected from project offices. Internal departments and structures exist within the project offices.

Project management department's account for 17% of all responses, while STEP project development and management departments account for 35%. Human resource and procurement departments account for 16 % of responders, while finance and IT departments account for 32 %.

Department	Project management	Human resource and procurement	Project Development and management	Finance and IT	TOTAL
Percentage	17%	16%	35%	32%	100%
Frequency	8	7	16	14	45

Table 1, Departments of respondents, source own survey 2022

4.2.3 Current positions of respondents

According to the pie chart below, 45 people participated in the prepared questionnaire responses. The majority of the responders (44%) work as core officers, while 13% work as project managers. Support officers account for 34% of respondents, while others account for 9%.

Figure 7, position of respondents ,source own survey

4.3 Result and analysis

4.3.1 Project integration management

Project Integration Management is defined by the PMOBK as a set of processes and activities that identify, define, combine, unify, and coordinate the numerous processes and project management activities within Project Management Process Groups. Because the project manager is ultimately responsible for the project as a whole, unlike the other knowledge categories, this demands direct competence from the project manager. The respondents reflected on the company's project integration management as shown below. The analysis range is between 1 and 5 as the logical frame work of the study implied 1 implying a poor maturity level while 5 is an optimizing stage where the company has reached a higher level of project management, maturity level.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Develop Project Charter	45	3.00	5.00	4.2222	.51737

Develop Preliminary Project Scope Statement	45	3.00	5.00	4.1333	.54772
Develop Project Management Plan	45	3.00	4.00	3.7778	.42044
Develop and Manage Project Execution	45	3.00	5.00	3.8667	.40452
Monitor and Control Project	45	3.00	5.00	4.2444	.67942
Work Integrated Change Control	45	3.00	5.00	3.6000	.53936
Close Project	45	3.00	5.00	4.2889	.69486
Valid N (list wise) Grand Mean				4.014	

Table, 2, source own survey, 2022

The table above shows seven metrics for assessing and markingmaturity of project integration management. Close Project was found to have a mean maturity level of 4.28, which is higher than average. Work Integrated Change Control, on the other hand, has a lower maturity level of 3.6.

According to the information gathered during the interview, there is a properly defined project charter that describes the existence of a project and grants permission to the project manager to use resources, as well as a clearly defined project plan.

The grand mean of integrated management maturity level of GIZ Ethiopia project maturity level in STEP project is 4.014. In terms of project integration management, GIZ Ethiopia is a level 4 organization. The interview response also implied that project management is integrated.

4.3.2 Project Scope Management

Project scope management is necessary to ensure that the project includes all the work required and completing the project successfully. The Project Scope Management

processes are scope planning, defining, and creating WBS, Validate Scope and Scope Controlling.The term Project scope as defined by PMBOK is the work performed to deliver a product, service, or result with the specified features and functions.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Scope Planning	45	3.00	5.00	4.2000	.96766
Scope Definition	45	4.00	5.00	4.6222	.49031
Create Work Break Down Structure	45	3.00	5.00	4.3556	.57031
Scope Verification	45	1.00	5.00	4.4889	.72683
Scope Control	45	4.00	5.00	4.8889	.31782
Valid N (list wise) Grand Mean	45			4.506	

Table, 3, source own survey 2022

The management of project scope is explained in terms of the five criteria listed in the table above. Each criterion's maturity level is averaged at level 4. Scope control has a greater maturity level of 4.888, while scope planning has a lower maturity level of 4.2. In the GIZ Ethiopia educational project, the average degree of project scope management is 4.5.

Although there is a stated scope in the beginning of a project, interview respondents agreed with the results of the questioner poll that partners are always important when it comes to the project's viability. As a result, extra studies of possible partners' capacity and viability are required throughout the planning phase. During planning, enough

personnel should be trained per sending organization in order to have a beneficial impact on overall training at the institution. It is recognized that the grand mean is 4.50, which stands in a range of the logical framework, Implying a good project scope management practices. In scope definition and scope control.

4.3.3 Project Time Management

Project time management, also known as schedule management, is a thorough plan that outlines how and when the project's products, services, and outcomes will be delivered. PMOBK Project Schedule Management refers to the procedures that must be followed to ensure that the project is completed on schedule. Processing activities, defining activity durations, sequencing activities, predicting resource durations, estimating which activity is completed when, scheduling development, and controlling schedules are all examples of what it entails.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Processes Activity	45	3.00	5.00	4.8444	.52030
Definition Activity	45	3.00	5.00	4.4667	.78625

Sequencing Activity	45	3.00	5.00	4.7556	.52896
Resource Estimating	45	4.00	5.00	4.6444	.48409
Activity Duration Estimating	45	4.00	5.00	4.8889	.31782
Schedule Development	45	3.00	5.00	4.5111	.75745
Schedule Control	45	4.00	5.00	4.6222	.49031
Valid N (list wise) Grand Mean	45			4.67	

Table, 4, source own survey 2022

The results of the study revealed that all time management activities are on a similar project management level. As a result, the grand mean maturity value of the GIZ Ethiopia educational project's project time management is 4.67, which is leveled as project management maturity level 4.activity duration estimating has the highest results with 4.88 maturity level, while definition of activity has a lower maturity level with 4.66 maturity level. Although there are solid time management techniques in place, interview respondents indicated that the company's project implementation has been delayed due to external reasons such as COVID 19 and the ongoing civil war in the nation. Respondents also noticed a gap in detail activity time.

4.3.4 Project Cost Management

The cost of the resources required to perform project operations is the primary focus of project cost management. The activities involved in planning, estimating, budgeting, financing, funding, managing, and controlling expenses so that the project can be completed within the allocated budget are referred to as project cost management..

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
formal plan of cost management	45	4.00	5.00	4.9778	.14907
Processes Cost Estimating	45	3.00	5.00	4.4889	.75745
regular budget update	45	3.00	5.00	4.7778	.47140
Cost Budgeting	45	4.00	5.00	4.4444	.50252
Cost monitor and Control	45	4.00	5.00	4.7556	.43461
Valid N (list wise) Grand Mean	45			4.68	

Table,5, source own survey 2022

At GIZ Ethiopia educational projects, the table above shows the components of project cost management and their related project management maturity level. According to the findings, the organization has a grand mean maturity value of 4.68, putting it in the project management maturity level 4 category. Process formal cost planning is almost level 5 mature among the activities within project cost management at GIZ Ethiopia. The process of determining how project expenses will be estimated, budgeted, managed, monitored, and controlled is known as cost planning.

According to the replies, STEP II sponsored by the German government with 12 million euros over three years for the implementation of pilot activities in three sites (Addis Ababa, Mekelle, and Hawassa). NORAD has contributed an additional 8 million euros to the program for the implementation of the pilot activities in three new locations (Adama, Bahir Dar, and Jimma) as well as additional outputs in the field of national institutional capacity building. Another initiative supported by the European Union is the development of skills, particularly in the agro-processing sector, in and around newly built industry parks. STEP has a total budget of 24,4 million euros.

4.3.5 Project Quality Management

Project Quality Management is concerned with project management and project deliverables. It applies to all projects, regardless of the deliverables' type. The types of

deliverables produced by the project dictate the quality metrics and methodologies used. Approaches to quality management aim to reduce variation and offer results that fulfill the needs of identified stakeholders..

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
formal Quality management	45	4.00	5.00	4.8222	.38665
Processes Quality Planning	45	3.00	5.00	4.5111	.75745
Standard quality management	45	1.00	5.00	4.7556	.67942
Perform Quality Control checklist	45	4.00	5.00	4.6444	.48409
compliance review with policies, processes, and quality requirements	45	4.00	5.00	4.8889	.31782
Valid N (list wise) Grand Mean	45			4.72	

Table, 6, source own survey 2022

Process quality planning, performing quality assurance, and performing quality control are used to measure and determine the maturity level of project quality management. The GIZ Ethiopia educational project quality management Grand mean maturity level is discovered to be 4.72. Project management maturity level 4 is assigned to the value determined. According to the study, project quality management maturity level 4.88 is given for compliance review with policies,processes, and quality requirements, which is substantially higher, and standard quality management maturity level 4.511 is given for standard quality management. The information gathered from the interviews suggests that the organization has a systematic quality management system in place, with quality being measured both in terms of the quality of a product or service and in terms of customer satisfaction.

4.3.6 Project Human Resource Management

Organizing and managing a project team is part of project human resource management. People with distinct talents and duties usually make up the team. (PMBOK) From the start of the project, the project team, also known as project staff, should be involved in planning and decision-making. Human resource planning, acquisition, development, and management are all aspects of project human resource management.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Processes Human Resource Planning	45	3.00	4.00	3.6000	.49543
Acquire Project Team	45	3.00	5.00	3.8889	.43809
Formal and informal training provided to project team members	45	3.00	4.00	3.4000	.49543
Develop Project Team	45	3.00	5.00	3.8444	.63802
Manage Project Team	45	3.00	5.00	3.7111	.58861
Valid N (listwise) Grand Mean	45			3.68	

Table,7, source own survey 2022

All of the requirements for project human resource management at GIZ Ethiopia educational have grand mean maturity values of 3.6. As a result, GIZ Ethiopia's project management maturity level in human resource management is at level 3. The organization has a lower maturity level when it comes to offering formal and informal

training to project team members, but it has a higher maturity level when it comes to building project teams. Although the organization has a nice work environment, interview respondents indicated that project team development is lacking.

4.3.7 Project Communications Management

Communication is the deliberate or involuntary exchange of information. Ideas, instructions, or emotions can all be used to communicate information. Communication fosters the development of relationships that are important for project and program success. Emails and informal discussions to formal meetings and monthly project reports are just a few examples of communication activity and artifacts. Project communication management, as part of the project management knowledge area, is concerned with process communication planning, information dissemination, performance reporting, and stakeholder management.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Processes Communications Planning	45	4.00	5.00	4.8444	.60744
Information Distribution	45	3.00	5.00	4.5111	.72683
information gathering and distributing system	45	3.00	5.00	4.8000	.50452
Performance Reporting	45	4.00	5.00	4.6667	.47673
Manage Stakeholders communication	45	4.00	5.00	4.5556	.50252
Valid N (list wise) Grand Mean	45			4.67	

Table, 8, source own survey, 2022

The analysis found that the communication management components of GIZ Ethiopia

educational projects are at a comparable maturity level. In addition, the calculated Grand mean maturity level of project communication management is 4.67, which is classified as project management maturity level 4. Processes Communications Planning has a maturity level of 4.8, which is greater and lower than the maturity level of 4.511. According to the interview response, the organization has a solid communication management system. Stakeholders are updated on the project's progress on a regular basis, and communication techniques utilize new technologies.

4.3.8. Project Risk Management

O'Connor, Scott W. (2020) the goal of project risk management is to identify and manage risks that are not covered by other project management techniques. These risks, if not managed properly, have the potential to cause the project to vary from the original plan and fail to meet the project's goals. As a result, the success of a project is directly proportional to the effectiveness of Project Risk Management. The procedures of undertaking risk management planning, identification, analysis, response planning, response implementation, and risk monitoring on a project are all included in Project Risk Management.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Processes Risk Management	45	3.00	5.00	3.4000	.57997
Risk Identification	45	3.00	5.00	4.0444	.47461
Qualitative Risk Analysis	45	3.00	5.00	3.6889	.59628

Quantitative risk analysis	45	3.00	5.00	3.7778	.51737
Risk Response Planning	45	3.00	5.00	3.7333	.61791
Valid N (list wise) Gran Mean	45			3.72	

Table, 9, source own survey, 2022

The above result showed that only risk management maturity lands in level 4,with higher average maturity result in planning risk identification and lower result in processing risk management with maturity value of 3.4.and grand mean maturity level 3.68. The interview responses implied that the company has a well-structured risk management office and it carries out a company-wide survey every six months to identify new risks and changes to known risks and to keep track of risk management measures already initiated. However, there is a gap in risk response planning.

4.3.9. Project Procurement Management

Project Procurement Management refers to the procedures for purchasing or obtaining products, services, or results from sources outside than the project team. Agreements that outline the connection between two parties—a buyer and a seller—are part of the Project Procurement Management processes. Agreements might be as basic as buying a certain number of work hours at a certain rate, than or as complicated as multiyear multinational building contracts. The contractual approach and the contract itself should reflect the simplicity or complexity of the deliverables or needed work, and written in accordance with local, national, and international contracting rules.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Processes Plan Purchase and Acquisitions	4	3.00	5.00	3.8889	.61134

	5				
Plan Contracting	4 5	3.00	5.00	4.0000	.47673
Request Seller Responses	4 5	3.00	5.00	4.2222	.63564
Select Seller	4 5	3.00	5.00	4.6667	.56408
Contract Administration	4 5	3.00	5.00	4.3111	.59628
Valid N (listwise) Grand Mean	4 5			4.21	

Table, 10, source own survey 2022

The table above reveals that the grand maturity level is 4.19, with a lower maturity level in purchase planning and accusation and a greater maturity level in selecting sellers (4.6). The project management responded that the initiative's goal is to enhance (self-) employment of TVET and graduate students in high-growth areas in certain locations. Purchasing and acquisition procedures were not well-established.

4.3.10. Project stake holder management

Stakeholders are those who are affected by or can influence a project in a positive or bad way. Some stakeholders may have limited influence over the project's work or outcomes, while others may have a major impact on the project and its projected outcomes. Users, providers, influencers, and governance are all included.

The processes for identifying the people, groups, or organizations that may have an impact on the project, analyzing stakeholder expectations and their impact on the project, and developing appropriate management strategies for effectively engaging stakeholders in project decisions and execution are all part of project stakeholder

management.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stakeholders identification	45	4.00	5.00	4.6667	.47673
Assessment in stakeholders interest and influence	45	3.00	5.00	4.0222	.49949
stakeholder management plan	45	3.00	5.00	4.4889	.69486
Develop stakeholders communication plan	45	3.00	5.00	4.6667	.56408
Engaging and influencing stakeholders	45	3.00	5.00	4.5111	.69486
Valid N (list wise) Grand Mean	45			4.46	

Table, 11, Source: Own survey, 2022

Stakeholder management is the practice of cultivating positive relationships with those who have the greatest influence over your work. As seen in the table above, project stakeholder management at GIZ Ethiopia averages 4.46, which falls beneath the maturity level of lever 4. The company has completed the process of identifying important stakeholders. This is due to the organization's semi-governmental nature, which includes programs supported by large organizations such as the European Union, yet the stakeholder interest and influence assessment indicates that it is low, with a maturity level of 4.02. Because the German government, the European Union, NORAD, and other organizations fund the project, interview respondents stated that stakeholder identification is a priority. However, as previously stated, stakeholders include not only project providers, but also project users. Some project managers stated that there is a gap in stakeholder assessment and influence the projects are carried out in collaboration with re.

4.3.11 Discussion

Knowledge areas	Average maturity level
Project integration management	4.02
Project Scope Management	4.5
Project Time Management	4.67
Project Cost Management	4.68
Project Quality Management	4.72
Project Human Resource Management	3.6
Project Communications Management	4.6
Project Risk Management	3.68
Project Procurement Management	4.19
Stakeholder Management	4.46
Average	4.31

Table, 12, Source own survey, 2022

A maturity model is a technique used by various businesses to assess how well their projects are progressing and to make continual improvements. Several project management models determine maturity levels. The majority of models include five rising levels, with identical activities and definitions among models. The project maturity model (PMM) is a model for assessing an organization's maturity level. Theoretically and experimentally, there is a positive association between project management maturity and project success. The higher the project maturity level, the more likely the project will succeed.

The STEP II program, according to secondary data sources, has four primary core

objectives: skill development, education, and employment. STEP enhances chosen TVET institutions, universities, enterprises, employers' groups and chambers, as well as other public education and industry authorities in selected regions by matching supply and demand, institutional capacity development, and education policy assistance. The Ethiopian Ministry of Science and Higher Education (MOSHE), along with its agencies and institutions, ensures the long-term viability of program interventions and the scaling-up of innovations and best practices at the federal level.

After the universities have completed their data collection, the implementation will begin in early January. During the first half-year, a preliminary data analysis and policy-making process be supported based on this information. The Key Performance Indicators for TVET is designed based on lessons learned in higher education, and the initial data collection will take place in the following six months. Meanwhile, until the completion of the project phase, evidence-based decision-making trainings will be devised and conducted, culminating in a proposal for reward systems based on educational institution KPI performance.

As shown table below project management, maturity value of GIZ Ethiopia in its educational project is 4.31 and it is categorized to maturity level 4. In project management Level 4 (Managed level) maturity level, detailed measures of the effectiveness of project management are collected and used by management. The process is understood and controlled. Project success is uniform. Cost and schedule performance conforms to plan.

According to Grant and Penny packer (2006), Cooke-Davies and Arzymanow (2003), companies that are project-based and use project management have a greater level of maturity. They also discovered that no organizations at maturity levels four or five exist. This conclusion is in line with the study's findings. GIZ Ethiopia has a lot of experience with educational projects.

CHAPTER FIVE

Summary of major findings, Conclusion and recommendation

The research summary, results, and recommendations for the entire study are included in Chapter 5. The summary summarizes the study's findings without providing too much detail.

5.1 summary of major findings

5.1.1 Respondent's profile

Majorities of the respondents are business and economics graduates, 13 %, are graduates of human resource, 8 % being IT, all the survey participants' work under the STEP program, in different departments, 44% work in core officer level and 34% as support officers.

5.1.2 Major findings

According the analysis of data collected in the above chapters it's found that all the 10 knowledge areas except human resource and risk management scored a grand mean in range of 4, this implied that Maturity level of GIZ Ethiopia Project management in educational projects is determined to be level four.

which characterized by Processes integrated with corporate processes, Management mandates compliance , Solid analysis of project performance, Estimates and schedules normally based on organization specifics, Management uses data to make decisions.

Process measurement and quality management, as well as process measurement and analysis, are all included in a level four maturity organization, according to the capability maturity model. As indicated by the company's approach to project management and deliverables, GIZ Ethiopia has a higher level of maturity in quality management than in the other knowledge areas.

Figure 8, Average level of knowledge areas source own survey

It includes identifying quality requirements for the project and its deliverables, documenting how the project will demonstrate compliance with quality requirements, translating the quality management plan into executable quality activities that incorporate the organization's quality policies into the project, and translating the quality management plan into executable quality activities that incorporate the organization's quality policies into the project.

GIZ's evaluations are based on the notion of "knowing what works." The company evaluates the impact of their work, determines what works and what does not, and determines how and why. Furthermore, apply what you have learned to better projects, our service delivery, and our processes and structures.

As depicted in figure above Project Human Resource Management exhibited maturity level 3.6, which is lower from the other knowledge areas and characterized by all processes are consistent and repeatable across all projects. Management based on industry norms and organizational details has institutionalized processes, estimates, and timetables. The focus of the organization although it is functioning well in human

resource management, the respondents indicated that there is a gap in staff training and human resource planning. Improvement is needed in the above holes.

The company's secondary sources revealed a well-organized risk management approach in risk management. Every six months, the Risk Management Section conducts a company-wide survey to identify new risks and modifications to existing risks (for example, damage reports and end-of-status reporting), as well as to keep track of risk management measures previously implemented. Organizational units can use the ad-hoc risk-reporting instrument at any time, regardless of the results of this survey.

The Risk Management Board meets six times a year to discuss issues that could have a negative influence on GIZ's development. The Risk Management Board is made up of the following individuals:

•a member of the Executive Committee (chair)

• Managers at all levels of management, as representatives of departments and corporate units

The Risk Management Board can provide recommendations to the GIZ Management Board on how to deal with the company's risks. Risk conversation is a venue for different levels of management to communicate information about risks and how they are addressed, as well as make choices about risk management levels. Risks that the individual reporting the risk can no longer handle are passed on to the next higher management level. GIZ is able to manage this by doing so.

GIZ received a 4.46 maturity level in procurement management because it is a public contracting authority, which means it is required to openly tender contracts to third parties in accordance with the rules outlined on the following pages. The procedures for granting GIZ contracts are transparent, competitive, and cost-effective. This rule applies to both supply contracts (materials and equipment) and service and construction contracts.

GIZ performs its procurement activities in accordance with the principles of compliance, corruption prevention, and transparency as a federal organization. Statutory regulations and our own internal procurement provisions support these concepts.

This means that, thanks to internal and external standards and documentation, fair bidding and procurement reflecting market prices, as well as sustainability, may be guaranteed at all times. Based on previously specified selection and award criteria, we always select the most economically advantageous bid in a clear and predictable manner.

5.2 Conclusion

Project management maturity and project success are closely correlated, as stated in the literature section of this study. The project maturity level is obtained by evaluating each project management knowledge area's actions. If project management maturity levels are unaffected by project management knowledge areas, the problem is attributed to the project driven organization's organizational structure (Price Waterhouse Coopers) (2004). According to pm solution (2014), maturity models offer advantages in that they allow organizations to examine their strengths and weaknesses. Determine the connections between wants and actual educational requirements. Set realistic improvement goals and provide a strategic improvement plan. Assess how far you have come in terms of improving your capability. Assess the project management of the organization using the agreed-upon criteria.

The Level of project management maturity of GIZ Ethiopia educational projects is analyzed in this article. All of the knowledge domains are standing in a good maturity level, based on the data acquired and processed. The highest score achieved was maturity level 4, which means that the company has a maturity level of 4 in most knowledge areas, indicating that it is mature. However, project management practices in human resource and risk management deemed to be lower implying there is a gap and further emphasis should be given in those knowledge areas.

5.3 Recommendation

The survey's maturity result demonstrates how skilled the company is in project management practices in STEP program, although all 10-knowledge areas are relevant to improving the success of the organization's educational programs. A gap is recognized in project risk and human resource management so it is recommended that all ten knowledge areas be used in conjunction with higher-level demand applicable

extra guidelines and tools.

A gap in human resource, Integration management and risk management of development projects needs to be filled.While keeping in mind their qualitative nature. The majority of knowledge fields are at maturity level 4, which means that all firm activities are standardized and based on major project methodologies and activities. The maturity levels of 50 knowledge domains were solely addressed in this paper based on the model's provided standards. The study concluded that: Project integration management, scope management, cost management; quality management, communication management, and stakeholder management are all at level 4. In addition, human resource management and risk management are I level 3 which implies processes are consistent across all projects and are repeatable. Management has formalized processes such as summary and comprehensive information; baseline and informal data gathering; estimates and schedules based on industry standards and organizational policies; and estimates and schedules based on industry standards and organizational policies.so in order to fix this Extensive human resource management is required such as: Improve organizational communication.Develop an effective training program, Provide more feedback that is regular to employees, and Build a company cultural vision and Use available technology.

• The GIZ Ethiopia quality management practices should be used as a model for other departments to manage their specific areas of expertise. With the greatest maturity level of 4, project procurement management is in a stronger position in the authority project management knowledge domains. Although operations at level 4 are properly structured and supervised, ongoing learning and improvement are still required. As a result, project procurement management must improve its status and progress to project management level 5. Managers must concentrate on other successful project organizations and share their experiences, then apply the best practices to the authority's quality management for further improvement.

• Using the currently identified project management maturity level of GIZ Ethiopia educational projects as a benchmark, GIZ Ethiopia's human resource department should

apply for all projects under this and other programs, and incorporate project management maturity level improvement into their plan as they prepare short, medium, and long term plans.

• More research should be done on the specifics of each of the ten knowledge areas of the company's other developmental programs, project management, and project management for further advancement, as level 5 still has room for improvement

5.4 Suggestions for Further Research

The idea of project management maturity is relatively new and not practiced in Ethiopia, it would be valuable to conduct further research in the topic, additionally developmental organizations such as GIZ implement projects all over the country they are prone to be affected by different external and internal situations. Further study should be conducted on different organizations and sectors considering these factors. This will allow greater reliability to provide important statistical generalizations. A study on similar case will also be stimulating since it will help to visualize the progress made in project management maturity and practices by different project driven organizations.

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APPENDIX

APPENDIX 1: Interview Questions

•is their analysis done before the launching of the project

• is there a defined project integration management?

• How is stakeholder management practices of the company?

• Do the project have a defined scope?

• How is Project Quality Management addressing and management of the project and the deliverables of the company?

• Is there a communicating strategy to ensure that the information needs of the project and its stakeholders are meet?

- is there a scoping document created as part of the planning phase?
- What are the practical PM strengths contributed to the success of your project?
- Project Managers engage in some form of project risk management.
- Are project schedules baseline so that performance can be tracked?
- Are project schedules actively used as part of managing projects?
- How is the financial system works? Is there a formal cost management?
- How is the staff recruitment process and transparency?
- does the organization perform post project analysis?
- Do you have any recommendation to improve project performance?

Appendix 2: Survey Questionnaire

ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

DEPARTMENT OF PROJECT MANAGEMENT

Research Questionnaire

Dear Sir/Madam, I am undertaking a research titled "Assessment of Project Management Maturity Level in GIZ Ethiopia Educational Projects" for the partial fulfillment of the requirement of Master of Arts (MA) degree in Project Management. Listed below are standard questioners prepared by PMI and listed under PMBOK guideline to measure project management maturity levels of project driven organization. The level enables the project driven organization to identify where its position is in terms of project management and project success. To level each list of question there are benchmarking references listed above the table.
Hence, please refer to the reference criteria's for each of leveling to undertake. Your

prompt and genuine response to each of the questionaries' helps the genuine leveling of Giz Ethiopia project management maturity level and contributes to recommendations for further improvement in the organizations.

Confidentiality of the response and data you provided to the research is strictly be protected and your information will be used only for this research purpose. Researcher would like to thank you in advance for all your collaboration in the participation of the research in filling the questioner am grateful for your time and responses. If you have questions or seek clarifications, please contact me on 0933 93 76 50. I thank you in advance, for your invaluable cooperation.

Part A. General Information

1. What is your profession……

2. Department you are currently working in……

3. What is your position?

A. Core Officer B. project manager C. Support officer D. other

Part B.

Project management maturity leveling

Please level each of the issues raised under table based on the characteristics of the levels listed below Level 1 If; - It is Getting Started but disorganized

Awareness is developed and ad hock

It is at its initial stage

Do not use formal procedure

Level 2 if; - informal and incomplete procedures are applied

Basic processes; not standard on all projects; used on large, highly visible projects

Management supports and encourages use

Mix of intermediate and summary-level information

Estimates and schedules based on expert knowledge and generic tools

Project-centric focus

Level 3 if; - All processes standard for all projects and repeatable

Management has institutionalized processes

Summary and detailed information

Baseline and informal collection of actual data

Estimates and schedules based on industry standards and organizational specifics

Organizational focus

Informal analysis of project performance

Level 4 if; - Processes integrated with corporate processes

Management mandates compliance

Management takes organizational entity view

Solid analysis of project performance

Estimates and schedules normally based on organization specifics

Management uses data to make decisions

Level 5 if; - Processes to measure project effectiveness and efficiency

Processes in place to improve project performance

Management focuses on continuous improvement

Knowledge area	Maturity levels				
Project integration management	Level 1	Level 2	Level 3	Level 4	Level
Develop Project Charter					
Develop Preliminary Project Scope Statement					
Develop Project Management Plan					
Develop and Manage Project Execution					
Monitor and Control Project					
Work Integrated Change Control					
Close Project					
Project Scope Management	Level 1	Level 2	Level 3	Level 4	Level
Scope Planning					
Scope Definition					
Create Work Break Down Structure					
Scope Verification					
Scope Control					
Project Time Management	Level 1	Level 2	Level 3	Level 4	Level
Processes Activity					
Definition Activity					
Sequencing Activity					
Resource Estimating					
Activity Duration Estimating					
Schedule Development					

Schedule Control					
Project Cost Management	Level 1	Level 2	Level 3	Level 4	Level
formal cost management					
Processes Cost Estimating					
regular budget update					
Cost Budgeting					

Cost monitor and Control					
Project Quality Management	Level 1	Level 2	Level 3	Level 4	Level 5
formal Quality management					
Processes Quality Planning					
Perform Quality Assurance					
Perform Quality Control					
compliance review with policies, processes, and quality requirements					
Project Human Resource Management	Level 1	Level 2	Level 3	Level 4	Level 5
Processes Human Resource Planning					
Acquire Project Team					
Develop Project Team					
Manage Project Team					
Project Communications Management	Level 1	Level 2	Level 3	Level 4	Level 5
Processes Communications Planning					
Information Distribution					

Performance Reporting					
Manage Stakeholders					
Project Risk Management	Level 1	Level 2	Level 3	Level 4	Level 5
Processes Risk Management					
Risk Identification					
Planning Risk Identification					
Qualitative Risk Analysis					
Risk Identification					
Risk Response Planning					
Risk Monitoring and Control					
Project Procurement Management	Level 1	Level 2	Level 3	Level 4	Level 5
Processes Plan Purchase and Acquisitions					
Plan Contracting					
Request Seller Responses					
Select Sellers					
Contract Administration					
Contract Closure					
Stakeholder Management	Level 1	Level 2	Level 3	Level 4	Level 5
Stakeholders identification					
Assessment in stakeholders interest and influence					