



Addis Ababa University
School of Commerce

**Assessment of the Relationship between Project Management
Maturity and Project Management Success: The Case of Initiative
Africa**

By:
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**A Research Project Work Submitted to the School of Graduate Studies of
AAU in Partial Fulfillment of the Requirement for the Degree of Master of
Arts in Project Management**

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Addis Ababa, Ethiopia

Declaration of the candidate

I, the undersigned, declare that the study entitled '*Assessment of the Relationship between Project Management Maturity and Project Management Success: The Case of Initiative Africa*' is the result of my own effort and study, that all sources of materials used for the study have been acknowledged. I have conducted the study independently with the guidance and comments of the research advisor.

This study has not been submitted for any degree in any university. It is conducted for the partial fulfillment of the Master of Arts Degree in Project Management.

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Letter of Certification

This is to certify that Yoseph Alemayehu has conducted this project work entitled ‘Assessment of the Relationship between Project Management Maturity and Project Management Success: The Case of Initiative Africa’ is under my supervision.

This project work is original and suitable for the submission in partial fulfillment of the requirement for the award of Master of Arts Degree in Project Management.

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Mesfin Workineh (PhD)

Date _____

**ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE
GRADUATE STUDIES
DEPARTMENT OF PROJECT MANAGEMENT**

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Project Management Success: The Case of Initiative Africa**

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List of Acronyms

(PM) ²	Project Management Process Maturity Model
APM	Association of Project Management
CIIR	Catholic Institute for International Relations
CMM	Capability Maturity Model
CPM	Critical Path Method
CSF	Critical Success Factor
DPM3	Development Project Management Maturity Model
IA	Initiative Africa
MINCE	Maturity Increments in Controlled Environments
NGO	Non-Governmental Organization
NRC	Norwegian Refugee Council
OGC	Office of Government Commerce
OPM3	Organizational Project Management Maturity Model
P3M3	Project, Program and Portfolio Management Maturity Model
PERT	Program Evaluation and Review Technique
PfM3	Portfolio Management
PgM3	Program Management
PjM3	Project Management (in Project, Program and Portfolio Management Maturity Model)
PM	Project Management
PM4DEV	Project Management for Developmental Organizations
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PMMM(s)	Project Management Maturity Model(s)
PMO	Project Management Office
PwC	PricewaterhouseCooper
SAP	Systems, Application and Products
SE-CMM	Systems Engineering- Capability Maturity Model
SIG	Specific Interest Group

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Abstract

The relationship between project management maturity and project success has been examined by various researchers. This research could also be added to that collection. The study set out to unearth the relationship between project management maturity and project success, by defining both on the basis of time, cost and quality, and taking Initiative Africa, a local NGO, as the case study. Both primary and secondary data were used. Primary data was collected mainly through the use of questionnaire, which was an adaptation of an online survey published by surveymonkey.com. The questionnaire was a self-assessment tool for the Organizational Project Management Maturity Model (OPM3) developed by the Project Management Institute. In addition, annual reports of IA were scrutinized to compliment the responses of respondents (IA staff). The maturity levels discovered in the areas of time, cost and quality were correlated to the respondents rating of their organization's project management success using Pearson's Correlation Coefficient. The results from the study show that there is a positive relationship between time, cost and quality management maturity levels and project management success. Furthermore, quality management maturity was found to be the only one with significant relationship with project management success.

Key Words: *Project, Project Management, Project Management Success*

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Project Management Institute (PMI) defines a project as ‘a temporary endeavor undertaken to create a unique product, service, or result.’ In addition, it defines project management as the consumption of knowledge, tools, skills and techniques for project activities so as to meet the requirements of the project. (PMI, 2013)

Limited to the United States’ Department of Defense contractors and construction companies just three decades ago, the relatively new concept of project management is presented as one of the approaches to how corporate activities should be managed in an attempt to obtain better control and use of existing corporate resources. Currently, the concept behind project management is being applied in various industries and organizations such as: defense, construction, pharmaceuticals, chemicals, banking, hospitals, accounting, advertising, law, state and local governments, and the United Nations (Kerzner, 2003).

Beset (2007) states that an effective project management tool that allows an organization to fully reap its benefit is guaranteed only by a developed project management system. Andersen and Jessen (2003) refer to maturity as a situation where by an organization is in the perfect position to achieve its objectives.

The implementation of a standard method and process that increases the chance of recurring success is what Kerzner (2003) refers to as maturity in project management. He further explains that maturity entails the existence of proper foundations of tools, techniques, processes and even culture (Kerzner, 2003). Organizational Project Management Maturity, on the other hand, is the ‘level of an organization’s ability to deliver the desired strategic outcomes in a predictable, controllable, and reliable manner.’ (PMI, 2013)

Vergopia (2008) states that over the past two decades researchers in the PM area developed project management maturity models (PMMMs) to help organizations improve their project management maturity. Murray and Ward (2007) define a maturity model as an ordered compilation of elements that describe characteristics of successful processes. Neverauskas and

Railaite (2013) reveal that since the 1980's where the first Capability Maturity Model was developed by the Software Engineering Institute, the world has seen over thirty new maturity models. Notable ones (as listed by Vergopia (2008)) include namely: Capability Maturity Model (CMM), Berkeley (PM) ², PMMM (by Kerzner), OPM3, SE-CMM, CMMI, PMMM (by PM Solutions Inc.) and P3M3 by OGC. Despite their differences, majority of the models comprise of 5 maturity levels, characterized by similar definitions of level name (Neverauskas and Railaite, 2013).

The link between project management maturity and performance, like the multiple models forwarded, has been examined by various researchers and found conflicting conclusions. Yazici (2009) summarized the findings following researches in his study regarding the relationships between Project maturity and project success: Ibbs and Kwak (2000): no statistically significant relationship between the two based on cost and schedule performance, Thomas and Mullaly (2006) there is lack of evidence of project maturity's contribution on an organization's success as a means of competitive advantage. Brookes and Clark concluded their 2009 study by highlighting the limited empirical evidence that has associated project maturity and project performance.

However, various other studies have been conducted and found a positive association between an organization's project management maturity and the level of project success. Mateen (2015) has revealed that project management maturity has a direct impact on project performance. Organizations with higher project maturity display a higher performance and vice versa. The 2012 PMI Pulse of the Profession survey also revealed that organizations whose employees reported high project management maturity had their projects in line with their business goals in addition to delivering them on time and on budget.

In 2004, PricewaterhouseCooper conducted a global survey on top management, senior management and project managers from thirty different countries and found that higher maturity level for an organization enhances not just overall project performance but also overall portfolio of projects. This research was also supplemented by the 2006 survey which went further to attributing the many project failures to a lower level of project maturity.

In 2014 PM Solutions published a study conducted on 293 companies spanning nine industries and five continents. The results affirm the supposition that as an organization's increases its project management maturity it also experiences gains on organizational performance. In addition, Yazici (2009), having surveyed project professionals and engineers from 75 US organizations also found a corroborating result.

The link between an organization's project management maturity and its performance is also similar in the case of not-for-profit categories as well. Falgari et al. (2013) illustrate that project success, both in the short and long term, could be achieved through the adoption of project management tools. Furthermore, they concluded that organizations that invest more on these methods are capable of improving their performance; hence it is important to increase both the awareness and the knowledge of these tools among nongovernmental organizations.

Golini, Kalchshmidt and Landoni (2014) claim that NGOs appear to neglect certain PM tools such as critical path method, issue log, earned value management system and opt to utilize mainly logical framework and progress report. Furthermore they claim that NGOs, rather than focusing on more structured and analytical methodologies, are more likely to implement simple techniques. They also add that the limited adoption of PM tools could be attributed to either the industry or the project management maturity of the organization. Despite some studies linking the level of use of PM practices to project success (Papke-Shields et al. (2010), very little evidence has been provided to the specific case of international development projects (Ika et al., 2010 as cited by Golini, Kalchschmidt and Landoni, 2014).

Shifting our focus to NGOs operating in our country, Initiative Africa (IA) is an education based organization which works to reduce risks to vulnerable populations, and help communities, non-governmental organizations, and local authority provide services and protection for at-risk groups. IA currently undergoes projects in five areas they have labeled as: Empowering Young Girls, All Children Reading, Education for All, Addis Film Festival and Active Citizen.

Bearing all this in mind, this study attempted to investigate the relationship between PM maturity and project success taking in Initiative Africa as the case study; unearthed areas which could be focused on to further improve their project management maturity and recommended solutions in an attempt to increase their chance of success.

1.2. Statement of the problem

Söderlund (2004) states that most post-world-war II industries are project intensive; as is the case in NGOs. Diallo and Thuillier (2005) state that most international assistance provided by governmental or NGOs is provided by means of projects and that the NGOs implementing those projects do not fully utilize project management tools. Consequently, Falgari et al. (2013) opine that, in improving the chance of success in NGO projects, there is a need of improving project management maturity.

Aside from the academic discussion taking place over the link between project management maturity and project and organizational performance, the issue seems to be one with grave implications. Catholic Institute for International Relations (CIIR) (2005) report that about 80 percent of development projects fail, before or after they are completed; due to the following reasons, all of which could be addressed ideally as an organization's project maturity increases:

- NGOs don't spend enough time on preparation and reflection before starting work and rush into projects without good planning.
- There are problems with logistics: not enough money, not enough time, the Project Manager gets sick, etc.
- The NGO has not developed the skills of project design and management, which require learning and practice.
- NGOs are inconsistent in the methods they use.

Despite the invaluable use unearthing the relationship between project management maturity and project success could have in allowing NGOs to have a better understanding of the discipline and how it could affect their professional landscape, local literature fails in addressing this issue.

These factors coupled with the desire of Initiative Africa to ascertain that its investment in project management is bearing the fruit have made the researcher select this area for his study. Consequently, by discovering the relationship between project management maturity and project management success, this study has a role to play in improving local NGOs awareness about the topic as well as contribute to the existing local PM literature, which is yet to say about NGOs

and project management maturity, is visible. After all, ‘Project management is here to stay’ (Kerzner, 2003).

1.3. Research Question

a. Main Research Question

This study set out to answer the following main research question:

‘What is the relationship between project management maturity and project management success in NGOs?’

b. Specific Research Questions

The specific questions this study has addressed are:

- i. What is the level of project management maturity on the basis of the three core knowledge areas (i.e. time, cost and quality) in the case of IA?
- ii. What is the level of project management success in the case of IA?
- iii. What is the relationship between project management maturity and project management success in the case of IA?

1.4. Research objectives

a. General objective

The general objective of this study is: to evaluate the relationship between project management maturity and project management success in the case of IA.

b. Specific objectives

The specific objectives of this study are:

- To evaluate the level of project management maturity
- To assess the level of project management success

- To evaluate the relationship between project management maturity and project management success

1.5. Scope of the study

This research attempted to analyze the relationship between project management maturity, as measured on the parameters of the three core areas of time, cost and quality, (the so called iron triangle (Atkinson, 1999)) and project management success. The reason behind this delimitation is that such metrics are simple, easy to use and within the realm of project organization (Jugdev and Müller, 2005).

Furthermore, for the purpose convenience to the researcher the study is limited to Initiative Africa projects in Addis Ababa, Ethiopia.

1.6. Limitation of the study

Of the limitations the researcher experienced during the course of this study, the major one is the inadequacy of existing local literature regarding project maturity and NGOs. Hence, this study examined various international researches on the topic and local researches on related project management issues.

1.7. Significance of the study

This study is of great importance to local NGOs struggling to stand on their own, by verifying the applicability of project management concepts. Moreover, it is a good addition to the existing project management literature and also indicates where future researches in project management could look towards in fully understanding this young, yet promising discipline.

1.8. Organization of the study

This study is organized in five chapters. The first is reserved for the Introduction of the study. The second chapter is dedicated to the Review of Related Literature, the third for presentation of Research Methodology and Design. The fourth chapter is used for discussing Research Finding and its Interpretation, and the fifth is for Conclusion and Recommendation.

1.9. Definition of key terms

Listed below are the definitions of the key terms:

Project: an endeavor undertaken with the aim of attaining a specific result, output or product.

Project Management Maturity: how well understood and implemented the concepts of project management are in an organization, on the basis of the three core parameters (time, cost and quality/performance)

Project Management Success: an NGO's evaluation of its performance in the areas of compliance with budget, time and quality

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter, which is composed of a Theoretical and Empirical sub-sections, has been allocated to the review of literature pertinent to the topic at hand.

2.1 Theoretical literature

On its website www.pmi.org, the PMI defines a project as '*a **temporary** endeavor undertaken to create a **unique** product, service or result.*' Further, it breaks down the components of that definition by elaborating its components; **temporary** indicates that there is a defined beginning and finishing time and hence a defined scope and resource, **unique** in that, a specific set of operations defined to accomplish a single goal. (PMI, 2017)

In relation, Businessdictionary.com defines Project Management as 'the body of knowledge concerned with principles, techniques and tools used in planning control, monitoring and review of projects.' PMI (2013, p. 1) states that 'Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements'.

The concepts of project management date back to the beginning of history with the constructions of The Great wall of China, The Pyramids of Egypt and the Stonehenge of England. However, the era of modern project management began in the 1950's with the development of two mathematical scheduling models: the Program Evaluation and Review Technique (PERT), which is basically a method for analyzing the tasks involved for completing a given project, and the Critical Path Method (CPM), which determines schedule flexibility for each activity. In the early 1960's industrial and business organizations began to take notice of the benefits of organizing work around projects; after which, the project management institute was founded (in 1969) with the aim of promoting project management best practices (Kilkelly, 2008).

The popularity of PM is growing in an increasing rate during the last decade on generally every field like engineering and construction, manufacturing industries, computer software development, etc (Beset, 2007). Grant and Pennypacker (2006) state that in the decade more businesses are utilizing project management as a way to develop a competitive advantage. Today

PM, being connected to the organization's strategic and tactical management, is becoming an increasingly important part of an organizations' management system, as a whole. Various types of organizations across the public and private sectors are improving their project management processes and trying to achieve the excellence by a way of developing their project management maturity (Neverauskas and Railaite, 2013).

2.1.1 Project Management Maturity

The online Merriam-Webster dictionary defines maturity as 'the quality or state of being mature'. Then, according to Kerzner (2003, p. 59) maturity in project management would mean '... the implementation of a standard methodology and accompanying processes such that, there exists a high likelihood of repeated successes.'

As cited by Mir and Pinnington (2014), Fortune et al. (2011) claim that the popularity of PM methodologies and tools within PM professionals has increased significantly in 2011 from 2002. Furthermore, the literature proposes that numerous benefits can be achieved from having a mature PM system in place and that PM is more efficient than traditional functional management (Bryde, (2003^a); Kwak and Ibbs, (2000) and Avots (1969); Munns and Bjeirmi, (1996) as cited by Mir and Pinnington, 2014).

Kerzner (2003) states the value of the maturity of a project management system by claiming that the ultimate aim of any project management system is to increase the likelihood that your organization will experience a continuous stream of successfully managed projects. In addition, in his 2009 book, Kerzner argues that maturity is the base on which an organization thrives to achieves excellence. PMI (2013) also supported the argument by claiming that the level of an organization's project management maturity (PMM) can influence a project success.

Vergopia (2008) states that over the past two decades researchers in the PM area have developed project management maturity models (PMMMs) to help organizations improve their project management maturity. These models are designed to help organizations complete projects successfully, consistently, and predictably. Furthermore, they are sequential frameworks which assess project management maturity level and indicate which specific areas in project management need to be changed or improved in order to attain a higher level of maturity.

Kwak and Ibbs (1996: 2), as cited by Ofori and Deffor (2013), claim that assessing the project management maturity of an organization is getting a picture of the capability of meeting or exceeding the expectations of the stakeholders of a project. Furthermore, Grobler and Steyn (2006) estimate that thirty PMMMs exists. However, this study has highlighted only the models shortlisted on Nenni et al. (2014): Capability Maturity Model (CMM)), Kerzner's Project Management Maturity Model (PMMM), Organizational Project Management Maturity (OPM3), Project, Program, Portfolio Management Maturity Model (P3M3) and Maturity Increments IN Controlled Environments (MINCE). Project Management for Development Organization's Development Project Management Maturity Model (DPM3) has also been added to the list for its relevance to the realm of development organizations.

This research has assessed the project management maturity of Initiative Africa project managers and project team in Addis Ababa on the basis of the core project management areas: the so called iron triangle: time, cost and quality, establish its relationship with project management success (to be elaborated in upcoming sections), unearth areas needed to improve upon to increase the level of maturity and provide recommendations.

2.1.2 Project Management Maturity Models

Murray and Ward (2007) define a maturity model as a structured compilation of elements that describe characters of an effective process. Jugdev and Thomas (2002) and Mittermaier and Steyn, (2009) explain that maturity models are intended to develop a framework where by an organization can improve its capabilities so as to deliver successful projects in the long term.

In selecting for a project management maturity model for their survey, Grant and Pennypacker (2006) used following criterion:

1. Alignment of project maturity model with organization's project management methodology,
2. Scope covered by project maturity model,
3. Number of publications about specific project maturity model,
4. Independency from industry/organization's type.

5. Ease and comfort ability to use and
6. Years of existence.

Mateen (2015) cited Man (2007) who reviewed the maturity model selection on the basis of:

- a) Structure,
- b) Applicability and
- c) Usage

Nenni et al. (2014) combined both frameworks and shortlisted the following models:

1. Capability Maturity Model Integration (CMMI)
2. Organizational Project Management Maturity Model (OPM3)
3. Kerzner Project Management Maturity Model (K-PMMM)
4. Project, Program, Portfolio Management Maturity Model (P3M3)
5. Maturity Increments IN Controlled Environments (MINCE)

In this study, models shortlisted by Nenni et al. (2014) are highlighted. In addition, because of its relevance to development organizations the Development Project Management Maturity Model (DPM3), which was developed by Project Management for Development Organizations (PM4DEV), has been highlighted in this study.

- i. Capability Maturity Model (CMM)

Grobler and Steyn (2006) state that CMM was developed by Software Engineering Institute, which became the first organization to develop a maturity model in the project management theater. Goulet (2000) explains that the CMM is business model that companies can utilize to enhance their software development capabilities. It is not a one-size-fit-all proposition, but rather each company should apply it so that it would fit their business. CMM is broken-down into five maturity levels:

Level 1: Initial process: ad-hoc, default level, every company starts out here.

Level 2: Repeatable: focuses on software projects' concern regarding the establishment of basic project management controls.

Level 3: Defined (Organizational standards and institutionalized process): addresses both project and organizational issues

Level 4: Managed process: establishes quantitative understanding of software process and software work products being built.

Level 5: Optimized process: covers the issue the project and the organization should address to implement continuous and measurable software process improvement.

- ii. Organizational Project Management Maturity Model (OPM3) by the Project Management Institute

Vergopia (2008) states that this model was designed by the Project Management Institute, first in 1998 in order to:

- Help organizations assess their level of project management maturity compared to best practices in the field of project management
- Identify specific areas needing improvement
- Promote organizational maturity awareness among senior management and,
- Link organizational strategy to consistent and predictable project completion

The model is structured based on three elements: Knowledge (learn about best practices), assessment (determine current PMM level), and improvement (identify path for continuous improvement) (Vergopia, 2008). According to Matassa (2006), OPM3 is a methodology for implementing and improving organizational project management by using a five step iterative cycle that emphasizes on the domains of project management (project, program and portfolio) PMI-OPM3 (2013), as cited by Mateen (2015), states that the following are the five levels of maturity in OPM3:

Level 1: None- no such practice exists

Level 2: Standardize- a standard process of doing projects have been documented and communicated with the organization but is practiced only by few projects

Level 3: Measure- Standardized process is used by all projects and processes are measure to evaluate effectiveness for organization

Level 4: Control- measured process is corrected for poor application of standardized practice

Level 5: improve- continuous improvement becomes a practice

iii. Project Management Maturity Model by Dr. Harold Kerzner

Kerzner's PMMM provides direction for organizations to develop their project management processes. The model is intended for any organization in any industry that uses project management as a means to operate and implement strategic planning (Vergopia, 2008).

Kerzner (2001) argues that a simple use of project management isn't always productive. In fact, he opines that it can result in repetitive mistakes, which is why he favors strategic planning for project management than other forms of strategic management. Though strategic planning for project management is done on a 'trial-by-fire' basis, models can be utilized to assist corporations in performing it.

As stated on Vergopia (2008), the five levels of maturity according to PMMM are:

Level 1: Common Knowledge: the organization acknowledges the necessity for a good understanding of the basic project management knowledge and terminology.

Level 2: Common Process: the organization recognizes that developing and defining a common process is needed in order to be able to repeat successful process from project to project.

Level 3: Singular Methodology: the organization realizes that it will benefit from a harmonious effect by combining corporate methodologies into a singular methodology centered on project management.

Level 4: Benchmarking: comparing PM processes with practices used by leading organizations (Benchmarking) should be done on continuous basis.

Level 5: Continuous Improvement: obtaining of continuous quantitative data from benchmarking used to analyze process results and improving the process.

iv. Project, Program and Portfolio Management Maturity Model (P3M3)

The Project, Program and Portfolio Management Maturity Model (P3M3) was first presented by Office of Government Commerce (OGC) in 2006 (Mateen, 2015). OGC (2008) state that P3M3 is a project management maturity model that looks across an organization as to how it delivers its projects, programs and portfolios. P3M3 contains three maturity models that can be used to separately to focus on specific areas:

- a. Portfolio Management (PfM3)
- b. Program Management (PgM3)
- c. Project Management (PjM3)

Each sub-model is further subdivided into seven process perspectives: Organizational Performance, Management Control, Benefits Management, Risk Management, Stakeholder Management, Finance Management and Resource Management. (OGC 2008)

OGC (2011), as cited by Mateen (2015) stipulate that each of the seven process perspectives are measured and ranked into five levels:

Level 1: Awareness of process: Projects are recognized in organizations but structured approach does not exist for handling projects, programs and portfolios.

Level 2: Repeatable process: Basic standard for project management exist but not used consistently across organization

Level 3: Defined process: Use of standards for projects is consistent across organization

Level 4: Managed process: enables organization to measure and monitor projects performance

Level 5: Optimized process: At this level of maturity, all the processes for handling projects, programs and portfolios are optimized and continuous improvement is evident in organization

v. Maturity Increments IN Controlled Environments (MINCE)

Maturity Increments in Controlled Environments Model (MINCE) was presented by MINCE2 Foundation in 2007 with a focus towards an organization's ability to adapt to environmental and market changes. MINCE provides insight into an organization's maturity, staff's skill level, effectiveness of projects, ability to adapt to change and how the organization benefits from past lessons (Meisner, 2007).

Mateen (2015) also cites the MINCE Foundation (2007) to claim that the model's framework uses six 'towers' to measure organizational maturity: people, methods and techniques, customer, realization, knowledge, and supporting services.

Each tower has five criteria which deal with the perspectives so as to determine maturity levels with each tower and allow us to view outside the tower and reflect on what we see. These five criteria are: leadership, staff, policy, means and instructions (Meisner, 2007).

The five levels of maturity for each tower as per the MINCE model are:

Level 1: Activities: the organization finds it hard to predict whether or not activities will in fact deliver the product intended is glad if the result is accomplished (Meisner, 2007).

Level 2: Process: the organization is aware of the processes leading to a completed product and describes neatly and places them in an optimized order (Meisner, 2007)

Level 3: System: the organization has activities and processes in place, developed a set of standard means to be used and has placed in a feedback loop to allow continuous updating and improvement (Meisner, 2007)

Level 4: Supply chain: the organization interacts with suppliers and customer chain, have control over their own internal activities, processes and systems but interact with entities in the market (Meisner, 2007)

Level 5: Quality: an organization setting trends, publishing and explaining of the way we see future events in their category of activities. (Meisner, 2007)

vi. Development Project Management Maturity Model (DPM3)

Development Project Management Maturity Model (DPM3) is a framework used for the progressive development of an organization-wide project management capability. It determines how an organization is utilizing project management. Organizations vary on their maturity levels based on their specific goals, strategies, resource capabilities, scope, and needs; DPM3 helps in identifying strategic strengths and weaknesses which are then used to prepare a thorough action plan for improving the capabilities of project management practices. (PM4DEV, Vol. 4-4)

Level 1: Awareness: Management is aware of project management methodologies, but hasn't yet taken steps to formalize it.

Level 2: Understanding: Management understands the value of a PMM and begins to formalize it.

Level 3: Adoption: Processes are repeatable and standard for all projects. Management is implementing a standard, repeatable methodology across the organization.

Level 4: Execution: PM processes are integrated with organizational processes. Management uses the established PMM to measure efficiencies and to obtain consistent results.

Level 5: Performance: The focus is on achieving effectiveness. Management uses PMM to make strategic decisions and predict future results.

Level 6: Excellence: Is achieving leadership and innovation in the industry Management practices continuous improvement of its PMM.

2.1.3 Project Success or Project Management Success?

Jugdev and Müller (2005) state that, like ‘good art’, success means different things to different people and is contextual in gaining consensus from a group of people. In addition, Jugdev and Müller (2005) also cite Freeman and Beale (1992) who argue that success is measured in subjective and objective ways.

Hartman and Ashrafi (2002) implicate the value of having a common understanding amongst the owner, contractor and consultant in defining success and how it will be measured by stating that when the project is complete, it will probably not satisfy everyone, perhaps no one.

Atkinson (1999) claims that early literature considered the success of a project on three parameters namely, time, budget and required quality (the so-called golden triangle) as the main criteria. However, he contends that there are more, possibly competing, criteria that can be identified. Wateridge (1998, p. 62) was cited by Cooke-Davis (2002) arguing that the decision to achieve time and cost constraints, project managers fail from putting great focus the happiness of users towards the system.

Kerzner (2003) explains that defining project success on the basis of the completion of an activity within the constraints of time, cost, and performance was the definition used for the two decades or so. He states that for a project to be called successful, it must be:

- Within the allocated time period
- Within the budgeted cost
- At the proper performance or specification level
- With acceptance by the customer/user
- With minimum or mutually agreed upon scope changes
- Without disturbing the main work flow of the organization and
- Without changing the corporate culture

Jugdev and Müller (2005) cite De Wit, (1988) who discusses the concept of project management success in terms of time, cost and quality/performance (scope) and indicates that project success involves broader objectives from the viewpoints of stakeholders throughout the project lifecycle. As cited by the earlier author De Wit (1988: p. 62) also adds that, though the presence of good project management can contribute to success, it cannot prevent failure. Kerzner (1987) was also cited by the same authors arguing that excelling in the areas of time, cost and performance/quality levels is misleading if expectations are not met.

Cooke-Davis (2002) attempt to provide further clarity by distinguishing between project success and project management success as follows:

- a. Project Management Success: being measured against the traditional gauges of performance (i.e. Time, cost and quality) and
- b. Project Success: being measured against the overall objectives

To substantiate the difference between the two definitions of project success, Jugdev and Müller (2005) mention the construction of Sydney Opera House as an instance. They state that the project took 15 years and was 14 times over budget, yet, it is proudly displayed as an engineering masterpiece.

In their 2005 study, Jugdev and Müller have described the journey of the concept of project management success from the 1960's to its contemporary state by dividing it into four periods which have been presented briefly below.

Period 1: Project Implementation and hand over (1960s – 1980s)

- Because of their ease of use and existence in the project organization realm, in this period, simple metrics such as time, cost and specifications were used to rate project success. In addition, project managers emphasized on getting projects done, making sure it works and getting it out the door; hence maintained minimal customer contact and long term follow up.

Period 2: CSF Lists (1980s- 1990s)

- As the header implies this period of project management literature is characterized by the development of Critical Success Factors (CSFs) which Kerzner (1987, p. 32 as cited by Jugdev and Müller (2005)) defines as the few elements where “things must go right”; in that they are the elements required to create an environment where projects are managed consistently with excellence.
- This period was where literature focused on stakeholder satisfaction and asked questions like ‘Are we done?’ and ‘Are we happy’ in an attempt to address users’ growing demand of satisfaction criteria as opposed to completion criteria.

Period 3: CSF Frameworks (1900s – 2000s)

- Majority of publications during this period addressed the notion that success was dependent upon on the stakeholder and that it involves the interactions between internal and recipient organization (Kerzner 1987; Lester 1998)
- Morris and Hough (1987) were mentioned by Jugdev and Müller (2005) as the pioneers in developing a comprehensive framework for the circumstances of project success. They grouped project success into:
 1. Project functionality: whether the project meets financial and technical requirements or not
 2. Project Management: whether the project meets budget, schedule and specifications
 3. Contractor’s commercial performance: whether the contractors benefit commercially or not
 4. Project termination: if the project was cancelled, was the decision made reasonably and efficiently?

- Cleland and Ireland (2002) suggested that success be viewed from two points: one, the Degree to which technical project performance goals were attained (e.g. time, cost and quality) and two, the contribution that the project made to the strategic mission of the firm.
- Jugdev and Müller (2005) reviewed the number of articles of Pinto published on CSFs between 1987- 1990 (Pinto and Covin 1989; Pinto and Montel, 1990; Pinto and Prescott 1990; Pinto and Slevin 1987) and attribute him for the ‘10 CSF list’:
 - ✓ Project mission
 - ✓ Top management support
 - ✓ Project schedule/plan
 - ✓ Client consultation
 - ✓ Personnel
 - ✓ Technology to support project
 - ✓ Client acceptance
 - ✓ Monitoring and feedback
 - ✓ Channels of communication and
 - ✓ Troubleshooting expertise

Period 4: Strategic project Management (21st century)

- Jugdev and Müller (2005) claim that the recent literature on project success summarizes the empirical results of several studies and delineate four necessary conditions for project success, all of which need be present for the project to be success but their presence alone doesn’t guarantee it. These four conditions build on the work of Wateridge (1998) and Mueller (2003) and are mentioned by Turner (2004, p. 350, as cited by Jugdev and Müller (2005)) as:
 1. Definition and agreement on success criterion before the project commencement and repeated reconstruction along the way.

2. Collaboration and feeling of partnership between project owner (or sponsor) and project manager.
3. Empowerment of the project manager to deal with unforeseen circumstances as they see best and guidance of the owner as to how they think the project should be achieved
4. The owner should take an interest in the performance of the project

Bearing all the aforementioned information in mind, this research sets out to assess the relationship between project management maturity in the areas of time, cost and quality/performance (the iron triangle) and project management success (as defined by Cooke-Davis (2002)) by taking Initiative Africa as the case study.

2.1.4 Initiative Africa (IA)

Mission: To partner to end poverty and help communities incorporate gender and environmental considerations into development initiatives (IA, 2017).

Vision: Ensure that today's children, youth and women are adequately prepared to be tomorrow's innovators and leaders (IA, 2017).

Initiative Africa (IA) is a non-profit organization established in 2002 GC and is registered as an Ethiopian resident charity which is working to promote self-reliance, opportunity, and access to key supports for people exposed to poverty. IA, since its re-registration in 2009, has joined together with NGOs, mass based associations, policymakers, and journalists in efforts to reducing poverty through education. In addition to collaborating with its partners so at achieve its key directions of reducing, alleviating and preventing poverty, IA continues to be committed to taking a long-term, integrated and coordinated approach, considering gender issues and building on partnerships (IA, 2016).

IA is currently undergoing projects in the following areas (programs):

1. Empowering Young Girls: Building Communities: is focused on interventions to address four major factors that IA identified as the causes for the drawback of women

empowerment: low socio-economic status, feeling unsafe in and around schools, poor quality of schools, low life skills

2. Read and Comprehend: Improving Reading Skills of Children: focuses on teaching children to read because if children don't read at an early age, children cannot absorb more advanced skills and content that relies on reading.
3. Capacitating the youth to get engaged in social action projects: aims to build and increase the capacity of secondary school students in participating and leading voluntary social actions through arts sports and entrepreneurship development to better contribute to the youth's future.
4. Addis International Film Festival: Documentary Films for Social Development: a platform to promote debate on social issues across the country via documentaries.

2.2 Empirical literature

The works of Ibbs, Kwak and Reginato (1997, 2000, 2000^a and 2002) were cited by Ghorbanali et.al (2011) to argue that over last decade researchers have focused on recognizing the benefits that could be reaped by investing in project management competency through measures of PM maturity. The supposition was that high levels of PM maturity correlates with higher levels of predicted project performance and investment in PM maturity should translate to other benefits including cost saving. Backlund, Chron  er and Sundqvist (2014) also mention Cooke-Davies and Arzymanow, (2003) to argue that success of organizations with higher levels of maturity in terms of project effectiveness and efficiency in addition to having a competitive advantage in the market place is the 'general opinion'.

An organization's effectiveness is increasingly being described by the concept of maturity; which refers to the state where by an organization is in ideal condition to attaining its objectives (Crawford, 2006). Ofori and Deffor (2013) hold the view that practitioners' project management maturity, which is the progressive development of an enterprise wide PM approach, methodology, strategy and decision making, is what is required to improve project failures.

Khang and Moe (2008) and Diallo and Thuillier (2004) (as cited by Falgari et.al (2013)) argue that the impact of PM tools and practices is supported by little evidence. But the results of various researches argue differently. For instance, as cited by Keleckaite and Meiliene (2015) Diaz 2010 explains that the effort organizations put-in in order to implement a standard project management methodology is outweighed by the benefits which include: completing projects effectively and efficiently, getting better results through planning, quick resolution of problems, resolving future problems before they occur.

Ibbs and Kwak (1998) studied 38 companies and found a positive correlation between project management ability and business performance in addition to discovering that companies with good project management capabilities and competencies yielded better results (cited by Ghorbanali et.al, 2011).

In his book Kerzner (2009) mentions a case study which revolves around Williams Company which from 1996 to 2001 came out of 24 consecutive quarters of loss with much of the credit going to the performance and maturity of the project management system. Tembo and Rwelamila (2007) mention in their study that strong indicators imply that the underperformance of a number of public projects in Botswana are symptoms of project management immaturity in the sector.

PM Solutions (2014) conducted a global survey covering 5 continents, 9 industries involving almost 300 participants. The study concluded:

- a. There is direct and strong correlation between project management maturity of firms and its overall performance and
- b. High performing firms are more project management mature.

The results from this study reprise that their 2001 and 2006 studies: more mature firms deliver more value.

Yazici (2009) conducted a similar study on 75 US organizations revealing a significant relationship between project management maturity level and organizational performance. PricewaterhouseCooper (PwC) also conducted a survey in 2004 on senior, top and project managers and project team members of 200 organizations, spanning 5 continents, 30 countries, 5

major industry sectors. In 2006 a second survey was conducted on over 200 respondents representing organizations across 26 nations. The results of both surveys were similar: project management maturity is closely project performance in that: 80% of projects labeled as 'high performing' have PM certified project manager and positive correlations exist between usage of project management software's, such as MS-Project and SAP, and project performance.

In 2016, a national survey of the state of project management was conducted by Wellington Project Management and published by the aforementioned organization together with the Association for Project Management (APM) Project Management Office (PMO) Specific Interest Group (SIG). In the survey, almost 700 professionals from over 300 organizations in the UK participated. The results showed a parallel result: about half of the organizations have a low project management maturity (level two or less) and perhaps consequently, a third of the organizations are at least 50% behind schedule and over budget.

Mateen (2015) studied internal documents and utilized survey questionnaires to assess the project management maturity of two departments in a multinational company in Pakistan. Though factors like project team competency, organizational structure, culture and organizational support are contributors, the results affirm the notion that project management maturity has a direct impact on project performance.

This notion also extends to the realms of international development projects. According to Golini, Kalchshmidt and Landoni (2015) international projects implemented by NGOs are the cornerstones for providing assistance to developing countries, but their success is nothing close to repetition! Catholic Institute for International Relations (CIIR) (2005), states that 80 percent of development projects fail before or after they are completed. Similarly, as cited by Ika, Diallo and Thuillier (2012), half of World Bank projects in Africa fail according to the Meltzer Commission (2000). A later study conducted by Independent Evaluation Group (2010) lowers the figure to nearly 40 percent (cited by as cited by Ika, Diallo and Thuillier, 2012)

It was with the aim of investigating the impact of PM practices on project performance that the aforementioned study administered an international survey to almost 500 project managers. The study came to the conclusion that different levels of PM maturity relate to project success in both

the short and long term. A study conducted by Falgari et.al (2013) also administered an international survey to almost 500 project managers came to a parallel conclusion.

Golini, Kalchshmidt and Landoni (2014) and Besner and Hobbs (2008) claim that NGOs are picky in their application of PM tools. NGOs appear to neglect certain PM tools such as critical path method, issue log and earned value management system and opt to utilize mainly logical framework, despite being criticized as ineffective (Smith, 2000, cited by Falgari et.al, 2013) and progress report. Golini, Kalchshmidt and Landoni (2015), converse to the current practice of NGOs encourage project managers to adopt more PM tools in order to achieve good project performance.

Viana and Mota (2016) argue that the basic essence of maturity compels organizational processes to continuous improvement and, hence, necessitates an understanding of the organizations current position. Assessing the project management maturity is the base for an organization's effort of enhancing its PM maturity (and hence improving the likelihood of project success), which is what this research sets out to accomplish; assess the project management maturity level of Initiative Africa, its relationship with project success and identify the areas of focus which, if paid due attention could result in improvement in maturity (hence project success).

CHAPTER THREE

RESEARCH METHODOLOGY

This portion of this study is dedicated to the illustration of research methodology that has been utilized and the rationales behind them.

3.1 Research Design

The study is time bound hence cross sectional. It is also a descriptive research; in that it attempts to ‘portray an accurate profile of persons, events or situations (Robson, 2002, p. 59, as cited by Saunders, Lewis and Thornhill (2009). This design has allowed the researcher to examine and describe the relationship between project management maturity and project success in the case of Initiative Africa. The design is selected in order to collect enough information from involved parties so as to understand the relationship between PMM and project management success.

Mixed method is the preferred research approach, as it is claimed to balance the benefits of both qualitative and quantitative research (Creswell, 2014) and allows the researcher to utilize the benefits of a questionnaire’s ability to extract specific data needed as well that of an interview’s openness in giving the respondent to have their say.

3.2 Population and sampling procedure

3.2.1 Population of the study

The population of this study is the project managers and project teams of Initiative Africa; for the evident reason that they are the ones at the front line, executing the project.

3.2.2 Sampling procedure

Because of the small size of Initiative Africa in Ethiopia, the population for the study, who are the two project managers and nine project team members of the organization, have all been taken as the sample i.e. census (Saunders, Lewis and Thornhill, 2009).

3.3 Data Collection Procedure

The study utilized both primary and secondary sources. Primary data was collected through questionnaires from the aforementioned sample. The questionnaire was an adaptation of an online survey published by surveymonkey.com for the Organizational Project Management Maturity Model (OPM3).

The model was selected because it is known to be applicable to diverse industries (Vergopia, 2008) and that the model has been compared with other models on the basis of the model's: publisher, scope, maturity level, discrete and continuous, details, refer to standard, organization strategic project management process, program management process, portfolio management process assessment difficulty, assessment cost, quantitative results, tangibility of results, identifying weakness and strengths, continuous assessment, training difficulty, commitment for continuous improvement suggestion of alternative for improvement, priority of improvement, support by publisher, new edition, easy for execution, simple and understandable, definition of maturity and coverage assessment and found to be the best (Khoshgoftar and Osman, 2009, cited by Mateen, 2015).

The adapted questionnaire was presented to experts (two lecturers at Addis Ababa University, School of Commerce) and pilot tested at the Norwegian Refugee Council (NRC). The reason for having a pilot sample outside of the population is that the size of the population is too small that the researcher cannot spare any sample for a pilot study. In addition to being in the same sector, (i.e. NGO), their geographic proximity and similarity in demographic features such as educational background have backed the decision of choosing NRC.

Furthermore, interview was also conducted with the project managers of the organization on their PM practice and tools adopted. Complimentarily, secondary data was collected by the examination of pertinent websites and the annual reports to attest for the performance of IA projects on the basis time and cost.

3.4 Data Analysis Procedure

The data obtained from the questionnaire respondents used to assess the project management maturity and project management success level of IA was analyzed using the software Statistical

Package for Social Science (SPSS). The scores of all 18 questions were fed to SPSS and the scores for every factor used for assessment purpose were obtained and then averaged to give the project maturity level of IA staff on all three knowledge areas and the level of perceived project management success. The demographics of respondents were also analyzed using SPSS.

Correlation coefficient was used to test the relationship of independent variables (time, cost quality management maturity) with the dependent variable (project management success).

The results of the analysis have been presented in the form of descriptive statistics such as mean, frequency and percent.

3.5 Validity and Reliability

Creswell (2014) underlines the value of checking validity and reliability of data in attempting to acquire meaningful interpretations. Furthermore, he mentions Cronbach's alpha (α) the reliability checks for the internal consistency of the scales.

The applicability of Cronbach's alpha as highlighted by Creswell was the reason it is utilized in checking the validity and reliability of data in this study.

In efforts to check the validity, the questionnaire used face validity by having the questionnaire adopted from an online survey checked by two lecturers and have conduct a pilot test. Furthermore, the researcher was present as respondents filled out the questionnaire, in case explanation was needed.

3.6 Ethical consideration

Ethical considerations were made and upheld throughout the course of the study include anonymity and confidentiality. These ethical pillars are the sole reasons that respondents were not asked their name. In addition the purpose of the research, who is conducting it, the outcome expected, possible benefits and beneficial parties as well as their role in the study has been disclosed to them before they fill out the questionnaire.

CHAPTER FOUR
RESEARCH FINDING AND INTERPRETATION

4.1. Introduction

As has been mentioned in the prior chapters, the main attempt of this study is to investigate the relationship between project management maturity and project management success. Data was collected from primary and secondary sources in the form of questionnaires and review of annual reports respectively. Hence, this chapter presents the analysis and discussions for research findings obtained from both sources, first the questionnaire followed by the scrutiny annual reports.

This chapter commences by presenting the discussion begins with the questionnaires' response rate followed by the descriptive statistics of the respondents related questions; like the gender, age, profession, and level of education.

4.2. Demographic Profiles of Respondents

This section presents the demographic characteristics of respondents that participated in the study. As shown in the table given below, 7 (77.8%) were male and 2 (22.2%) were female. The majority of the ages of respondents fall under the age of 25-29 (4, 44.4%), less than 25 (3, 33.3%), and rest falls in the age interval 30-35 above 35 (1, 11%).

Table 4.1: Demographic Profiles of Respondents

Variables		Frequency	Percent
Gender	Male	2	22.2
	Female	7	77.8
Age	Less than 25 years	3	33.3
	From 25 - 29 years	4	44.4
	From 30-35 years	1	11.1
	Above 35	1	11.1
Educational level	Up to Diploma	1	11.1
	BA Degree	4	44.4

	MA or Above	4	44.4
Training	Yes	3	33.3
	No	6	66.7
	Total	9	100.0

In respect to educational level, respondents who have acquired B.A. and M.A. covered equal proportion (4, 44.4% each). The rest 1 (11.1%) respondent responded as he has diploma and above. When asked whether or not they attended a project management course or training, majority of respondents (6, 66.7%) stated that they haven't attended such training while only rest 3 (33.3%) confirmed that they have acquired a project management training. This implies that the attention the organization has given to its employees' awareness of PM concepts and tools is low.

4.3 Answers to research questions

In this section, the answers to research questions the study planned to answer have been addressed by using the data acquired.

4.3.1 What is the level of project management maturity on the basis of the three core knowledge areas in the case of IA?

One of the objectives this study set out to answer was, knowing what the level of project management maturity of IA was, on the basis of the core knowledge areas of project management i.e. time management maturity, cost management maturity and quality management maturity. This was done by asking respondents to evaluate their organization's practice on those areas and answering by choosing between, 'Never and no need', 'Never but probably should', 'Yes but not always and appropriately', 'Yes, appropriately and competently', 'Yes, in an exemplary manner', representing maturity from level 1-5 accordingly.

a. Time Management Maturity

Time management entails processes required to manage the timely completion of the project (PMI, 2013). To assess the time management maturity of IA, three major questions were asked which have been presented below along with the results discovered through the questionnaire.

Table 4.2: Project Time Management Maturity

Questions	Response	No	%
Your organization describes the processes, tools and techniques used to develop a project schedule.	Never, but probably should.	1	11.1
	Yes, but not always and appropriately.	1	11.1
	Yes, appropriately and competently.	6	66.7
	Yes, and in an exemplary manner.	1	11.1
Your organization describes how the project schedule will be checked, monitored and how changes to it will be assessed.	Never, but probably should.	1	11.1
	Yes, but not always and appropriately.	4	44.4
	Yes, appropriately and competently.	3	33.3
	Yes, and in an exemplary manner.	1	11.1
Your organization describes and requires the use of scheduling software	Never, but probably should.	7	77.8
	Yes, but not always and appropriately.	1	11.1
	Yes, appropriately and competently.	1	11.1

Source: Survey Data, 2017

As shown in the above table, the first question is whether their organization describes the processes, tools and techniques used to develop a project schedule, to which majority of them (66.7%) replied yes, appropriately and competently. The second question was whether their organization describes how the project schedule will be checked, monitored and how changes to it will be assessed. Nearly half (44.4%) of them responded yes, but not always and appropriately and 33.3% said yes, appropriately and competently. Majority of the respondents (77.8%) said

that their organization never describes and requires the use of scheduling software but probably should.

When calculating the average time management maturity from the above table, we find that the average maturity is 3.19.

b. Cost Management Maturity

Cost management maturity is processes that are aimed to assure that the project can be completed within the approved budget (PMI 2013). In an attempt to assess the cost management maturity of IA staff, seven questions were asked; as has been summarized by the following table.

Table 4.3: Project Cost Management Maturity

Questions	Response	No	%
Your organization describes the processes, tools and techniques used to estimate costs on the project.	Never, but probably should.	1	11.1
	Yes, appropriately and competently.	8	88.9
Your organization describes how project cost estimates will be checked, monitored and how changes to them will be assessed.	Never, but probably should.	1	11.1
	Yes, appropriately and competently.	7	77.8
	Yes, and in an exemplary manner.	1	11.1
Your organization describes the processes, tools and techniques used to prepare and document a project budget.	Never, but probably should.	1	11.1
	Yes, appropriately and competently.	8	88.9
Your organization describes how the project budget forecast will be checked, monitored and how changes to it will be assessed.	Never, but probably should.	2	22.2
	Yes, but not always and appropriately.	2	22.2
	Yes, appropriately and competently.	5	55.6
Your organization requires the use of earned value management techniques for monitoring cost and/or time.	Never, but probably should.	1	11.1
	Yes, but not always and appropriately.	5	55.6

	Yes, appropriately and competently.	3	33.3
Your organization describes any internal financial processes that may influence the project.	Never, but probably should.	5	55.6
	Yes, but not always and appropriately.	1	11.1
	Yes, appropriately and competently.	3	33.3
Your organization describes and requires the use of cost and budgeting software	Never and no need.	1	11.1
	Never, but probably should.	6	66.7
	Yes, appropriately and competently.	2	22.2

Source: survey data, 2017

Highest number of the participants was replied “yes, appropriately and competently” for the question “Your organization describes how project cost estimates will be checked, monitored and how changes to them will be assessed”. Half of (55.6%) them were replied appropriately and competently for the statement “your organization describes how the project budget forecast will be checked, monitored and how changes to it will be assessed.” The same amount of respondents reported that their organization requires the use of earned value management techniques for monitoring cost and/or time but not always and appropriately.

Consequently, when assessing the maturity of IA staff in the area of cost management, we find that their maturity stands at 3.3.

c. Quality management maturity

PMI (2013) states that Project Quality Management entails efforts made to ensure that the project requirements, including product requirements, are met and validated. So as to accomplish the aim of assessing the quality management maturity five questions were asked; which have been presented below along with their corresponding response.

Table 4.4: Project Quality Management maturity

Questions	Response	No	%
Your organization describes the processes for implementing quality assurance in the project.	Never, but probably should.	1	11.1
	Yes, appropriately and competently.	6	66.7
	Yes, and in an exemplary manner.	2	22.2
Your organization describes how quality assurance audits will occur in the project.	Never, but probably should.	1	11.1
	Yes, appropriately and competently.	5	55.6
	Yes, and in an exemplary manner.	3	33.3
Your organization describes how quality control will be defined, inspected and documented on the project.	Never, but probably should.	1	11.1
	Yes, but not always and appropriately.	1	11.1
	Yes, appropriately and competently.	5	55.6
	Yes, and in an exemplary manner.	2	22.2
Your organization describes how the quality management processes will be checked, monitored and how changes to them will be assessed.	Never, but probably should.	1	11.1
	Yes, but not always and appropriately.	1	11.1
	Yes, appropriately and competently.	5	55.6
	Yes, and in an exemplary manner.	2	22.2
Your organization describes and requires the use of quality management software	Never and no need.	1	11.1
	Never, but probably should.	7	77.8
	Yes, appropriately and competently.	1	11.1

Source: survey data, 2017

Respondents were asked five questions regarding project quality management of sample projects. As presented in table 4.4, majority of the respondents replied that their organization describes the processes for implementing quality assurance in the project (66.7%), how quality assurance audits will occur in the project (55.6%), how quality control will be defined, inspected and documented on the project (55.6%), and how the quality management processes will be checked, monitored and how changes to them will be assessed (55.6%) appropriately and competently. On the other hand, 77.8% said that their organization never describes and requires the use of quality management software. The quality management maturity of IA staff, which is also the area where the IA staff showed the highest level of maturity, stands at 3.6.

Table 4.5 Recap of average project management maturity levels

Maturity area	Average Maturity Level
Time Management	3.19
Cost Management	3.30
Quality Management	3.60

4.3.2 What is level of project management success in the case of IA?

Cooke-Davis (2002) explained that project management success refers to the evaluation of the performance of a project measured against the measurements of time, cost and quality. Hence this research, in an attempt of accomplishing one of its objectives, asked respondents to evaluate and rank the performance of their projects on the basis of time: compliance with schedule, cost: compliance with budget and quality: delivery the product intended. Each of these parameters was ranked by respondents on a five point scale as Very poor, Poor, Neutral, Good and Very good. The results have been summarized as follows.

- i. Compliance with budget

The response of respondents when asked to evaluate the performance of organization’s projects, they responded as follows:

Table 4.6 Compliance with budget

Rating	No	Percent
Neutral	2	22.2
Good	2	22.2
Very Good	5	55.6
Total	9	100.0

When evaluating the success of their organization on the basis of budget compliance 22.2% (2 respondents) rated it as neutral. The same portion of the sample also thought that their organization's projects complied with their budget in a very good manner, while the majority rated it as very good, putting the average compliance of IA projects to their budgets at 4.33, which translates to a performance level above 'good'.

This level of cost performance was also affirmed by analyzing the annual reports of 2014 and 2015 fiscal years where IA utilized 95.7 and 89.2 percent of their annual budget respectively.

ii. Compliance with time

Table 4.7 Compliance with time

Rating	No	Percent
Neutral	1	11.1
Good	3	33.3
Very Good	5	55.6
Total	9	100.0

When asked to rate their organizations trend in complying with deadlines and delivery dates, 88.9% (8) of the respondents answered 'good' and above. Only one respondent (11.1 %) answered neutral. Consequently, the average compliance of IA projects to time sits at 4.44 out of a possible 5.

This level of perceived performance is also substantiated by the 2014 and 2015 annual reports where IA completed the projects for that year. The average level of work completed in the aforementioned fiscal years stood at 101.2 and 101 percent respectively.

iii. Compliance with quality (deliver exactly the output expected)

When asked to rate the trend of their organization displayed with regards to delivering a project output that is exactly what it set out to complete, respondents gave an average rating of 4.44 out of 5, with just one respondent (11.1 %) rating it as ‘neutral’ and 8 of them (88.9 %) rating it as ‘good’ or greater.

Table 4.8 Compliance with Quality

Rating	No	Percent
Neutral	1	11.1
Good	3	33.3
Very Good	5	55.6
Total	9	100.0

4.3.3 What is the relationship between project management maturity and project management success in the case of IA?

The final question this study set out to answer was to find the correlation between the project management maturity and project management success. To this partial correlation coefficient was utilized. Gaur and Gaur (2009) state that partial correlation allows us to examine the correlation between two variables while controlling for the effects of one or more of the additional variables without throwing out any of the data.

The correlation coefficients show the extent and direction of the linear relationship between project maturity variables and project management success measures of the sample projects. The probability is shown in parenthesis with the correlation coefficient for the three correlation matrix below. The significance level also shown that is ** for 5% level.

The table below demonstrates shows that quality management maturity is positively and significantly correlated at 5 percent significance level with project management success. The

Pearson correlation coefficient of quality management maturity is 74 percent. From this it can be understood that quality management maturity has a strong association with management success of projects. On the other hand, cost and time management maturities have no significant correlation with project management success.

Table 4.9: Correlation Analysis of Project Management Success and Maturity levels

		PM Success	Time Mgt Mat	Cost Mgt Mat	Quality Mgt Mat
Pearson Correlation	PM Success	1.000			
	Time Mgt Mat	.390 (.149)	1.000		
	Cost Mgt Mat	.433 (.122)	.791 (.002**)	1.000	
	Quality Mgt Mat	.740 (.011**)	.786 (.006**)	.782 (.002**)	1.000

** Correlation is significant at the 0.05 level.

In efforts to ascertain the reliability of the results Cronbach's alpha (α) was calculated. In order for the result to be reliable Cronbach's alpha (α) must be 0.7 or greater. In his research it was found to be 0.889, which implies that the result is reliable.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

In efforts to unearth the relationship between project management maturity and project management success in NGOs this study set out to answer three specific research questions.

These are:

- What is the level of project management maturity on the basis of the three core knowledge areas (i.e. time, cost and quality) in the case of IA?
- What is level of project management success in the case of IA?
- What is the relationship between project management maturity and project management success?

In the final chapter of this study conclusion is made from the findings of the study, followed by forwarding of recommendations and indication of directions for future research.

5.1.Conclusion

Despite some contradicting findings, majority of studies, as the ones mentioned in Chapter Two of this research, have shown a positive correlation between project management maturity and project success. This study set out to investigate the relationship between project management maturity and project management success, by taking Initiative Africa as a case study. Based on the results of the descriptive statistics and correlation analysis the researcher has made the following conclusions.

- The maturity of IA based on all three parameters lies above 3, level 3 (i.e. Measure as per OPM3) meaning that the organization has a standard processes used by all projects, and processes are measured to evaluate effectiveness.
- Quality management has the highest level of PM maturity (with 3.6), which implies that there is a good management process in play to assure that the organization delivers project outputs exactly how it planned.

- The correlation analysis conducted between project management maturity and project management success displayed a positive correlation on all three parameters. However, only quality management maturity had a significant relationship with project management success. Furthermore, efforts in incorporating PM tools and methodologies in the process will bear positive impact on the project management success of the organization, with improvements in quality management being the significant maturity area.

5.2 Recommendation

Based on the conclusion of the study it is recommended that IA consider the following in efforts of increasing their chance of project management success:

- Invest further on improving the quality management. As has been said in the findings portion of the study and later in the conclusion part of the study, quality management has a significant positive relationship with project management success. The organization should exploit this scenario by making further efforts to enlighten the project team about how quality assurance audits will occur in the project, the processes needed for implementing quality assurance in the project, how quality control will be defined, inspected and documented on the project, how the quality management processes will be checked and monitored and how changes to them will be assessed and by describing and requiring the use of quality management software.
- The use of modern technology tools in simplifying work is well known. For this reason, the organization should encourage the use of project management software's. Furthermore the organization should engage itself in efforts to incorporate project management concepts and techniques as opposed to adopting a selected PM tools such as the logical framework.
- Train more staff! The performance of IA projects on the basis of time, cost and quality is above good. However, one has wonder, what if all of the staff are trained and have a better understanding of project management tools and techniques? The fact that it will bear positive fruits is evident from the findings.

5.3 Future Researches

Despite all its good promises, the discipline of project management has not been studied well in our nation; its application even less so. As a result future research has a lot of ground to cover in assessing the applicability of the discipline, the benefits organizations could reap from it, how they could fall into line with the project management concepts and so on. Much to do!

However, directly related to the topic of this research, i.e. project management maturity, more research needs to be conducted on assessing the relationship project management maturity has on project success (not just project management success). Future research should also make efforts to analyze the cases of organizations operating in various other sectors. After all, 'project management is here to stay!' (Kerzner, 2003).

References

- Andersen, E. S. and Jessen, S. A. 2003. Project Maturity in Organizations. *International Journal of Project Management* 21 (6)
- Atkinson, R., 1999. Project Management: Cost, Time and Quality, Two Best Guesses and A Phenomenon, It's Time To Accept Other Success Criteria, *International Journal of Project Management* Vol. 17, No. 6, pp. 337-342,
- Backlund, F, Chronéer, D. and Sundqvist, E. 2014. Project Management Maturity Models- A Critical Review: A Case Study within Swedish Engineering and Construction Organizations, 27th IPMA World Congress
- Bay, A. F., and Skitmore, M. 2006. Project Management Maturity: Some Results From Indonesia, *Journal of Building and Construction Management* 10: pp. 1-5
- Beset, D. A. 2007. A Model For Assessing Project Management Maturity Level Of Architectural Design Offices (ARCH-PMM) (Doctoral Dissertation- İzmir Institute of Technology)
- Besner, C. and Hobbs, B., 2008. Project management practice, generic or contextual: A reality check. *Project Management Journal*, 39(1), pp.16-33.
- BMG Research 2014. Factors in Project Success, Prepared for: The Association for Project Management (APM)
- Brookes, N. and Clark R. 2009. Using Maturity Models to Improve Project Management Practice, POMS 20th Annual Conference, Orlando, Florida U.S.A., May 1 to May 4, 2009
- Catholic Institute for International Relations Unit 3, 2005. Capacity building for local NGOs A Guidance Manual For Good Practice ISBN 1 85287 315 9
- Ciaghi, A., Villafiorita, A. and Dalvit, L., 2014. Understanding Best Practices for ICTD Projects: Towards A Maturity Model, 2014 IDIA conference, Port Elizabeth South Africa
- Cleland, D.I. and Ireland, L.R., 2002. *Gerência de projetos*. Reichmann & Affonso Editores.
- Cooke-Davies, T. 2002. The “real” success factors on projects *International Journal of Project Management* 20 (3), pp. 185–190
- Creswell, J. W. 2014. *Research design: Qualitative, Quantitative, and Mixed Methods Approaches* Fourth ed. by SAGE Publications, Inc.
- Crawford, J., 2006. *The creation of states in international law*. Oxford University Press.

- Demir, C. and Kocaba I. 2010. Project Management Maturity Model (PMMM) in Educational Organizations, *Procedia Social and Behavioral Sciences* 9 1641–1645 WCLTA 2010
- Diallo, A. and Thuillier, D., 2005. The success of international development projects, trust and communication: an African perspective. *International journal of project management*, 23(3), pp.237-252.
- Falgari, M., Golini, R. Kalchschmidt, M. and Landoni, P. 2013. *Managing International Development Projects: Evidences from an International Survey*
- Gaur, A. S and Gaur S. S. 2009. *Statistical Methods for Practice and Research: A guide to data analysis using SPSS (Second edition)*, Vivek Mehra for SAGE Publications India Pvt Ltd
- Getaneh, E., 2016. *Assessing Project Management Practice of Oromia Integrated Urban Land Information System Coordination Project Office*, Master of Arts Thesis, Addis Ababa University
- Ghorbanali, A., Khosravi, S., Afshari, H., Borzabadi, M. and Valipour, M. 2011. *Improving Project Management Competency By Using An OPM3 Approach*, International Conference on Economics, Business and Management IPEDR vol.2 (2011) IAC S IT Press, Manila, Philippines
- Golini, R., Kalchschmidt, M., and Landoni, P., 2014. *Adoption of Project Management Practices: The impact on International development Projects of Non-Governmental Organizations*
- Golini, R., Kalchschmidt, M., and Landoni, P., 2015. *Adoption of Project Management Practices: The Impact on International Development Projects of Non-Governmental Organizations*, *International Journal of Project Management* 33 (3), pp. 650 – 663
- Goulet, D. R., 2000. *Measuring the Success of Project Management and the Capability Maturity Model Using the Parking Lot Metric*. Paper presented at PMI annual seminars and symposium, Houston, Tx. New Town square, PA: Project Management Institute
- Grant, K. P. and Pennypacker J. S., 2006. *Project Management Maturity: An Assessment of Project Management Capabilities among and Between Selected Industries* *IEEE Transactions on Engineering Management*, Vol. 53, No. 1

- Grobler, P.J. and Steyn, H. 2006. Project Management Maturity Models: Does One Size Fit All? Proceedings of the 2006 PMSA International conference 30 May – 1 June 2006 Johannesburg, South Africa
- Hartman, F. and Ashrafi, R., 2002. Project management in the information systems and information technologies. *Project Management Journal*, 33 (3), pp. 5-15.
- Ibbs, C. W. and Kwak, Y. H., 2000. *Assessing Project Management Maturity*, Project Management Institute
- Ika, L. A., Diallo, A. and Thuillier D. 2012. Critical Success Factors For World Bank Projects: An Empirical Investigation, *International Journal of Project Management* 30 (2012) 105–116
- Initiative Africa, 2014. Annual report of 2014
- Initiative Africa, 2015. Annual report of 2015
- Initiative Africa, 2016. Annual report of 2016
- International Project Management Association 2016. *Project Excellence Baseline For Achieving Excellence In Projects And Program*, version 1.0
- Iqbal S., 2015. *A Unified Strategic View of Organizational Maturity*, Project Management Institute
- Jedd, M., 2005. Organizational maturity assessments light way to optimized project management. *PM Network*, June
- Jugdev, K. and Thomas, J., 2002. Project management maturity models: The silver bullets of competitive advantage. Project Management Institute.
- Jugdev, K. and Müller R., 2005. A retrospective look at our evolving understanding of project success. Project Management Institute
- Keleckaite, M. and Meiliene, M., 2015. The Importance of Project Management Methodologies and Tools in Non-Governmental Organizations: Case Study of Lithuania and Germany, Second Edition *PM World Journal* Vol. IV, Issue VII
- Kerzner, H., 2001. *Strategic Planning For Project Management Using A Project Management Maturity Model*, John Wiley & Sons Inc
- Kerzner, H., 2003. *Project Management: A Systems Approach to Planning, Scheduling, and Controlling*, John Wiley & Sons, Inc.

- Kerzner, H., 2009. Project Management A Systems Approach to Planning, Scheduling, and Controlling Tenth Edition, Published by John Wiley & Sons, Inc.
- Khang D. B. and Moe, T. L., 2008. Success Criteria and Factors for International Development Projects: A Lifecycle-based Framework, Project Management Journal, V.39 No.1
- Kilkelly, E., 2008. Blended Learning: Pathways to Effective Project Management. Development and learning organizations: an International Journal, 23 (1), pp. 19-21
- Kwak, Y. H. and Ibbs C. W., 2002. Project Management Process Maturity (PM2) Model, Journal of Management In Engineering 18 (3) pp, 150-155
- Larsson J. and Kinnunen J., 2008. Performance Measurement In Nonprofits: Much To Be Gained Or A Waste Of Resources
- Lim, C. M. and Mohamed, M. Z., 1999. Criteria of Project Success: An Exploratory Re-Examination, International Journal of Project Management Vol. 17, No. 4, pp. 243-248,
- Matassa, P., 2006. Grow up already! – An OPM3 primer. Paper presented at PMI Global Congress 2006- North America, Seattle, WA. New Town square, PA: Project Management Institute
- Mateen, M., 2015. Measuring Project Management Maturity - A framework For Better And Efficient Projects Delivery, Chalmers University Of Technology Göteborg, Sweden Master's Thesis 2015: 136
- Meisner, R., 2007. MINCE®-A framework for organizational maturity. Van Haren.
- Mir, F. A. and Pinnington, A. H., 2014. Exploiting the value Project Management: Linking Project Management Performance and Project success. International journal of project management 32 (2), pp 202-217
- Mittermaier, H. K. and Steyn, H. 2009. Project Management maturity: an assessment of maturity for developing pilot plants. South African Journal of Industrial Engineering, 20 (1), pp. 95 107
- Murray, A. and Ward, M., 2007. Improving project performance using PRINCE2 Maturity Model (P2MM). The Stationary Office.
- Nenni, M.E., Arnone, V., Boccardelli, P. and Napolitano, I., 2014. 'How to Increase the Value of the Project Management Maturity Model as a Business-oriented Framework', International Journal of Engineering Business Management, 6, p. 8

- Neverauskas B. and Railaite R., 2013. Formation Approach for Project Management Maturity Measurement Economics and Management: 2013. 18 (2) ISSN 2029-9338 (Online)
- Office of Government Commerce, 2008. Portfolio, Programme and Project Management Maturity Model (P3M3) Public Consultation Draft v 2.0, © Crown copyright 2008
- Ofori, D. and Deffor, E. W., 2013. Assessing Project Management Maturity in Africa: A Ghanaian Perspective, International Journal of Business Administration Vol. 4, No. 6;
- Papke-Shields, K.E., Beise, C. and Quan, J., 2010. Do project managers practice what they preach, and does it matter to project success?. International journal of project management, 28 (7), pp.650-662.
- PricewaterhouseCooper, 2006. Insights and Trends: Current Program and Project Management Practices: The Second Global Survey on the Current State of Project Management Maturity in Organizations Across The World
- PricewaterhouseCooper, 2008. Boosting Project Success through Project Management Maturity! Presented for PMI Sydney Chapter
- PricewaterhouseCooper, 2004. Boosting Business Performance through Program and Project Management: A First Global Survey On The Current State Of Project Management Maturity In Organizations Across The World
- Project Management for Development Organization, PM Connect PM4DEV quarterly journal, PM Connect PM4DEV Volume 5-1
- Project Management for Development Organization, PM Connect PM4DEV quarterly journal, Volume 4-4
- Project Management for Development Organizations 2015. A Methodology to Manage Development Projects For International Humanitarian Assistance And Relief Organizations
- Project Management for Non-Governmental Organizations (PM4NGO) 2013. A Guide to the PMD Pro, Project Management for Development Professionals, Revised Version 1.7 April 2013, PM4NGOs
- Project Management Institute 2013. A Guide to the Project Management Body of Knowledge (PMBOK Guide) – Fifth Edition, Project Management Institute, Inc.
- Project Management Solutions 2014. Project Management Maturity and Value Benchmark
- Röglinger, M., Pöppelbuß J., and Becker, J., 2012. Maturity Models in Business Process Management, Business Process Management Journal 18 (2), pp. 328-346

- Saunders, M., Lewis P. and Thornhill A., 2009. Research methods for business students, fifth edition, Pearson Education Limited
- Söderlund, J., 2004. Building theories of Project management: Past research, questions for the future. International journal of project management, 22 (3), pp. 183-191
- Tembo, E. and Rwelamila P. M. D., 2007. Project Management Maturity In Public Sector Organizations: The Case Of Botswana CIB W065/055 Commissions: Transformation Through Construction
- Thomas, J. and Mullaly, M., 2006. - Understanding the value of project management: First steps on an international investigation in search of value. Project Management Journal, 38 (3) pp. 74- 89
- Vergopia, C., 2008. Project Review Maturity and Project Performance: An Empirical Case Study Doctoral Dissertation (Open Access) University of Central Florida, Paper 3653
- Vianaa J. C., and Motaa, C. M. D. M., 2016. Enhancing Organizational Project Management Maturity: A Framework Based On The Value Focused Thinking Model Production, 26(2), pp. 313-329
- Wellington Project Management, 2016. The State of Project Management Annual Survey
- Westerveld E., 2003. The Project Excellence Model: Linking Success Criteria and Critical Success Factors, International Journal of Project Management 21 411- 418
- Yazici, H. J., 2009. Does project maturity matter for organizational Success? Proceedings of the 2009 Industrial Engineering Research Conference
- Yimam, A. H., 2011. Project Management Maturity in the Construction Industry of Developing Countries (The Case of Ethiopian Contractors), Master of Science Thesis, University of Maryland, College Park

Websites

- www.businessdictionary.com/definition/project-management.html cited April 27,2017 PM
- www.initiativeafrica.net cited May 26, 2017
- www.merriam-webster.com/dictionary/maturity cited April 29, 20217
- www.pmi.org/about/learn-about-pmi/what-is-project-management cited on April 27, 2017

Appendix

Addis Ababa University

School of Commerce

Project management (MA) Program

This questionnaire is set out with the sole aim of acquiring information needed to evaluate the relationship between project management maturity and project success.

The results of this research will contribute greatly in furthering our understanding of the impact of the aforementioned tools in improving an organizations project performance in the realm of non-governmental organizations.

The first component of the questionnaire is allotted to the demographics of the respondents in terms of age, sex, educational experience, and so on. The second portion of the questionnaire is composed of questions on the ten knowledge areas of project management where you, the respondent are expected to simply **answer by ticking on** either of following:

- **Never and no need.**
- **Never but probably should**
- **Yes but not always and appropriately**
- **Yes, appropriately and competently**
- **Yes, in an exemplary manner.**

The third portion is dedicated to the respondent's evaluation of their projects level of success. The fourth and final part is allotted to open ended questions. The entire questionnaire should take no more than 15 minutes.

★ **Please know that the confidentiality and anonymity of your identity and your responses will be kept throughout course of this study.**

Thank you.

Part II. Project Management Maturity

1. Project Time Management

State the your organization's application of the following elements

		Never and no need.	Never but probably should.	Yes but not always and appropriately.	Yes, appropriately and competently.	Yes, in an exemplary manner.
TM ₁	Your organization describes the processes, tools and techniques used to develop a project schedule.					
TM ₂	Your organization describes how the project schedule will be checked, monitored and how changes to it will be assessed.					
TM ₃	Your organization describes and requires the use of scheduling software.					

2. Project Cost Management

State the your organization's application of the following elements

		Never and no need.	Never but probably should.	Yes but not always and appropriately.	Yes, appropriately and competently.	Yes, in an exemplary manner.
CM ₁	Your organization describes the processes, tools and techniques used to estimate costs on the project.					
CM ₂	Your organization describes how project cost estimates will be checked, monitored and how changes to them will be assessed.					
CM ₃	Your organization describes the processes, tools and techniques used to prepare and document a project budget.					
CM ₄	Your organization describes how the project budget forecast will be checked, monitored and how changes to it will be assessed.					
CM ₅	Your organization requires the use of earned value management techniques for monitoring cost and/or time.					

CM ₆	Your organization describes any internal financial processes that may influence the project.					
CM ₇	Your organization describes and requires the use of cost and budgeting software.					

3. Project Quality Management

State the your organization's application of the following elements

		Never and no need.	Never but probably should.	Yes but not always and appropriately.	Yes, appropriately and competently.	Yes, in an exemplary manner.
QM ₁	Your organization describes the processes for implementing quality assurance in the project.					
QM ₂	Your organization describes how quality assurance audits will occur in the project.					
QM ₃	Your organization describes how quality control will be defined, inspected and documented on the project.					
QM ₄	Your organization describes how the quality management processes will be checked, monitored and how changes to them will be assessed.					
QM ₅	Your organization describes and requires the use of quality management software.					

Part III. Project success

Rate your organization's performance on the following parameters.

	Measure	Rate				
		Very poor	Poor	Neutral	Good	Very good
PS ₁	Compliance with budget					
PS ₂	Compliance with time					
PS ₃	Compliance with quality (deliver exactly the output expected)					

Part IV. Open-ended questions

a. What do you think are the contributors to project success in your organizations context?

b. Do you expect more application of project management tools and methodologies in our organizations context? Why?

c. How do you evaluate the application of project management tools and methodologies in that of local NGO's?
