UNIVERSIDAD PARA LA COOPERACIÓN INTERNACIONAL (UCI)

PROPOSAL FOR THE ESTABLISHMENT OF A PROJECT MANAGEMENT OFFICE (PMO) FOR THE PROTECTED AREAS CONSERVATION TRUST (PACT)

COLIN MATTIS

FINAL GRADUATION PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE MASTER IN PROJECT MANAGEMENT (MPM) DEGREE

Belmopan, Belize

May, 2022

UNIVERSIDAD PARA LA COOPERACIÓN INTERNACIONAL (UCI)

This Final Graduation Project was approved by the University as partial fulfillment of the requirements to opt for the Master in Project Management (MPM) Degree

Alberto Redondo Salas TUTOR

Juan Camilo Delgado Acevedo REVIEWER No.1

> Carlos Castro Torres REVIEWER No.2

Colin Sylvester Mattis

STUDENT

DEDICATION

This research project is dedicated to my family members who have been a source of encouragement and support throughout the execution of this final graduation project. This project is also dedicated to my professors who had invested their time in teaching the courses and to my peers who have shown resilient support throughout the term of our studies.

ACKNOWLEDGMENTS

This research project would not come to fruition without the collective efforts of a few people. While I may not be able to capture each and every individual who assisted, I will endeavor to try.

Firstly, as cited in Philippians 4:13, "I can do all things through Christ who strengthens me". I would thank God for his never ending mercies, knowledge, sustenance and strength in allowing me to embark on such a journey and to see it through.

Secondly, I must express extreme gratitude to my tutor, Alberto Redondo Salas, who provided direction, guidance and counsel for the production of quality work through all stages of this project.

Thirdly, my appreciation goes out to PACT's Executive Director, Mrs. Nayari Perez and her supportive staff, for giving me the opportunity to work with the organization in the development of this project. To the functional managers and technical staff members who provided me with all the data needed for satisfying my objectives, I say Thank You!

Finally, but most importantly, my heartfelt and most sincere appreciation goes to my family members, my wife Crystal Mattis and daughter Cryslin Mattis, who in many instances, have had to do without a husband and a father because of the time and effort expended in executing this initiative. Thanks to my parents, Colin and Juliet Mattis, for your support and meaningful discussions on topics revolving my research. Your indelible assistance throughout the execution of this project coupled with the pursuing of my studies in the Master in Project Management Degree was nothing short of remarkable. My success is accredited to you all.

ABSTRACT

The Protected Areas Conservation Trust (PACT) plays a pivotal role in protected areas management and environmental protection in Belize through project development, project financing and project management. Nevertheless, PACT lacks an effective project governance framework which has affected the success rate of the entity with regards to project implementation. For this reason, the Final Graduation Project (FGP) aimed to develop a proposal for the establishment of a Project Management Office (PMO) in the Protected Areas Conservation Trust (PACT).

Using the Project Management Maturity Model (PMMMSM), PACT's project management maturity was assessed to be at level 1 which showed that mainly adhoc project management processes are used across all of the project management knowledge areas within the organization. The low project management maturity level, in addition to the fact that PACT is a project-oriented organization with a weak matrix organizational structure, showed the need for the establishment of a supportive PMO within PACT. The main function of this PMO would be to provide and create the processes, templates, guidelines and methodologies needed for effective project management.

The PMO should fall under the Office of the Executive Director, which currently oversees project management functions. The staffing complement of the PMO should include a PMO Director, a Project Manager, a Project Development Specialist and a Project Assistant. To facilitate improvement in project management maturity, a 6-month improvement plan was developed which is aimed at improving maturity from level 1 to level 2 in the short term. Further improvements to level 3 will be facilitated by implementing measures for continuous improvement.

To ensure that the PMO is strategically aligned with PACT's strategic plan, it is recommended that a PMO strategic plan be developed which would provide a roadmap for achieving organizational goals. Providing executive support, investing in skilled and qualified staff, and continuously measuring progress using metrics were all recommended to facilitate strategic alignment of the PMO.

INDEX OF CONTENTS

ΑP	PROVA	L PAGE	ii		
DE	DICATI	ON	iii		
AC	KNOWI	LEDGMENTS	iv		
AB	STRAC	Т	V		
IND	DEX OF	CONTENTS	vi		
IND	EX OF	FIGURES	vii		
IND	EX OF	CHARTS	viii		
AΒ	BREVIA	ATIONS AND ACRONYMS	ix		
EX	ECUTIV	'E SUMMARTY	Χ		
1.	INTRO	DDUCTION	1		
	1.1.	Background	1		
	1.2.	Statement of the problem	2		
	1.3.	Purpose	3		
	1.4.	General objective	4		
	1.5.	Specific objectives			
2.	THEO	RETICAL FRAMEWORK	6		
	2.1	Company/Enterprise framework	6		
	2.2	Project Management concepts	14		
	2.3	Other applicable theory/concepts related to the project topic and context			
3.	METH	ODOLOGICAL FRAMEWORK			
	3.1.	Information sources	31		
	3.2.	Research Methods	36		
	3.3.	Tools	41		
	3.4.	Assumptions and constraints	45		
	3.5.	Deliverables	51		
4.	RESUI	LTS	54		
	4.1.	The project management maturity level of PACT	57		
	4.1.1.	Project Integration Management	59		
	4.1.2.	Project scope management	62		
	4.1.3.	Project Schedule Management			
	4.1.4.	Project Cost Management	65		
	4.1.5.	Project Quality Management	66		
	4.1.6.	Project Resource Planning	68		
	4.1.7.	Project Communications Management	70		
	4.1.8.	Project Risk Management	71		
	4.1.9.	Project Procurement Management	73		
	4.1.10.	Project Stakeholder Management	75		
	4.1.11.	Overall Organizational Project Management Maturity Level	76		
	4.2. Identification and examination of the different types of PMOs in order to				
	determ	ine the most suitable option for PACT			
	4.2.1.	Does PACT need a PMO?	79		
	4.2.2.	The different types of PMOs			
	4.2.3.	The most suitable PMO for PACT	86		
	4.2.4.	Supportive PMO Scope and Functions	92		

	4.3. The best placement of the PMO in PACT's organizational structure, the best placement of the PMO in PACT's organizational structure, the best placement of the PMO in PACT's organizational structure, the best placement of the PMO in PACT's organizational structure, the best placement of the PMO in PACT's organizational structure, the best placement of the PMO in PACT's organization	est
	structure of the PMO and the roles of PMO personnel	99
	4.3.1. The PMO's placement in PACT's organizational structure	99
	4.3.2. The structure of the PMO and the roles of PMO personnel	
	4.4. PACT's plan for PMO implementation and the improvement of project	
	management maturity	104
	4.4.1. A PMO implementation plan for PACT	104
	4.4.2. Project Management Maturity improvement plan	110
	4.5. Recommendations for alignment of the PMO to PACT's strategic needs	113
5.	. CONCLUSIONS	117
6.	. RECOMMENDATIONS	122
7.	BIBLIOGRAPHY	125
8.	. APPENDICES	130
	Appendix A. FGP Charter	130
	Appendix B. FGP WBS	
	Appendix C. FGP Schedule	135
	Appendix D. Survey Instrument	136
	Appendix E. Interview schedule	138
	Appendix F. PMMM Self-Assessment Survey Checklist	141
	Appendix G. Characteristics of Project Management Maturity Levels	149
	Appendix H. PACT's 6-month Project Management Maturity improvement plan	167
	Appendix I. Plan, Do, Check, Act cycle for PMO continuous improvement	175
	Appendix J. Philological Revision Certificate	176
	Appendix K. Philologist's Undergraduate Degree Certificate	177
	Appendix L. Philologist's Postgraduate Degree Certificate	178

INDEX OF FIGURES

Figure 1. PACT stakeholder map	7
Figure 2. Alignment of PACT's mandate with strategic objectives	8
Figure 3. PACT Organizational Structure	
Figure 4. Responsibilities of the Office of the Executive Director and Accounting	
and Finance Department	12
Figure 5. Responsibilities of the Conservation Investment Department and the	
Human Resource and Administration Department	13
Figure 6. Characteristics of a project	
Figure 7. Project Management responsibilities in project phases	
Figure 8. Generic phases of the project life cycle	
Figure 9. Activities of the project execution phase	
Figure 10. Project life cycle depicted in an iterative model	22
Figure 11. Shows the project documents and sponsor in relation to the project	
initiation process group	
Figure 12. Processes in the executing process group	
Figure 13. Monitoring and controlling process group	
Figure 14. Project Management Maturity Model	
Figure 15. Phases that are part of PACT's Investment Modality	
Figure 16. Strategic reasons for implementing projects	
Figure 17. Responsibilities in Project management	
Figure 18. Percentage of respondents with formal project management training	
Figure 19. Challenges faced by PACT in managing projects	
Figure 20. Solutions to project Management challenges at PACT	
Figure 21. The need for a PMO in PACT	
Figure 22. Types of PMOs	
Figure 23. Type of PMO that is suitable for PACT	
Figure 24. The scope of the PMO	
Figure 25. Proposed functional organizational structure for PACT	
Figure 26. Proposed organogram for Supportive PMO1	02

INDEX OF CHARTS

Chart 1. Information sources	34
Chart 2. Research methods	38
Chart 3. Tools4	43
Chart 4. Assumptions and constraints	47
Chart 5. Deliverables5	52
Chart 6. Maturity level of project integration management components	
Chart 7. Maturity level of project scope management components	63
Chart 8. Maturity level of project schedule management components	65
Chart 9. Maturity level of project cost management component	66
Chart 10. Maturity level of project quality management components	68
Chart 11. Maturity level of project resource planning components	70
Chart 12. Maturity level of project communications management components7	71
Chart 13. Maturity level of project risk management components	73
Chart 14. Maturity level of project procurement management components	75
Chart 15. Maturity level of project stakeholder management components	76
Chart 16. Organizational project management maturity level	78
Chart 17. Summary of the contribution that each PMO type would give at PACT8	86
Chart 18. Alignment of PMO functional areas with PACT's strategic objectives9	
Chart 19. PMO designation, roles and their alignment to PMO functions9	
Chart 20. Steps for PMO implementation	
Chart 21. Key Performance Indicators for the PMO10	08

ABBREVIATIONS AND ACRONYMS

AF: Adaptation Fund

CBO: Community Based Organizations

CID: Conservation Investment Department

ESMF: Environmental and Social Management Framework

FGP: Final Graduation Project

GCF: Green Climate Fund

KPI: Key Performance Indicators

• MCCAP: Marine Conservation and Climate Adaptation Project

NGO: Non-Government Organizations

NIE: National Implementing Entity

NPAS: National Protected Areas System

PACT: Protected Areas Conservation Trust

PMBOK: Project Management Body of Knowledge

PMI: Project Management Institute

• PMMM^{SM:} Project Management Maturity Model

PMO: Project Management Office

• PMU: Project Management Unit

ROI: Return On Investment (ROI)

• SMART: Specific, Measurable, Achievable, Relevant and Time-

bound

SO: Strategic objective

WBS: Work Breakdown Structures

EXECUTIVE SUMMARY

To facilitate the conservation of the National Protected Areas System (NPAS), Belize passed the Protected Areas Trust Act which paved the way for the establishment of the National Protected Areas Trust Fund (known as PACT) on June 1st, 1996. The formation of PACT was seen as an important part of the Government's strategy to generate revenue which was to be used for financing the protection, conservation and enhancement of Belize's natural heritage.

The focus areas of PACT's mandate are communication for enhanced stakeholder relationships, internal capacity building, resource mobilization, strategic investments, and coordinating the NPAS. PACT's vision is to be a trusted global leader in sustainable development, enhancing the quality of life of all Belizeans through funding and coordination of a resilient protected areas system. PACT's mission is to effectively manage Belize's National Protected Areas System through strategic partnerships and high impact investments. Nevertheless, PACT lacks an effective project governance framework which has affected the success rate of the entity with regards to project implementation.

Considering the challenges faced by PACT in successfully managing projects, it is expedient for the organisation to consider the establishment of a Project Management Office (PMO). In this regard, the general objective of the Final Graduation Project (FGP) is to develop a proposal for the establishment of a Project Management Office (PMO) in the Protected Areas Conservation Trust (PACT) which should facilitate the delivery of high quality projects with consistency and efficiency. Specifically, the FGP aims to: assess the project management maturity level and organisational needs of PACT; identify and examine the different types of PMOs in order to determine the type that is most suitable for adoption by PACT; determine the best structure of the PMO, the roles of PMO personnel and the best placement of the PMO in PACT's organisational structure; develop an implementation plan which outlines the main steps and procedures to be followed for the establishment of the PMO and; provide recommendations which should ensure the allignment of the PMO with the Strategic needs of PACT.

The FGP used three common methods for conducting research. These methods are quantitative, qualitative and mixed methods. The tools that were used to collect data included the PM solutions project management maturity model. This model is based on a 2-dimensional framework in which the first dimension reflects the level of maturity, and the second dimension looks at key areas of project management addressed. The model includes the ten knowledge areas which helps to determine the project management maturity of the organization. Additionally, surveys, structured and semi-structured interviews, and document analysis (also known as literature reviews) were used to collect key information for the FGP.

PACT's project management maturity has been rated as being at level 1 for performance in all of the project management knowledge areas, including project integration management, project scope management, project schedule management, project cost management, project quality management, project resource management, project communications management, project risk management, project procurement management, and project stakeholder management. This rating was given because of the lack of organizational and

processes and standards that hold project managers and team members accountable for their performance in these knowledge areas.

The project maturity level of PACT can provide enough justification for the need of a PMO within the organization. In addition, the fact that PACT is a project-oriented organization can help to justify the establishment of a PMO. The results of the interviews give an indication of the level of standardization and governance that the staff members believe that the organization should reach, since most respondents indicated the need for a Controlling PMO. Nevertheless, based on the level of project management maturity of the organization, organizational needs, a weak matrix organizational structure and current staffing needs, the best type of PMO that should be implemented by PACT is the Supportive PMO.

The PMO would function as a repository for project management knowledge management and support, provide consulting and mentoring services, deliver processes standards, metrics and other software tools, provide training and education, manage projects and aid in career development.

It is recommended that the Supportive PMO be instituted within the Office of the Executive Director since this will necessitate the least change within PACT's current organizational structure for the accommodation of the PMO. The proposed designations of PMO staffing includes the PMO Director, the Project Manager, the Project Development Specialist and the Project Assistant.

Establishing the PMO would involve four specific steps. These steps include: 1. Current status analysis and general concept, 2. Preparation and specification, 3. PMO implementation and 4. PMO normal operations. It is recommended that the four steps be carried out within eight weeks as this will give the organization a good target and tangible product to achieve within a defined timeframe.

Since PACT was assessed as being level 1, the next step will be to carry out actions which can improve the maturity of the organization to level 2, and eventually to a level 3. The project management maturity improvement plan covers a period of 6 months and includes actions to develop project charters, develop project management plans, acquisition of templates and the establishment of processes, guidelines and best practices that are needed to improve project management maturity.

The PMO will help to achieve PACT's vision and mission by enhancing the implementation of the organization's strategic plan. The PMO will accomplish this task by choosing the right projects to implement and by ensuring that delivery is done effectively, in alignment with the strategy. In this regard, four recommendations were proposed. The first is related to the development of a PMO strategic plan which identifies resources and tools needed to achieve PACT's strategic plan and to complete projects on time and within the budget. The second recommendation is related to the provision of executive support and buy-in, which is key to ensuring that the PMO is empowered to carry out its strategic functions. The third recommendation supports the equipping of the PMO with skilled staff who can provide leadership in carrying out strategic functions. The final recommendation is related to the use of metrics to produce data which show the effectiveness of the PMO in achieving strategic goals.

1. INTRODUCTION

1.1. Background

Belize is said to be located in a Mesoamerican hotspot and is made up of a variety of terrestrial, marine and freshwater ecosystems. The country has one hundred and three (103) protected areas which are comprised of statutory sites, private protected areas and archaeological reserves that are said to be part of the national system (National Climate Change Office, 2016). Nevertheless, the protected areas system has historically been under threat due to the unsustainable use of resources, deforestation, rapid coastal development and weak institutional and legal frameworks, etc. (Young, 2008).

To address the issues relating to protected areas management, Belize hosted the first eco-tourism international conference in 1991. At this conference, eco-tourism was embraced, and the idea was pitched to create an innovative source of funding for the conservation of natural ecology. Five (5) years later, the Protected Areas Trust Act was passed which paved the way for the establishment of the National Protected Areas Trust Fund (leading to the formation of PACT) on June 1st, 1996.

The formation of PACT was seen as an important part of the Government's strategy to generate revenue which was to be used for financing the protection, conservation and enhancement of Belize's natural heritage. The main source of the funds was, and still is, acquired from a conservation fee which is paid by foreign visitor's departure fees, protected areas entrance fees, concession fees, permit and license fees, cruise ship passenger fees, grants and donations. Since 1996, PACT has engaged in strategic planning and has established a grants portfolio that has benefited forestry enterprises, universities, marine conservation agencies, protected areas co-managers and government agencies, just to name a few.

On September 16th, 2011, PACT was accredited as a National Implementing Entity (NIE) to the Adaptation Fund which facilitated the development and funding of national projects with the main aim of promoting climate change adaptation. Through funding from the Adaptation fund, PACT financed the "Marine Conservation and Climate Adaptation Project (MCCAP)" that costed USD\$7.31 million Dollars. This

project was implemented from March 2015 to September 2020 (Adaptation Fund, 2021).

Additionally, PACT is accredited to the Green Climate Fund (GCF) which allows the entity to submit project proposals from the GCF, acquire funds for the management of approved projects and to manage projects on behalf of the government and people of Belize. Through a readiness grant, PACT is receiving post accreditation support from the GCF which helps the entity to satisfy accreditation criteria through the establishment of a planning framework for GCF engagement, the mobilization of national climate action, and strengthening the capacity of PACT to identify, design and implement climate change projects according to GCF requirements (Green Climate Fund, 2019).

1.2. Statement of the problem

PACT's role in project development, project financing and project management, is usually spearheaded by managerial and technical staff who work in accordance with PACT's guidelines and the requirements of funding agencies. For instance, the aforementioned GCF readiness project is being managed by PACT's Climate Change Technical Officer with support from the staff of the Conservation Investment Department (CID) of the organization.

PACT also provides fiduciary management support to the projects that it implements through the use of requisite finance, procurement or accounting staff who may be hired on a part time or full-time basis. This support ensures that funds are used for their intended purposes and safeguards the projects from fraud and corruption. For instance, PACT provided fiduciary management services to the MCCAP project and ensured that funds were used according to the principles of economy, effectiveness, efficiency and transparency.

Nevertheless, PACT lacks an effective project governance framework, thus limiting its ability to provide a structured approach to project management. In this regard, key stakeholders such as team members, project managers, project sponsors and clients, etc., are supposed to have well defined roles and responsibilities with regarding to decision making for projects that are managed by the entity (Prakash,

2021). In PACT this has not occurred, and it has had various effects on projects, which include:

- Projects not being prioritized and aligned to the strategic goals of the agency.
- Inadequate access to the right information by the right people for effective decision making.
- The completion of some projects over budget and over schedule.
- The inefficient use of resources in project management.
- Inadequate risk assessments and risk mitigation across projects.

There is also a lack of centralized reporting at PACT relating to the progress and health of projects, the status of milestones and deliverables of projects, budget forecasting, project risks, operational efficiency and the designing and tracking of key project performance indicators (Greengard, 2013). Due to these challenges, projects are often started without a clear business case, many of them seem to lack real ownership from stakeholders and there is little visibility regarding how projects are performing (Prakash, 2021).

In summary, project development, project financing, project management and project fiduciary management are carried out at PACT without the aid of an effective governance framework. The status quo has resulted in projects not being strategically aligned to the goals of the agency, in addition to ineffective budget, schedule, resource and risk management, inter alia. In addition, there is a lack of centralized reporting which also has a bearing on project tracking and monitoring. The resulting lack of structure, coordination and consistency has affected the ability of PACT to ensure project success on a consistent basis.

1.3. Purpose

Considering the challenges faced by PACT in successfully managing projects, it is expedient for the organisation to consider the establishment of a Project Management Office (PMO). It is for this reason that assessments need to be executed to find out more information about the project management practices of PACT, to validate the need of a PMO, to determine the best fit for a PMO within the

organisation and to identify ways in which a PMO can enhance PACT's ability to achieve its strategic goals.

Through this research it was established that a PMO is needed for enhancing PACT's ability to plan, manage, implement and control projects. The PMO would help in standardization of methods and processes and would assist PACT to produce consistent and accurate results through project implementation (Planisware, 2021). The establishment of the PMO would facilitate the insitution of the the right governance structure, and the accompanying management standards and guidelines, which would help the organisation to have a well defined and coordinated approach to project management. Such an approach would help in keeping customers satisfied and is needed to ensure that projects help to achieve the strategic goals of the organisation (Prakash, 2021).

The establishment of a PMO would also facilitate adequate resource management by ensuring that the required resources are allocated to the right projects at the time in which they are needed. This would be accomplished, in part, through forecasting which would help project managers to make effective decisions regarding the placement of physical and human resources. Especially in the case where the organization is managing multiple projects, having a PMO would facilitate a collaborative working environment which would improve communication, reduce chaos and improve productivity.

1.4. General objective

To develop a proposal for the establishment of a Project Management Office in the Protected Areas Conservation Trust (PACT) which should facilitate the delivery of high quality projects with consistency and efficiency.

1.5. Specific objectives

- To assess the project management maturity level of PACT which should give insights into the methodologies, approaches, strategies and decision making processes used for project management.
- To identify and examine the different types of PMOs in order to determine the type that is most suitable for adoption by PACT.

- To determine the best structure of the PMO, the roles of PMO personnel and the best placement of the PMO in PACT's organisational structure for ensuring consistent and effective project management.
- To develop an implementation plan which outlines the main steps and procedures to be followed for the establishment of the PMO, policies on training and improvement of organisational maturity and guidelines for aquiring requisite personnel.
- To provide recommendations which should ensure the allignment of the PMO with the Strategic needs of PACT so as to ensure that it provides added value to the organisation.

2. THEORETICAL FRAMEWORK

2.1 Company/Enterprise framework

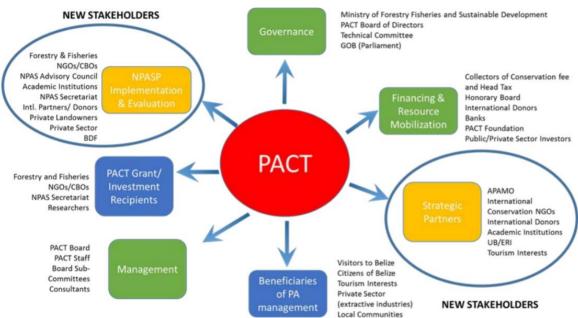
2.1.1 Company/Enterprise background

PACT is a statutory body that was established as a trust fund in 1996. This trust fund was established under the Protected Areas Conservation Trust, No. 15 of 1995. PACT funds the National Protected Areas System of Belize which has a total of 103 sites which are located in terrestrial and marine areas. To achieve its objective, PACT works in close partnership with government agencies, Non-Government Organizations (NGOs) and Community Based Organizations (CBOs). Comanagement agreements facilitate these partnerships (International Financial Consulting, 2017).

In 2015, the legal framework for PACT was amended. The new Act is termed the "Protected Areas Conservation Trust (Amendment) Act No. 18 of 2015". The new Act provided for the expansion of PACT's mandate and functions. In addition to financing protected areas conservation and management, PACT's mandate was extended to protected areas planning, coordination, monitoring and evaluation. In terms of monitoring and evaluation, PACT measures the effectiveness of management of these areas and measures the effectiveness of investments in protecting biodiversity (International Financial Consulting, 2017).

Since the amendment of the Act expanded the mandate of PACT, the stakeholders of the organization expanded and is thus made up of all persons involved in the National Protected Areas System (NPAS). These stakeholders are shown in Figure 1.





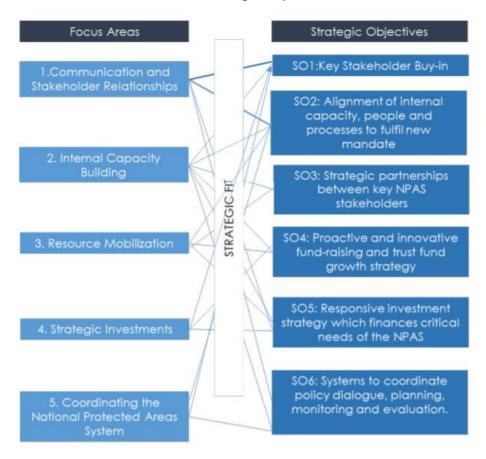
Note. From "Strategic Plan for The Protected Areas Conservation Trust (PACT)" by International Financial Consulting, 2017, p. 9. Copyright 2017 by Protected Areas Conservation Trust. Reprinted with permission.

In the Figure 1, the green boxes show PACT's management, governance and financial functions; the blue boxes show the beneficiaries of PACT's investments; and the yellow boxes show the new strategic functions of PACT with the key stakeholders that are associated with those functions (International Financial Consulting, 2017).

PACT has developed a strategic framework that is made up of six strategic objectives. The alignment of the mandates of PACT with the strategic objectives of the organization is shown in Figure 2.

Figure 2

Alignment of PACT's mandate with strategic objectives



Note. From "Strategic Plan for The Protected Areas Conservation Trust (PACT)" by International Financial Consulting, 2017, p. 11. Copyright 2017 by Protected Areas Conservation Trust. Reprinted with permission.

In Figure 2, the focus areas of PACT's mandate are communication and stakeholder relationships, internal capacity building, resource mobilization, strategic investments, and coordinating the NPAS. The strategic objectives include establishing mechanisms to facilitate stakeholder buy-in with PACT's mandate, the alignment of PACT's capacity, people and processes to ensure the fulfillment of its new mandate, the forming of strategic partnerships with key stakeholders, the development and implementation of PACT's financial mobilization and growth strategy, the development and implementation of PACT's investment strategy, and the coordination of PACT's monitoring and evaluation activities.

In 2018, PACT extended its operational profile to include the status of accredited entity of the Adaptation Fund and the Green Climate Fund (GCF). This led to the establishment of a Climate Finance Portfolio which included climate change adaptation (Protected Areas Conservation Trust, 2018). Since then, PACT has been building its capacity to expand resource mobilization in support of Belize's National Climate Change Policy, Strategy and Action Plan (Protected Areas Conservation Trust, 2019).

2.1.2 Mission and vision statements

2.1.2.1 Vision statement

PACT's vision statement recognizes its national leadership role and its responsibility to promote sustainable development, environmental resilience, reduce negative impacts, promote trust and improving quality of life of stakeholders. The establishment of a PMO is key to achieving the vision of the organization. The vision statement is stated as follows:

"PACT is a trusted global leader in sustainable development, enhancing the quality of life of all Belizeans through funding and coordination of a resilient protected areas system" (International Financial Consulting, 2017).

2.1.2.2 Mission statement

PACT's mission shows its intention to move from an organization that distributes funding to recipients to one that is proactive and outwardly engaging in the execution of actions that benefit the protected areas system. The establishment of a PMO is important for the achievement of this mission. The mission statement is stated as follows:

"To effectively manage Belize's National Protected Areas System through strategic partnerships and high impact investments" (International Financial Consulting, 2017).

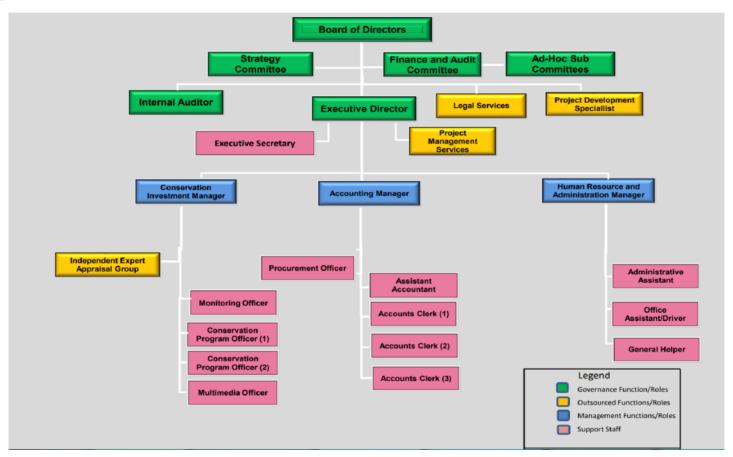
2.1.3 Organizational structure

PACT's organizational structure is shown in Figure 3. PACT is governed by a Strategy Committee, a Finance and Audit Committee and a Board of Directors. The Board of Directors is the most important of these Committees and is made up of directors from public, private and non-government organizations. The main function of the Board is to facilitate the implementation of policies to ensure the sustainability of the Organization and to ensure that Funds are distributed equitably across the NPAS (Protected Areas Conservation Trust, 2018).

PACT is led by an Executive Director who manages the day-to-day activities of the organization and is accountable to the Board of Director and other key stakeholders.

Figure 3

PACT Organizational Structure



Note. From "Strategic Plan for The Protected Areas Conservation Trust (PACT)" by International Financial Consulting, 2017, p. 5. Copyright 2017 by Protected Areas Conservation Trust. Reprinted with permission.

PACT has four main functional departments. These are the Office of the Executive Director, Accounting and Finance Department, the Human Resources and Administration Department and the Conservation Investment Department.

Figure 4

Responsibilities of the Office of the Executive Director and Accounting and Finance

Department



Note. From "Strategic Plan for The Protected Areas Conservation Trust (PACT)" by International Financial Consulting, 2017, p. 14. Copyright 2017 by Protected Areas Conservation Trust. Reprinted with permission.

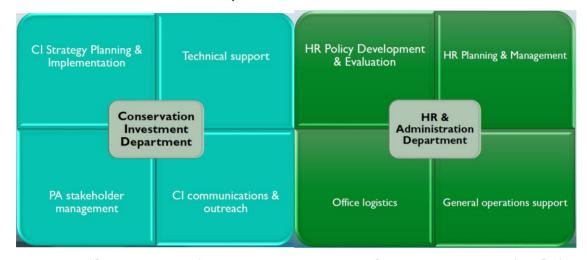
The Office of the Executive Director provides strategic and governance leadership to the organization and is in charge of auditing, resource mobilization and networking, strategic management oversight and communications. This office is staffed with an Executive Secretary, a Project Manager and an Interna Auditor.

The Accounting Department is key for the development of a diversified investment portfolio and is staffed with a procurement officer, an assistant accountant, and 3 accounts clerks. This department is tasked with revenue collection, Compliant Accounting, procurement planning and management and operational financial management oversight (see Figure 4).

The Conservation and Investment Department manages investments in biodiversity and ecosystem protection, financial sustainability and Revenue generation. The Department's responsibilities include Conservation Investment Planning Strategy and Implementation, project stakeholder management, technical support and

Conservation Investment Communications and outreach. The Manager is supported by an Independent Expert Appraisal Group, a Monitoring Officer, a Multimedia Officer, and 2 Conservation Program Officers.

Figure 5
Responsibilities of the Conservation Investment Department and the Human
Resource and Administration Department



Note. From "Strategic Plan for The Protected Areas Conservation Trust (PACT)" by International Financial Consulting, 2017, p. 14. Copyright 2017 by Protected Areas Conservation Trust. Reprinted with permission.

The Human Resources and Administration Department looks at staffing issues which include, compensation and benefits, recruitment, firing, and restructuring (Protected Areas Conservation Trust, 2018; Protected Areas Conservation Trust 2019). Specifically, this department is in charge of human resource policy development and evaluation, human resource planning and management, office logistics and general operations support. The staff complement includes an Office Assistant/Driver, a General Helper and an Administrative Assistant.

2.1.4 Products offered

PACT produces the following products in accordance with its mandate under the Protected Areas Conservation Trust (Amendment) Act No. 18 of 2015.

 Strategy planning for the NPAS: PACT produces 5-year strategic plans for the NPAS and facilitates its implementation.

- Management plans for Protected Areas: PACT facilitates the revision of Management Plans for protected areas to ensure that they are consistent with the National Protected Areas System Plan.
- Monitoring and Evaluation of Protected Areas: PACT is responsible for setting up a system for monitoring and evaluating the NPAS and reviewing and approving reports on the performance of the NPAS every 5 years.
- Investment in the NPAS: Through thematic funding windows, PACT invests in the NPAS according to its requirements.
- Marketing: PACT develops marketing materials about the NPAS to support tourism expansion in Belize.
- Co-manager capacity development: PACT conducts capacity assessments and ensures that resources are channeled to co-managers in a timely fashion to aid in their development.

2.2 Project Management concepts

2.2.1 Project

A project can be defined as "a temporary endeavor undertaken to create a unique product, service or result." Projects are implemented to achieve objectives through the production of deliverables. What comes out of a project may be either a new product, capacity to deliver a service, or a particular result (Project Management Institute, 2017).

Project are temporary since they are implemented between specific time periods and have clear start and end dates, but it should be noted that their outcomes exist beyond the project's end date. For instance, a project to build a bridge may last for a definite period of 9 months, but the product will exist long after the project for an indefinite period of time. This shows the fact that projects do not go on indefinitely and are implemented with a definite purpose (Juneja, 2021).

It is important to note that all projects have boundaries. Boundaries can be time schedule, money, and quality. The project manager is required to complete the project as effectively and efficiently as possible within the aforementioned constraints. Also, projects are not business as usual activities or processes that are

performed on a routine basis. Projects are implemented during a specific time period in order to achieve specific results and should not be confused with activities that are carried out regularly, such as the processing of expense reimbursement approvals (Taylor, 2021). Many of the aforementioned characteristics are shown in Figure 5.

Figure 6

Characteristics of a project

A clear start and end date A project has boundaries A project creates something new A project is not business as usual

Characteristics of a project

Note. From "What is a project in project management?" by P. Taylor, 2021. Copyright 2021 by P. Taylor. Permission not sought.

Sindhuja (2021) states that there are four types of projects. These are stated as follows:

- Manufacturing projects: In these types of projects, vehicles, ships, machinery and other similar products are produced (Sindhuja, 2021).
- Construction projects: In these types of projects, buildings, bridges, roads and tunnels are built (Sindhuja, 2021).
- Management projects: These are projects that are mostly carried out to enhance organizational management or to enhance the capacity of a particular entity to achieve a specific outcome, such as the development of a new software package (Sindhuja, 2021).

 Research projects: In these types of projects, the results may be unpredictable before the end of the project (Sindhuja, 2021).

PACT is instrumental in implementing management projects. Currently, PACT is implementing a management project entitled "Capacity Building for PACT as a GCF National Direct Access Entity." The main aim of the project is to build PACT's capacity to meet the conditions of accreditation that were set by the GCF (Green Climate Fund, 2019). Another management project is entitled "Enhancing the Turneffe Atoll Sustainability Association's Management of the Turneffe Atoll Marine Reserve, Assisting in Securing Belize's Marine Biodiversity." This project is geared towards enhancing the capacity of the association to effectively achieve its management goals in the Turneffe Atoll Marine Reserve. These and other products are geared towards addressing critical needs of the NPAS which include biodiversity and ecosystem protection, enhancing the financial sustainability and revenue generation of the NPAS and expansion of the socio-economic benefits that the NPAS provides for communities and the local economy.

2.2.2 Project management

Project management is defined as "the application of knowledge, skills, tools and techniques to project activities to meet project requirements" (Project Management Institute, 2017). Project management includes activities to identify project requirements, addressing the needs and expectations of key beneficiaries, communicate with stakeholders, effectively use resources and manage project constraints (Project Management Institute, 2017).

Project management is usually carried out by professionals called project managers who are either deliberately hired or are procured through various circumstances to ensure that a project achieves its objectives. In carrying out their duties, project managers use various tools and techniques which assist in meeting the needs of the projects. These tools and techniques help the project manager to carry out activities which include managing plans, resources, costs and project teams.

Figure 7 shows general project management tasks that are executed at various phases in the execution of projects. The diagram show that the execution of project

management tasks is key at all stages of projects. This shows that effective project management is absolutely essential for the achievement of outcomes in projects, whether they are small or large. And this is important since, in the future, most organizations will achieve their strategic objectives via projects. In this regard, it is important for organizations to invest in building capacity for project management.

Figure 7

Project Management responsibilities in project phases



Note. From "5 Phases of Project Management – A Complete Breakdown" by P. Taylor, 2021. Copyright 2021 by P. Taylor. Permission not sought.

Many organizations have PMOs which helps to improve project management by standardizing processes and improving efficiency. At PACT, a PMO does not exist to carry out these functions. This is because PACT has historically placed more focus on providing funds to external partners that are part of the NPAS for the

implementation of projects. Thus, in the past, PACT did not play a hands-on role in project management. Nevertheless, as an accredited entity to the GCF and the Adaptation Fund, PACT has hired technical personnel who are tasked with facilitating the effective management and implementation of projects. Currently, PACT seeks to increase its competency for project management. This FGP will produce a proposal that can be used by PACT to justify the establishment of a PMO so that PACT can improve its project management functions.

2.2.3 Project life cycle

Project Management Institute (2017) defines the project life cycle as a "series of phases that a project passes through from start to completion". Each phase is made up of project activities that are logically related to each other, and which help to produce one or more project deliverables. Phases are time bound and can be sequential or overlapping (Project Management Institute, 2017).

There are instances where phases can be overlapping and concurrent. The types of phase-to-phase relationships are as follows:

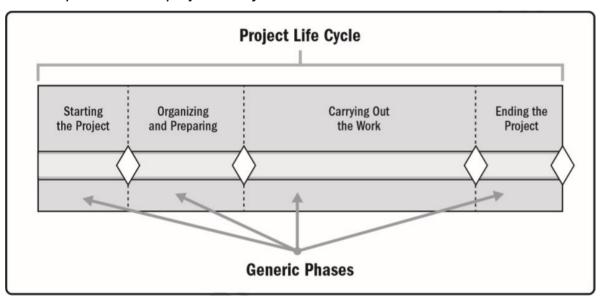
- Sequential relationship: In this type of relationship, a new phase starts when the preceding phase is complete.
- Overlapping relationship: In this type of relationship, the next phase starts before the preceding phase finishes.

Life cycles can also be predictive and adaptive. In predictive life cycles, scope, time and cost are determined early in the project at a detailed level. The activities of the project pass through sequential or overlapping phases. In adaptive life cycles, the processes are carried out in an iterative and incremental manner. Processes can be ongoing in a parallel manner and can have fixed costs and timelines (Project Management Institute, 2017).

Project Management Institute (2017) describes four generic phases of a project life cycle. It should be noted that these are the phases that are usually used by PACT in their project management processes. These are shown in Figure 8.

Figure 8

Generic phases of the project life cycle



Note. From "A guide to the Project Management Body of Knowledge (PMBOK guide) (6th ed.)" by Project Management Institute, 2017, figure 1-2, p. 548. Copyright 2017 by Project Management Institute. Permission not sought.

The description of these phases is as follows:

- Starting the project: This is called the project initiation phase that provides an overview of the project and the activities needed to achieve the desired results. In this phase, the project business case, objectives, scope, stakeholders, project feasibility and major deliverables are determined (Brown, 2021).
- 2. Organizing and preparing: This stage is referred to as the project planning phase. In this phase, the project plan is developed to guide the project team through the proceeding phases of the project. The project is broken down into smaller tasks, the team is built and a schedule. It includes efforts to develop a resource plan, estimate the project budget, gather resources, and developing a plan to manage risks (Brown, 2021).
- Carrying out the work: This is called the project execution phase. In this
 phase, tasks are assigned, and activities are implemented to achieve project
 deliverables to satisfy customer requirements. This is the phase where the

project deliverables are produced which makes it the most important phase of the project (Brown, 2021). The tasks during the project execution phase are shown in the figure 9.

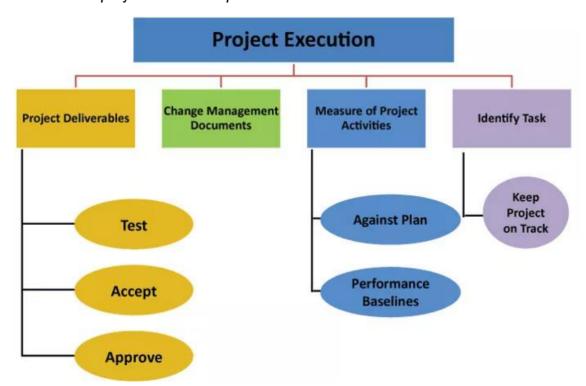
This phase includes carrying project reporting activities, holding regular meetings with the team, managing project time and quality, and monitoring and controlling the project by measuring performance and tracking progress.

4. Ending the project: This phase is referred to as the project closure phase. This is the final phase of the project where the final product is ready for delivery (Brown, 2021).

Boyde (2014) described a second type of life cycle called the iterative or agile life cycle as shown in Figure 10. This type of project life cycle is used for software development. In this type of life cycle, a limited number of functionalities are completed during each cycle of the project. In this type of life cycle, each phase build

Figure 9

Activities of the project execution phase

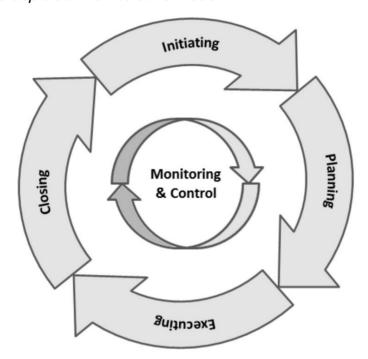


Note. From "The Project Management Life Cycle, and Its 5 Phases" by L. Brown, 2021. Copyright 2021 by L. Brown. Permission not sought.

upon the results of the previous cycle. In this type of cycle, there are times when the cycle goes back to the beginning which helps the customers to reevaluate and assess the project. Future cycles help project deliverables to be refined and reprioritized (Boyde, 2014).

Figure 10

Project life cycle depicted in an iterative model



Note. From "A Down-To-Earth Guide to SDLC Project Management: Getting your system / software development life cycle project successfully across the line using PMBOK adaptively", 2nd Edition by J. Boyde, figure 7, p. 14. Copyright 2014 by J. Boyde. Permission not sought.

2.2.4 Project management processes

Project Management processes fall into five distinct process groups. These process groups are described as follows:

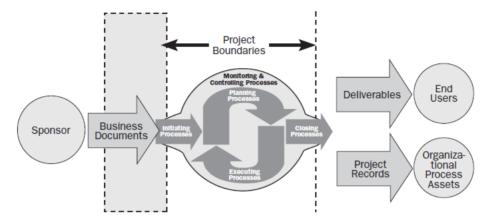
2.2.4.1 Initiating process group

All processes for the development of a new project or project phase calls into this phase. In this group the scope is defined, business documents are defined, and financial sources are committed to the project. The activities in this group help to

align the project to the organization's strategic objectives (Project Management Institute, 2017).

Figure 11

Project documents and sponsor in relation to the project initiation process group



Note. From "A guide to the Project Management Body of Knowledge (PMBOK guide) (6th ed.)" by Project Management Institute, 2017, figure 2-1, p. 561. Copyright 2017 by Project Management Institute. Permission not sought.

The PMO usually plays an important role in executing activities in this group. As such, the establishment of a PMO in PACT, as recommended by this FGP will facilitate effective project implementation.

2.2.4.2 Planning process group

This group contains processes which define the project scope, objectives and actions required to complete the project activities. The components in the project management plan and other important project documents are developed in this group. It involves progressive elaboration of the project management plan in an iterative manner (Project Management Institute, 2017).

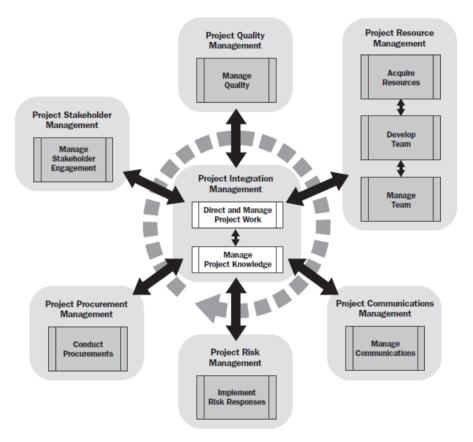
The involvement of the project management team and key stakeholders are important in this process group. Activities in this group include determining the project scope, planning quality management, planning cost management, developing the project schedule, defining activities, sequencing activities and estimating their duration, inter alia.

2.2.4.3 Executing process group

The executing process group facilitates the completion of all work needed to meet project requirements. The process group involves managing stakeholders, managing resources, and facilitating the full implementation of the requirements of the project management plan. A large number of financial resources are used for executing the processes in this group (Project Management Institute, 2017).

Figure 12

Processes in the executing process group



Note. From "A guide to the Project Management Body of Knowledge (PMBOK guide) (6th ed.)" by Project Management Institute, 2017, figure 4-1, p. 596. Copyright 2017 by Project Management Institute. Permission not sought.

As shown in Figure 12, this groups facilitates the performing of works that are described in the project management plan so that the project can be successful. These processes are important for managing project knowledge and creating new knowledge, ensuring quality, and acquiring resources, inter alia.

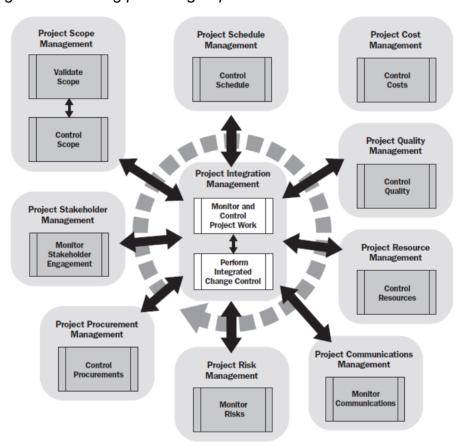
2.2.4.4 Monitoring and controlling process group

In this process group processes are carried out to track, review and regulate process in the project. It includes processes for monitoring project progress, identifying the need for changes, executing those changes according to approved processes and monitoring on-going activities (Project Management Institute, 2017).

As shown in Figure 13, the processes in this group are important for monitoring risks, communications and stakeholder engagement and controlling schedule, costs, quality, resources and procurement.

Figure 13

Monitoring and controlling process group



Note. From "A guide to the Project Management Body of Knowledge (PMBOK guide) (6th ed.)" by Project Management Institute, 2017, figure 5-1, p. 614. Copyright 2017 by Project Management Institute. Permission not sought.

2.2.4.5 Closing process group

This process group contains processes that are needed for the closure of the project, a phase of the project or a contract that is part of the overall project. The group ensures that all predetermined processes are completed so that the phase, project or contract can close. It should be noted that early closure of projects, which may be aborted or cancelled, also falls in this process group (Project Management Institute, 2017).

2.2.5 Project management knowledge areas

Project management knowledge areas are defined as "fields or areas of specialization that are commonly employed when managing projects" (Project Management Institute, 2017). There are a total of ten knowledge areas that are used in most projects. The need for the use of a knowledge area is dependent on the type of project being implemented. The ten knowledge areas are described as follows:

- Project Integration Management: This covers all project management knowledge areas and includes processes to identify, define, unify and combine various activities and processes within the project management process groups (Project Management Institute, 2017). This knowledge areas facilitates the development of the project charter, the project management plan, and other processes for directing and managing project work and knowledge, inter alia.
- Project Scope Management: This knowledge area includes all processes to be implemented as required to ensure that the required work is included in the project (Project Management Institute, 2017). It includes processes to develop a scope management plan which is used to define, validate and control the project scope (Kotwani, 2019).
- Project Schedule Management: This knowledge area includes processes that
 are implemented to facilitate the timely completion of the project (Project
 Management Institute, 2017). It involves the development of a schedule
 management plan and involves defining activities, activity sequence,
 duration, and schedule, etc. (Kotwani, 2019).

- Project Cost Management: This knowledge area includes processes for budget preparation and tracking to ensure that the project is being implemented according to the project baseline. It includes processes for developing a cost management plan for cost estimation, management and control (Project Management Institute, 2017; Kotwani, 2019).
- Plan Quality Management: This knowledge area includes processes which ensure that the organization's quality policy is implemented according to stakeholder expectations. It includes processes to develop a quality management plan and for managing and controlling quality (Project Management Institute, 2017; Kotwani, 2019).
- Project Resource Management: This knowledge area includes all processes
 that facilitate the identification, acquisition, management and control of
 resources for the execution of project work. It involves the development of a
 recourse management (Project Management Institute, 2017; Kotwani, 2019).
- Project Communications Management: This knowledge areas includes all the processes for planning, collecting, creating, distributing, storing, retrieving, managing, monitoring and dispensing project information. It involves the development of a communications management plan and other processes important for managing and monitoring communications (Project Management Institute, 2017; Kotwani, 2019).
- Project Risk Management: This knowledge area includes processes for identifying, analyzing, responding, implementing and monitoring risks on a project. It involves developing a risk management plan, identifying risks, performing qualitative and quantitative risk analysis, planning and implementing risk responses and monitoring risks (Project Management Institute, 2017; Kotwani, 2019).
- Project Procurement Management: This knowledge area includes all processes for the purchasing and acquisition of products, services and results that are needed from sources that ae external to the project. The knowledge area facilitates the development of a procurement management plan and

- other documents which are needed by the project (Project Management Institute, 2017; Kotwani, 2019).
- Project Stakeholder Management: This knowledge area includes all processes for identifying and involving stakeholders in the project from start to finish. It also involves developing a stakeholder management plan and the management and monitoring of stakeholders (Project Management Institute, 2017; Kotwani, 2019).

Project schedule management, cost management, stakeholder management, procurement management, risk management and resource management are carried out by PACT. Nevertheless, it should be noted that the required management plans are not developed by the organization as defined by the Project Management Body of Knowledge (PMBOK). The proposal to establish a PMO at PACT will consider the standardization of these processes as part of the overall process to enhance project management effectiveness in the organization.

2.3 Other applicable theory/concepts related to the project topic and context

The FGP will focus on the development of a proposal for the establishment of a PMO at PACT. The terms and concepts relating to this topic are defined and detailed in the following sections.

2.3.1 Project Management Office

According to Project Management Institute (2017), a PMO "is an organizational structure that standardizes the project related governance processes and facilitates the sharing of resources, methodologies, tools and techniques" (Project Management Institute, 2017). PMO's ensure the effective implementation of project procedures, practices and guidelines and ensures that projects are implemented successfully, on time and on budget. There are different types of PMOs which vary in their roles. Some provide management support, while others directly management one or more projects. PMOs, are critical for effective sharing of resources among projects, identifying and developing appropriate methodologies, best practices and

standards, training and capacity building, and monitoring compliance, among other duties.

There are three types of PMOs. These are described as follows:

- Supportive PMO: This type of PMO provides support to projects by providing expertise, templates, best practices, access to information, and lessons learnt. This type of PMO does not seek to directly management projects and would work best in organizations where such direct control is unnecessary. If the organization just needs a clearing house for project information, then this type of PMO is best (Project Management Institute, 2017; Reiling, 2021).
- Controlling PMO: A controlling PMO ensures that activities, processes, procedures and documentation adhere to guidelines and requirements. The requirements might include the use of certain methodologies, templates, governance frameworks, and rules. In this regard, the PMO carried out regular reviews of project offices and projects to ensure conformity to the requirements. This type of PMO exercises a medium degree of control over projects (Project Management Institute, 2017; Reiling, 2021).
- Directive PMO: A directive PMO actually takes over the management of projects by providing the competencies and resources needed to facilitate effective project management. In this regard, professional project managers are assigned to projects when the organization decides to use projects for the achievement of various objectives. This type of PMO exercises a high degree of control over projects (Project Management Institute, 2017; Reiling, 2021).

The best type of PMO to be used is dependent on the type, culture and history of the organization. Nevertheless, the tasks of PMOs are similar and this would include implementing common methodologies, standardizing terminologies, introducing effective and repeatable project management processes, providing common reporting tools and improve project success (Project Management Institute, 2017; Reiling, 2021).

PMOs have different functions and configurations which are determined by their roles within specific organizations. Based on these roles, Project Management Institute (2013) has defined 5 PMO Frameworks. These frameworks are as follows:

- Organizational Unit PMO/Business Unit PMO/Divisional PMO/Departmental PMO- This type of PMO provides services to business units or departments that exist within a larger organization.
- Project-Specific PMO/Project Office/Program Office- This is a temporary entity that is usually developed to support large projects within organizations.
 This type of PMO provides services relating to data management, governance and administrative activities, etc.
- Project support/services/controls office or PMO- This type of PMO
 continuously supports project, program and portfolio management within
 organizations and seeks to ensure the frequent use of processes, practices
 and tools for the successful completion of projects.
- Enterprise/Organization-wide/Strategic/Corporate/Portfolio/Global PMO-This PMO works at the highest levels within organizations and seeks to ensure that projects, programs and portfolios are aligned with the strategic plans of the organization. It also helps to promote governance and ensure benefits realization.
- Center of Influence/Center of Competency- This type of PMO ensures the development and use of effective methodologies, standards and tools so as to enable the successful implementation of projects.

3. METHODOLOGICAL FRAMEWORK

This chapter provides details of the methodology used to execute this FGP. It provides details on the sources of information, the research methods used, tools, assumptions, constraints, and deliverables.

3.1. Information sources

Information has various definitions. Collins English Dictionary defined information as:

- Knowledge of specific timely events or situations.
- Knowledge acquired through study or experience.
- Knowledge acquired by being informed or the act of informing.
- Facts or data that is acquired.
- Processed, transmitted or stored data (National Institute of Open Schooling, 2014).

The above definition shows that information can have various meanings depending on the context that is being referred to. In this regard, the National Institute of Open Schooling (2014) defines information as ideas, facts, conclusions, creative works and ideas that have been communicated formally or informally.

The sources of information can be comprised of documents, humans, institutions and the media. Human communication is a very important source of information, in addition to other sources such as news, entertainment, study and research (National Institute of Open Schooling, 2014). Institutions such as schools, universities, libraries and government organizations are also key sources (Streefkerk, 2021).

These sources can be divided into categories which are primary, secondary and tertiary. For the FGP, primary and secondary sources of information was used.

3.1.1 Primary sources

Primary sources of information are original information that was published, recorded or reported for the first time. They provide raw information and firsthand evidence and can include interview transcripts, letters, diaries, official documents, records, recordings, etc. (Streefkerk, 2021).

For this FGP, the primary sources of information are as follows:

- Interviews: Interviews were conducted with twelve key management and staff members of PACT. The selection as based on the involvement of these staff members in the projects that were managed and supported by PACT. A total of 12 personnel were interviewed, and these included the Executive Director, the Manager of the Human Resources and Administration Department, the acting Manager for the Conservation Investment Department, the Climate Change Technical Officer, the Monitoring and Compliance Officer, the Conservation Program Officer, the Procurement Officer, the Assistance Accountant, the accounts clerk, the Multimedia Officer, the Project Development Specialist and the Internal Auditor.
- Surveys: Surveys were carried out each of the 12 stakeholders mentioned above. These stakeholders were internal to PACT and have experience working in and around the NPAS. Completed questionnaires were the product of the surveys.
- Official documents: Search and evaluation of official documents was carried out. The official documents included those published by PACT to assist in the management of projects. Other applicable documents from government and non-government agencies were also reviewed. The documents reviewed included PACT's Strategic Plan (2017), the PACT Act (2011) and amendments, Conservation Investment Strategy, Environmental and Social Management Framework, Conservation Investment Operations Manual, Communications Strategy, Procurement Policy, Employee Development Plan, Stakeholder Engagement Plan, Logical Framework Document, Internal Audit Plan and Internal Audit Policies, Standards and Procedures.
- Records: Such records included meeting minutes, and other documentation that are used by PACT and its partners to conduct business.

Chart 1 provides detailed information about the primary sources of information to be used in this FGP.

3.1.2 Secondary sources

Secondary sources of information are dependent on primary sources for their information. They provide second-hand information and commentary from other researchers. These secondary sources also evaluate, analyze or interpret information from primary sources (Streefkerk, 2021).

For this FGP, the secondary sources of information were as follows:

- Books: Books such as the Project Management Body of Knowledge (PMBOK® Guide) were used to provide information on project management methodologies, processes, tools, techniques, inputs and outputs, etc. The book entitled "Project Management Maturity Model (Fourth Edition)" provided the methodology for assessing PACT's project management maturity.
- Online articles: Articles on project management that were published online by the Project Management Institute (PMI) and other reputable institutions were used to provide information on PMOs and the methodologies to be used to develop a PMO proposal for PACT.
- Peer reviewed journals: Peer reviewed Journals were a great source of information from previous research that was carried out on the FGP topic.
 These journals are usually reviewed by an editorial board of subject experts and can be trusted to provide factual information.
- Websites: Websites belonging to various organizations were of use in providing information relating to project management maturity, PMOs and other topics.

Chart 1 provides detailed information about the secondary sources of information to be used in this FGP.

Chart 1
Information sources

Objectives	Information sources	Information sources		
	Primary	Secondary		
1. To assess the proj	ct Face-to-face interviews	and The book entitled		
management matu	ty online surveys	were "Project		
level of PACT wh	ch conducted with	key Management		
should give insights in	stakeholders that are in	ternal Maturity Model (4th		
the methodologi	s, to PACT. T	hese edition)" provided		
approaches, strateg	s stakeholders inc	luded guidance on the		
and decision-mak	g PACT's management	and methodology used.		
processes used	or staff.	Other books, online		
project management.	Official documents	were articles, and peer		
	requested from PA	ACT's reviewed journals		
	Executive Director,	and were reviewed to		
	these were reviewed.	extract pertinent		
		information.		
2. To identify and exam	e Face-to-face interviews	s and Books, online		
the different types	of online surveys	were articles, and peer		
PMOs in order	co conducted with PA	ACT's reviewed journals		
determine the type tha	is management and sta	off to relating to PMO		
most suitable	or collect information relat	ing to types were		
adoption by PACT.	the most suitable PM	O for reviewed to extract		
	PACT.	pertinent		
		information.		
3. To determine the b	st Interviews were cond	ucted Books, online		
structure of the PMO,	e with key stakeholders	that articles, and peer		
roles of PMO person	el are internal to PAC	T to reviewed journals		
and the best placeme	nt acquire information re	lating and websites		
of the PMO in PAC	s to the PMO structure	that provided		

or	rganisational structure	would be the best fit for	information on
fo	or ensuring consistent	PACT.	PMO roles and
ar	nd effective project	Internal documents provided	responsibilities.
m	nanagement.	information on PACT's	
		organizational structure	
		which helped in providing	
		guidance on where the PMO	
		should be located within the	
		current structure.	
4. To	o develop an	Official documents and	The book entitled
im	nplementation plan	records were reviewed.	"Project
w	hich outlines the main		Management
st	teps and procedures to		Maturity Model (4 th
be	e followed for the		edition)" helped to
es	stablishment of the		provide the timeline
PI	MO, policies on training		for the project
ar	nd improvement of		management
or	rganisational maturity		maturity
ar	nd guidelines for		improvement plan.
ac	quiring requisite		Books, online
ре	ersonnel.		articles, and peer
			reviewed journals
			and websites were
			used to provide
			guidance for the
			development of the
			PMO
			implementation
			plan.
5. To	o provide	Interviews with PACT's	Books, online
re	ecommendations which	management and staff	articles, and peer

sh	ould	ensure	the	provided	information	on	reviewed	journals
alli	gnmen	t of the	PMO	recomme	ndations.		and websi	tes were
wit	n the S	Strategic	needs	Internal	documents	were	reviewed	to extract
of	PACT	so as to	ensure	also revie	ewed.		pertinent	
tha	t it p	rovides	added				informatio	n.
val	ue to th	ne organi	sation.					

Note. Compiled by author.

3.2. Research Methods

Research methods are the tools, strategies, techniques and processes that are used for data collection, compilation analysis and analysis relating to a specific research problem. There are different types of research methods that vary based on the topic, type of data needed, purpose of the study, nature of the study and research design (Pfeiffer Library, 2020; Pedamkar, 2020).

There are three common methods for conducting research. These methods are quantitative, qualitative and mixed methods. In regard to mixed methods, qualitative and quantitative methods are not viewed as rigid and distinctive since both can be used in a research project. Qualitative methods can be used to complement quantitative methods by providing greater explanations to various phenomena as they relate to the research project (Sagepub, 2013). As such, this FGP incorporated the use of mixed methods for data collection and analysis.

Details of the methods to be used in the FGP are given below.

3.2.1 Quantitative method

Quantitative research facilitates the collection of numerical data which can be analyzed using statistical techniques. Quantitative methods aim to find out information relating to how much, how many, to what extent and how often with regards to a particular research question (Sagepub, 2013; Pfeiffer Library, 2020; Pedamkar, 2020).

Other names for quantitative research are positivist, traditional, empirical and experimental research. This research method is usually objective in nature and

produces results that are independent of the thoughts and feelings of researchers. This means that this research method can be very reliable, when compared to other methods. This research method usually incorporates other research methods, such as collection of empirical data, data modelling, results evaluation and scientific models (Sagepub, 2013; Pfeiffer Library, 2020; Pedamkar, 2020).

Using this research method, the results of surveys and interviews were statistically analyzed in order to measure variables and the relationships between them. The data produced were used to produce tables, charts and graphs to help in the achievement of the research objectives.

3.2.2 Qualitative method

Qualitative research is based on qualitative variables that cannot be measures in scale or units. These research methods are usually used to study human behavior and the reasons for such behavior. This research methods investigates the "why and how" of a particular research issue and seeks to interpret events and describe actions (Sagepub, 2013; Pfeiffer Library, 2020; Pedamkar, 2020).

This research method is subjective in nature and is seen by some researchers as being less reliable when compared to quantitative research methods. The method produces words, sounds and images and is usually very data rich. The types of qualitative research design include ethnography, grounded theory phenomenology, and case study (Sagepub, 2013; Pfeiffer Library, 2020; Pedamkar, 2020).

3.2.3 Mixed research method

Mixed methods incorporate both qualitative and quantitative research methods, techniques, approaches and concepts and facilitate the explanation of results (Pfeiffer Library, 2020; Pedamkar, 2020).

This research method usually has three characteristics:

- 1. Both methods are applied to a single study (Sagepub, 2013)
- 2. Both methods are used to collect data (Sagepub, 2013)
- 3. The methods are used in the research in sequential or concurrent order (Sagepub, 2013)

Many researchers prefer this mixed method because it provides more complete and less biased results as compared to when individual methods are used (Sagepub, 2013).

The summary of research methods is shown in chart 2.

Chart 2
Research methods

	F	Research methods	
Objectives	Quantitative Research Method	Qualitative Research Method	Mixed Research Method
1. To assess the	The Quantitative	The Qualitative	The quantitative
project	method was used	research method	and qualitative
management	to analyze primary	was used to	methods
maturity level of	information	acquire and	facilitated the
PACT which	collected through	analyze	analysis of
should give	surveys and	information	primary and
insights into the	interviews.	regarding the	secondary
methodologies,		project	information for
approaches,		management	the production of
strategies and		practices of the	charts and drafts
decision-making		organization. This	and the drafting
processes used		included the	of conclusions.
for project		review of	Triangulation
management.		documents and	mixed method
		the summarizing	design was
		of the information	used, where
		acquired in a	quantitative
		qualitative	research is
		manner.	mixed with
			qualitative
			research.

2.	To identify and	The Quantitative	The Qualitative	
	examine the	method was used	research method	
	different types of	to analyze primary	was used to	
	PMOs in order to	information	acquire and	
	determine the	collected through	analyze	
	type that is most	surveys and	information	
	suitable for	interviews.	regarding PMO	
	adoption by		types. This	
	PACT.		included the	
			review of	
			documents	
			(official, online	
			and offline) and	
			the summarizing	
			of the information	
			acquired in a	
			qualitative	
			manner.	
3.	To determine the		The Qualitative	
	best structure of		research method	
	the PMO, the		was used to	
	roles of PMO		acquire and	
	personnel and the		analyze	
	best placement of		information	
	the PMO in		regarding this	
	PACT's		objective. This	
	organisational		included the	
	structure for		review of survey	
	ensuring		results, interview	
	consistent and		results,	
			documents	

effective project	(official, online	
management.	and offline) and	
	the summarizing	
	of the information	
	acquired in a	
	qualitative	
	manner.	
4. To develop an	The Qualitative	
implementation	research method	
plan which	was used to	
outlines the main	acquire and	
steps and	analyze	
procedures to be	information	
followed for the	regarding this	
establishment of	objective. This	
the PMO, policies	included the	
on training and	review of survey	
improvement of	results, interview	
organisational	results,	
maturity and	documents	
guidelines for	(official, online	
aquiring requisite	and offline) and	
personnel.	the summarizing	
	of the information	
	acquired in a	
	qualitative	
	manner.	
5. To provide	The Qualitative	
recommendations	research method	
which should	was used to	
ensure the	acquire and	

allignment of the	analyze	
PMO with the	information	
Strategic needs of	regarding this	
PACT so as to	objective. This	
ensure that it	included the	
provides added	review of survey	
value to the	results, interview	
organisation.	results,	
	documents	
	(official, online	
	and offline) and	
	the summarizing	
	of the information	
	acquired in a	
	qualitative	
	manner.	

Note. Compiled by author.

3.3. Tools

Tools refer to instruments or devices that can be used to collect data. These include the use of interviews, surveys, checklists, questionnaires, etc. Deciding on the right tool is important for capturing quality evidence as is needed for carrying out credible research (Formplus, 2021). As such, the type of tool used varied based on the needs of the research project.

The tools used in this FGP are defined as follows:

3.3.1. PM Solutions Project Management Maturity Model

The Project Management Maturity Model (PMMMSM) is a tool developed by PM solutions to measure an organization's project management maturity. The model is based on a 2-dimensional framework in which the first dimension reflects the level of maturity, and the second dimension looks at key areas of project management addressed. The model includes the 10 knowledge areas which helps to determine

the project management maturity of the organization. After the project management maturity is identified, the model provides a roadmap for achieving project management maturity (Pennypacker, 2002). A PMMMSM self-assessment survey checklist was used to collect information for the maturity assessment and is shown in appendix D.

3.3.2. Surveys

Surveys are carried out by selecting a representative sample of persons from a group that is being studied. Surveys can be done face to face or by telephone using questionnaires. Online questionnaires can also be used to do surveys. A survey can be descriptive, meaning that it is used to identify the frequency of an occurrence. A survey can also be analytical where it is used to analyze the relationship between variables (University of Bradford, 2007). For this FGP, surveys were done face to face and online.

3.3.3. Interviews

Interviews can be structured, semi-structured or unstructured. Structured interviews use questionnaires that contain predetermined questions. The interviewer usually reads the questions in an effort to get a response from the interviewee. Semi-structured interviews usually have a list of themes to be covered with standardized questions. But depending on how the interview goes, questions may be added or omitted by the interviewer. Unstructured interviews are usually carried out like discussions where the interviewer explores into a topic or a range of topics. For this FGP, structured interviews were used (University of Bradford, 2007).

3.3.4. Document analysis or literature review

A literature review or document analysis includes which facilitates the critical evaluation of documents. The objectives of a literature review are to acquire all documents relating to the topic, to carry out a critical evaluation and to discuss the contents of the documents. It's usually one of the first tasks carried out when executing research projects since it helps to frame the topic, research objectives and research questions (University of Edinburgh, 2021).

The summary of tools used for each objective is shown in chart 3.

Chart 3

Tools

Objectives	Tools
1. To assess the project management	• The PM solutions Project
maturity level of PACT which should	Management Maturity Model was
give insights into the methodologies,	used to assess the project
approaches, strategies and decision-	management maturity of the
making processes used for project	organization.
management.	Structured interviews were used to
	acquire information about project
	management maturity,
	methodologies, approaches,
	strategies and decision-making
	processes within the organization.
	Surveys and questionnaires were
	used to acquire information about
	methodologies, approaches,
	strategies and decision-making
	processes within the organization.
	Document analysis or literature
	review of reports, and
	official/unofficial documents was
	carried out to give insights into the
	methodologies, approaches,
	strategies and decision-making
	processes.
2. To identify and examine the different	Document analysis or literature
types of PMOs in order to determine	review of published documents was

the type that is most suitable for adoption by PACT.

- carried out to research on PMO types.
- Surveys and questionnaires were used to collect pertinent information from PACT management and staff.
- Interviews was used to collect pertinent information from PACT management and staff.
- To determine the best structure of the PMO, the roles of PMO personnel and the best placement of the PMO in PACT's organisational structure for ensuring consistent and effective project management.
- Surveys and questionnaires were used to collect pertinent information regarding PMO structure, roles, and personnel.
- Interviews were used to collect pertinent information regarding PMO structure, roles, and personnel.
- Document analysis or literature review of published documents was carried out to research on PMO structures, roles, personnel needed, etc.
- 4. To develop an implementation plan which outlines the main steps and procedures to be followed for the establishment of the PMO, policies on training and improvement of organisational maturity and guidelines for aquiring requisite personnel.
- Surveys and questionnaires were used to collect pertinent information to support the formation of an implementation plan.
- Interviews were used to collect pertinent information to support the formation of an implementation plan.
- Document analysis or literature review of published documents was

5.	To provide recommendations which
	should ensure the allignment of the
	PMO with the Strategic needs of
	PACT so as to ensure that it provides
	added value to the organisation.

- carried out to support the formation of an implementation plan.
- Surveys and questionnaires were used to acquire information to formulate recommendations.
- Interviews were used to acquire information to formulate recommendations.
- Document analysis or literature review of published documents was used to acquire information to formulate recommendations.

Note. Compiled by author.

3.4. Assumptions and constraints

3.4.1 Assumptions

Assumptions are factors that in the planning processes of projects that are considered to be true, real or certain without proof of the contrary. They are considered to be true since the project cannot move forward successfully if the assumptions are not in place. In projects, assumptions are recoded in the assumptions log and provide a basis for planning for the project (Boogaard, 2020; PMTIPS, 2021).

The assumptions for this FGP are as follows:

- 1. The researcher will have access to all physical, human and financial resources needed to complete the FGP.
- 2. The estimated budget will not increase as the FGP is implemented.
- 3. The overall scope will not change as the FGP is implemented.
- 4. The tasks and durations of the project schedule will not go beyond the time limit of the FGP.
- 5. The right methodology will be implemented fully for the success of the project.

- 6. All technologies, such as software and investiture, needed to execute the FGP will be available when needed.
- 7. The right Project Management Maturity Model will be chosen to determine to project management maturity of the organization.
- 8. PACT's management and staff will provide all information and documents needed for the implementation of the FGP.
- 9. PACT management and staff will provide full cooperation for interviews and surveys to be conducted.
- 10. External stakeholders NPAS will provide full cooperation for interviews and surveys to be conducted.
- 11. External stakeholders NPAS will provide all information and documents needed for the implementation of the FGP.
- 12. All online and offline publications, records and documents was available when needed.

3.4.2 Constraints

Project Management Institute (2017) defines a constraint as a limiting factor that affects the execution of a project, program, portfolio, or process (Project Management Institute, 2017). The constraints for this FGP are as follows:

- 1. Time: The completion of the FGP must not exceed the UCI schedule which includes the final due date of deliverables.
- 2. Cost: The amount of funds spent to execute the FGP must not exceed the estimated budget.
- 3. Scope: The FGP must not exceed the scope that was agreed upon between student and tutor.
- 4. Quality: The FGP document must meet the quality limitations that were placed by UCI.
- 5. Benefits: The FGP must be of benefit to PACT.

The assumptions and constraints for each FGP objective are shown in chart 4.

Chart 4Assumptions and constraints

Objectives	Assumptions	Constraints
1. To assess the project	The researcher will	Time: The completion
management maturity	be able to determine	of the assessment
level of PACT which	a suitable	must not exceed the
should give insights into	methodology to	scheduled time limit.
the methodologies,	facilitate the	Cost: The cost of
approaches, strategies	assessment of the	acquiring reference
and decision-making	PACT's project	materials to
processes used for	maturity level.	determine a suitable
project management.	• The methodology	methodology would
	will be implemented	not exceed the
	fully for the success	budgeted amount.
	of the project.	Quality: The quality of
	The cost of acquiring	the assessment must
	reference materials	meet PACT's
	to determine a	expectations.
	suitable	
	methodology would	
	be minimal.	
	• All technologies,	
	such as software	
	and investiture,	
	needed to carry out	
	the assessment will	
	be available when	
	needed.	
	All online and offline	
	publications,	

Objectives	Assumptions	Constraints
	records and documents will be available when needed.	
2. To identify and examine the different types of PMOs in order to determine the type that is most suitable for adoption by PACT.	 PACT's management and staff would provide their viewpoints on the most suitable type of PMO for the organization. All online and offline publications, records and documents relating to PMO types will be readily available to the researcher. The allotted time and budgetary resources would not be exceeded. 	 Expertise: The knowledge and capacity of PACT's management and staff will affect the effectiveness of the PMO identification process. Resources: The required number of books and reference materials relating to PMO types must be readily available. Quality: The quality of the analysis must meet PACT's expectations. Time: The completion of data collection and analysis must not exceed the allotted time.

Objectives Assumptions Constraints 3. To determine the best Quality: The The researcher will structure of the PMO. conclusions relating successful be in of roles **PMO** the to PMO placement, acquiring all personnel and the best PMO structure and necessary placement of the PMO in PMO personnel must documentation from PACT's organisational be aligned to the PACT. structure for ensuring special All online sources of consistent and effective circumstances of information. project management. PACT. including peer Expertise: The reviewed iournals knowledge and and websites will be capacity of PACT's readily available to management and the researcher. staff will affect the The interviews and effectiveness of the surveys will provide collection data all the information exercise. needed. Time: The completion The allotted time of data collection and and budgetary analysis must not resources would not exceed the allotted be exceeded. time. 4. To develop The an The project Quality: **PMO** implementation plan implementation plan management which outlines the main maturity and the **Project** steps and procedures to will management maturity assessment be followed for the provide kev improvement plan establishment of the information needed must be aligned to the PMO, policies on for the development special training **PMO** and of the

Objectives	Assumptions	Constraints
improvement of	implementation plan	circumstances of
organisational maturity	and the project	PACT.
and guidelines for	management	• Expertise: The
aquiring requisite	maturity	knowledge and
personnel.	improvement plan.	capacity of PACT's
	All online sources of	management and
	information,	staff will affect the
	including peer	effectiveness of the
	reviewed journals	data collection
	and websites will be	exercise.
	readily available to	Time: The completion
	the researcher.	of data collection and
	• The interviews and	analysis must not
	surveys will provide	exceed the allotted
	all the information	time.
	needed.	
	• The allotted time	
	and budgetary	
	resources would not	
	be exceeded.	

Objectives	Assumptions	Constraints
5. To provide	All online sources of	Quality: The
recommendations which	information,	recommendations
should ensure the	including peer	must be useful for
allignment of the PMO	reviewed journals	PACT.
with the Strategic needs	and websites will be	• Expertise: The
of PACT so as to ensure	readily available to	knowledge and
that it provides added	the researcher.	capacity of PACT's
value to the	The interviews and	management and
organisation.	surveys will provide	staff will affect the
	all the information	effectiveness of the
	needed.	data collection
	The allotted time	exercise.
	and budgetary	Time: The completion
	resources would not	of data collection and
	be exceeded.	analysis must not
		exceed the allotted
		time.

Note. Compiled by author.

3.5. Deliverables

Project Management Institute (2017) defines a deliverable as a "unique and verifiable product, result or capability to perform a service that is required to be produced to complete a process, phase or project."

The deliverables that were produced by this project are as follows:

- The results of the assessment of PACT's project management maturity level.
- The results of the examination of different types of PMOs and a determination of the most suitable option for PACT.

- The results of the analysis showing the structure of the proposed PMO, the roles of PMO personnel and the placement of the PMO in PACT's organizational structure.
- An implementation plan to support the establishment of a PMO within PACT and a project management maturity improvement plan.
- Recommendations for the alignment of PMO with the strategic needs of PACT.

The deliverables of each PMO objective are showing in chart 5.

Chart 5

Deliverables

Objectives	Deliverables
1. To assess the project management	• A completed project
maturity level of PACT which should	management maturity
give insights into the methodologies,	assessment.
approaches, strategies and decision-	Charts showing analysis
making processes used for project	results.
management.	
2. To identify and examine the different	A list of PMO types.
types of PMOs in order to determine the	A list of PMO frameworks.
type that is most suitable for adoption by	Rationale for the determination
PACT.	of the appropriate PMO type.
	Figures and charts showing
	analysis results.
3. To determine the best structure of the	A PMO organizational chart.
PMO, the roles of PMO personnel and	PACT's organizational
the best placement of the PMO in	structure showing the
PACT's organisational structure for	determined placement of the
ensuring consistent and effective project	PMO.
management.	

	A list of PMO personnel and
	their associated roles.
	Figures and charts showing
	analysis results.
4. To develop an implementation plan	A PMO implementation plan.
which outlines the main steps and	A project Management Maturity
procedures to be followed for the	improvement plan.
establishment of the PMO, policies on	
training and improvement of	
organisational maturity and guidelines	
for aquiring requisite personnel.	
5. To provide recommendations which	A list of recommendations for
should ensure the allignment of the	alignment of PMO with the
PMO with the Strategic needs of PACT	strategic needs of PACT.
so as to ensure that it provides added	
value to the organisation.	

Note. Compiled by author.

4. RESULTS

PACT has positioned itself as the lead organization for conservation investments in Belize. Investments made by PACT are geared towards the promotion, sustainable management and development of national protected areas. In 2021 alone, PACT invested BZE \$3.4 Million to establish, maintain and enhance nineteen protected areas in Belize (Protected Areas Conservation Trust, 2021). PACT works in concert with 11 Non-Government Organizations (NGOs), inclusive of Protected Areas Co-Management Organizations, who apply for funding grants to facilitate project implementation. As shown in figure 15, the grant allocation process includes a planning phase, a screening phase, and implementation phase and an evaluation phase.

PACT acquires funds through the following sources:

- The payment of a conservation fee of US \$3.75 by overnight tourists as they leave Belize.
- Fifteen percent of the cruise ship passenger head tax.
- Fees accrued from fiduciary services provided to projects.
- Interest earned on long term investments (Protected Areas Conservation Trust, 2021)

After grants are given out to NGOs, PACT carries out monitoring and evaluation, procurement and fund management activities, while the NGOs are allowed to manage the day-to-day operations of the projects.

Starting in 2017, PACT made a strategic decision to be more involved in project implementation as a way of leveraging more funds for protected areas management and environmental conservation. As such, PACT developed a new conservation investment strategy and operational framework which helped the organization to transition from being a grant-based entity to a project executing entity. The strategy and framework have facilitated the development of a climate finance portfolio which has helped to mobilize funding from the Green Climate Fund (GCF) and the Adaptation Fund (AF) for the implementation of projects (Protected Areas Conservation Trust, 2020).

Past and current GCF projects executed by PACT include the following:

- Strengthening the Belize National Protected Areas System (BNPAS) to provide resistance, resilience and reduce vulnerability of community livelihoods against climate change.
- Building climate resilience of the new river water shed in Belize.
- Climate Adaptation through Disaster Risk Management perspective in Belize.
- Enabling Activities for the execution and formulation of a Multisectoral National Adaptation Plan for Belize (Protected Areas Conservation Trust, 2021).

PACT is currently executing the following AF project:

Project Formulation Grant and Project Formulation Assistance Grant for the
Development of the Project Proposal "Enhancing the Resilience of Belize's
Coastal Communities to Climate Change Impact" (Protected Areas
Conservation Trust, 2021).

PACT currently has a climate finance portfolio of USD\$6.42 million which will be used to execute three GCF Readiness Projects and two AF projects. PACT expects to increase this portfolio as part of its strategic plan for the next 5 years and seeks to increase its capacity for project management which includes the establishment of a PMO as part of its institutional structure. The assessment of PACT's project maturity is key to determine how advanced the organization is in project management. It will also help to assess capabilities and improvement opportunities which are key to achieving the strategic goals of PACT. This will pave the way for the assessment of the different PMOs to determine the right fit for PACT, the determination of the right structure of the PMO and its staff complement and to develop a solid implementation plan that can help to fully establish the PMO as part of PACT's organizational structure (Mullaly, 2010).

PACT has a complement of sixteen staff members; twelve of which contribute to projects in some way of another (the other staff members are clerical/support staff). All twelve of these staff members were asked to complete an online survey (appendix D shows the survey instrument) and to participate in an interview (appendix E shows the interview schedule). A self-assessment survey was used to collect information from all twelve staff members to determine the project

management maturity level of PACT (appendix F shows PMMMSM self-assessment survey checklist). The data collected was compiled, reviewed and analyzed in order to generate the results needed to satisfy the project's objectives.

4.1. The project management maturity level of PACT

The project management maturity of the Protected Areas Conservation Trust (PACT was assessed using the Project Management Maturity Model (PMMMSM) which was developed by Project Management Solutions Inc. The model is useful for determining project management maturity, determining priorities for improving project management maturity, determining the need for a PMO, assessing where a PMO should be placed in an organization's structure and developing a project management maturity improvement plan (Crawford, 2021).

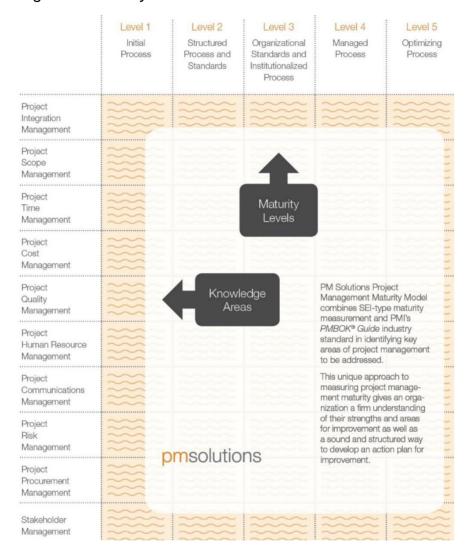
The model has two distinct components. Firstly, it utilizes the ten knowledge areas of the PMBOK (6th Edition) and seeks to analyze the project maturity of organizations according to their alignment to the requirements of each knowledge area. Secondly, it presents five levels of maturity which shows the level of advancement of organizations being assessed (Crawford, 2021).

The levels of maturity are described as follows:

- Level 1 This is called the initial process. Organizations at level 1 are described as those having ad hoc processes that do not hold individual project managers to account (Crawford, 2021). Even though management realizes the need for project management, documentation is carried out on an ad hoc basis.
- 2. Level 2 Organizations at level 2 have more structured process and standards than level 1 organizations. These organizations have a project centric focus and have basic processes which may not be standard across all projects. In this case, they may only be used on large projects that provide a high amount of visibility to the organization. At this level, project estimates and schedules are determined using expert knowledge and generic tools (Crawford, 2021).
- 3. Level 3- Organizations at level 3 have organizational standards and institutionalized processes that are implemented and repeated for all projects. At this level, project estimates and schedules are determined using industry and organizational standards. Organizations at this level carry out informal analysis of project performance (Crawford, 2021).

Figure 14

Project Management Maturity Model



Note. From "Project Management Maturity Model, Fourth Edition, by J. Crawford, 2021, Taylor and Francis Group. Copyright 2021 by J. Crawford. Permission not sought.

4. Level 4- Organizations at level 4 have managed processes for projects which are integrated with corporate processes. This helps to ensure compliance across the organization. Project estimates and schedules are normally determined using organizational specifics and actual data is used to make decisions. Organizations at this level carry out formal and in-depth analysis of project performance (Crawford, 2021). Level 5- Organizations at this level use optimized processes that are geared towards ensuring project effectiveness and efficiency. Processes are also in place to measure project performance with the view of ensuring continuous improvement in project management (Crawford, 2021).

More details on the characteristics of project management maturity levels are shown in appendix G.

Using PMMMSM, staff interviews were carried out using a self-assessment survey to determine the project management maturity level in the various knowledge areas as specified in the PMBOK (see appendix F for the self-assessment survey checklist). The process also involved artifact collection and evaluation which helped to provide context and verify many of the claims made during interviews to ensure accuracy. In the assessment of project management maturity using PMMMSM, it should be noted that the maturity level is cumulative. Meaning that, to rate an organization at a particular maturity level, all of the criteria of the preceding levels must be fulfilled. For instance, if an organization is to be rated at level 4, then all the processes for level 1, 2 and 3 must be in place. Some level 5 processes may be available, but if all level 4 processes are not in place, then the organization is rated as being at level 4. Therefore, the maturity level for components and across components would not be higher than the lowest level individual score that is given for the knowledge area (Crawford, 2021).

4.1.1. Project Integration Management

Project integration management incudes the use of processes which help to ensure that the project is started properly, coordinated effectively, monitored efficiently and closed in an orderly fashion. This knowledge area includes processes for Project Charter development, Project Management Plan development, project execution, Project Knowledge Management, Monitoring and Controlling Project Work, Integrated Change Control and Project/Phase closure.

PACT has not instituted any formal processes for project charter development. This means that project charters are generally not used to authorize projects or to enable the allocation of project resources to the project manager. Project authorization is

usually facilitated through the signing of contractual agreements with Implementing Entities for example, signing a grant agreement with the World Bank).

PACT has not instituted formal requirements for the development of project management plans. On the other hand, various project implementation documents are usually acquired from Implementing Entities. These documents provide details on project objectives, project description, project implementation, project budget, project risks, environmental, social and economic benefits, inter alia. The format of the project implementation document would vary based on the requirements of implementing entities. Similarly, when giving out grants for projects, PACT facilitates the development of a logical framework matrix which contains information on goals, SMART indicators, objectives, risks and opportunities.

Since Project Management Plans are not developed for such projects, these documents are therefore not used to support project execution. Assignment of work is carried out through a less formal manner with the use of approved work plans and grant agreements. In the case of Green Climate Fund Projects (GCF), the GCF accreditation master plan provides guidance for project implementation. At the higher level, project execution is guided by PACT's Conservation Investment Manual and PACT's Operations Manual.

PACT carries out processes for knowledge management in some projects which helps in documenting lessons learnt. Knowledge gained through projects are usually stored in PACT's information management system which helps in information collection processing, archiving and organization. Monitoring and Controlling project work is facilitated by PACT's monitoring and evaluation framework which facilitates the production of reports on a quarterly basis. These reports provide information on funds spent, activities implemented, and challenges faced. These reports do not facilitate the integration of basic metrics (milestone percentage complete and planned budget), time spent on activities, variance analysis and performance measurement analysis.

In terms of integrated change control, PACT has not instituted a standard process and change requests are not always document. Changes may be communicated in an ad hoc manner to the Executive Director and, in some cases, the Board of Directors before final approval is given. For projects that are funded through international implementing entities, final approval is given by that entity.

Project or phase closure is carried out in a formal manner but not with the use established or standard processes at PACT. Some activities to facilitate phase closure may include audits, formal signing of documents and project completion assessments. Nevertheless, deliverables may be delivered without customer acceptance, contracts contain minimal or no reporting requirements, and there are no procedures for closing a project that is cancelled.

PACT has no PMO to facilitate the effective implementation of projects according to established processes and standards. The Assessment of Project Integration Management at PACT therefore shows that that the organization is at level 1. Chart 6 shows the maturity level of project integration management components.

Chart 6

Maturity level of project integration management components

PROJECT INTEGRATION MANAGEMENT	Project Management Maturity Levels							
	1	2	3	4	5			
Project Charter Development	~							
Project Management Plan Development	~							
Project execution		✓						
Project Knowledge Management		~						
Monitoring and Controlling Project Work		v						
Integrated Change Control	~							
Project or Phase Closure		<u>~</u>						

Special Interest Component:			
Project Management Office (PMO)	~		

4.1.2. Project scope management

Project Scope Management ensures that projects contain only the work that is necessary to successfully complete project deliverables. The knowledge area includes processes for scope management planning, requirements collection, scope definition, development of the Work Breakdown Structure, scope validation and scope change control.

At PACT, scope management plans are not developed for projects. Scope is extrapolated through other documents which include the logical framework matrix. Requirements collection is carried out in an ad hoc manner and there no organizational standard for this. Technical requirements are usually collected through meeting with stakeholders, as needed, and this usually results in giving a general idea of what project outcomes or objectives should be.

Scope statements are not developed for projects, as required by the PMBOK, but elements of scope statements are usually found in project implementation documents and agreements that give authority for project implementation. PACT's Conservation Investment Department (CID) also provides guidance for developing detailed scope statements for the organization, but no specific template exists for this purpose. There is no standard template for the development of Work Breakdown Structures (WBS) in the organization which leads to them not being developed. Nevertheless, other project documents, including logical framework matrix and work plans contain schedules and activities that are important for project implementation. Scope validation is facilitated through the review of deliverables by internal staff members, members of the Board of Directors and the Committees. There is no established process for this, and it is usually done in an ad hoc manner as the project is being implemented. PACT's monitoring and evaluation framework facilitates monitoring of project status, but there are no standard templates or organizational standards existing for scope change control for projects. Proposed changes to scope

may or may not be documented before final decisions are made for acceptance of rejection by either the functional manager or the Executive Director. For externally funded projects, a project governance body is usually used to facilitate any changes in project scope.

The Assessment of Project Scope Management at PACT therefore shows that that the organization is at level one. Chart 7 shows the maturity level of project scope management components.

Chart 7

Maturity level of project scope management components

PROJECT SCOPE MANAGEMENT	Project Management Maturity Levels						
	1	2	3	4	5		
Scope Management Planning	~						
Requirements Collection	~						
Scope Definition	V						
Work Breakdown Structure	V						
Scope Validation	~						
Scope Change Control	~						

Note. Compiled by author.

4.1.3. Project Schedule Management

Project schedule management refers to the use of process, tools and techniques to develop the project schedule, execute the project schedule and manage the schedule so that to ensure that the project is completed on time.

At PACT, there are no processes, standards or guidelines for schedule management planning and control. Thus, schedule management plans are not developed for projects. Projects schedules are therefore defined in workplans, and implementation plans that are developed for individual projects. There are also no processes,

standards or guidelines for activity definition. Therefore, activity definition is usually done on an ad hoc basis through the development of workplans for projects. The method of defining activities also varies from project to project.

Implementation and disbursements plans are commonly used to show the logical flow of activities and their sequence in project implementation. Nevertheless, dependencies between the activities are not analyzed. There is also no standard organizational method for activity sequencing.

Activity duration estimation is carried out in an ad hoc manner. There is no organizational standard for estimating this component. Thus, technical project related staff are prone to use historical knowledge to forecast how long an activity should last. Similarly, there is no established process for schedule development, which would include the calculation of start dates and finishing dates for each activity. This is usually carried out in an ad hoc manner between internal project staff and implementing partners. Since there is no established process, the method used will not be repeatable across units/departments.

At PACT, there is no developed or documented process for controlling project schedules. Project implementation plans and the Monitoring and Evaluation Framework provides some guidance for this knowledge area but do not result in the development of status reports, performance metrics and the management of changes, etc. If schedule monitoring is done, the approach uses would vary from project manager to project manager. Likewise, there are no processes within PACT that facilitate project schedule integration across the organization.

The Assessment of Project Schedule Management at PACT therefore shows that that the organization is at level one. Chart 8 shows the maturity level of project schedule management components.

Chart 8

Maturity level of project schedule management components

PROJECT SCHEDULE MANAGEMENT	Project Management Maturity Levels							
	1	2	3	4	5			
Schedule Management Planning	•							
Activity Definition	~							
Activity Sequencing		~						
Activity Duration Estimating	•							
Schedule Development	•							
Schedule Control	~							

4.1.4. Project Cost Management

Project Cost Management encompasses activities for the determination of project budget and managing the budget to prevent cost overruns. Currently, PACT has no formal institutional requirements for cost management planning. As such, cost management plans are not development for projects, and this affected the management and control of project costs. Also, there are no standards and processes for cost estimating using various tools and techniques. This is mostly done in an ad hoc manner with the use of historical trends and data from current research.

Standardized processes for budget determination do not exist in the organization. Budgets are usually determined in conjunction with implementing partners and are usually reviewed internally by accounts and finance staff. For projects that are funded by implementing partners, the budget would be determined by that partner

(for example, the Global Environment Facility). Otherwise, budgets are determined based on the availability of resources and the priorities of PACT.

Cost control and monitoring is carried out using various tools and platforms that facilitate financial reporting, monitoring and verification. Cost reporting and performance tracking is carried out through the use of monitoring and evaluation procedures that are established at PACT.

The Assessment of Project Cost Management at PACT therefore shows that that the organization is at level one. Chart 9 shows the maturity level of project cost management components.

Chart 9

Maturity level of project cost management components

PROJECT COST MANAGEMENT	Project Management Maturity Levels							
	1	2	3	4	5			
Cost Management Planning	<u>~</u>							
Cost Estimating	~							
Budget Determination	✓							
Cost Control		~						

Note. Compiled by author.

4.1.5. Project Quality Management

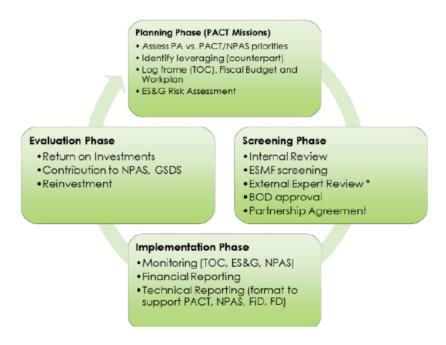
Quality management seeks to ensure customer satisfaction with the products that are developed through the project. This is facilitated by putting processes and procedures in place to ensure that product/service specifications meet customer requirements and that they are appropriate for the intended functions. Management's inclusion and participation in project processes is also key for quality management. Thus, management oversight is included as part of this component. PACT has not instituted established standards, policies or activities for project quality management planning. Thus, quality management plans are not developed by the organization. Instead, quality standards are loosely defined in project

implementation documents and agreements. In addition, PACT's "Theory of Change" document and logical framework matrix provide insights into the quality standards that are expected from projects at an organizational level.

There is also no established organizational procedure for quality assurance. Project management personnel tend to determine their own standards and provide day to day checks to ensure that these standards are met. This would vary from project to project. Projects that are funded by implementing partners usually provide quality standards that are to be adhered to by the project manager and team. During the implementation phase of projects, quality assurance activities include document reviews, inspections, technical and financial monitoring to ensure that the outcome of projects adhere to PACT's Theory of Change, Conservation Investment Manual, Environmental, Social and Gender Policy and the National Protected Areas System ACT. More information can be found in figure 15.

Figure 15

Phases that are part of PACT's Investment Modality



Note. From "Conservation Investment Strategy" by Protected Areas Conservation Trust, 2018, p 17. Copyright 2018 by Protected Areas Conservation Trust. Permission not sought.

PACT has no established process for quality control. Review of final deliverables to determine adherence to quality standards are usually carried out by requisite staff of the Conservation Investment Department as part of PACT's monitoring and evaluation System. At PACT there is a high degree of management oversight of projects. The Executive Director usually functions as Project Director for many projects which provides the opportunity for decision making in projects from the highest levels of the organization. The managers of the other functional departments all play a part in providing support to projects that are being executed by the organization.

The Assessment of Project Quality Management at PACT therefore shows that that the organization is at level one. Chart 10 shows the maturity level of project quality management components.

Chart 10

Maturity level of project quality management components

PROJECT QUALITY MANAGEMENT	Project Management Maturity Levels							
	1	2	3	4	5			
Quality Management Planning	✓							
Quality Management		~						
Quality Control	~							
Special Interest Component:								
Management Oversight		~						

Note. Compiled by author.

4.1.6. Project Resource Planning

Resource management planning seeks to ensure that projects get all of the resources they need and that these resources are managed successfully. Resources here refer to human and physical resources. In terms of human resources, resource management seeks to ensure that qualitied personnel are hired for projects. Physical

resources refer to hardware and software that are needed for effective project execution.

PACT does not have a resource management plan that helps in the assignment of project roles and resources, but there is an employee development plan and an employee handbook which provides information on the types of human resources needed and the skill sets required by project staff. Basic responsibilities are determined via terms of references that which are developed by project managers. During project planning stages, internal consultations are held to determine the physical resources needed for executing project work.

PACT does not employ standardized organizational procedures for resource estimation in projects. For projects that are funded by external organizations, human resource estimation is carried out and determined to some extent before the signing of project implementation agreements. Otherwise, the project manager estimates resources using their own methods.

Guidance for resource acquisition is given by the employee development plan which helps in the acquisition and retention of top talent for the organization. PACT's procurement manual also provides much needed guidelines for acquiring resources. Procurement policies are also developed for most individual projects and gives outlines standard procurement practices to be followed by PACT's procurement officer. In acquiring new staff members, internal staff members with the requisite skills are given the first opportunities to apply for vacancies. Otherwise, PACT goes through a standard process of recruitment, shortlisting, interviews and hiring.

Team development and management at PACT is carried out on an ad hoc basis. Activities are not implemented to enable buy-in and create synergies among project team members. Nevertheless, the organization has a major focus on the professional development of staff members. This is carried out through the implementation of training activities and buy giving employees the opportunity to complete training courses. Guidance for professional development of staff is provided by PACT's employee development plan.

Resource control at PACT remains ad hoc, meaning that there are no procedures for monitoring the planned and actual use of resources. The Assessment of Project

Resource Planning at PACT therefore shows that that the organization is at level one. Chart 11 shows the maturity level of project resource planning components.

Chart 11

Maturity level of project resource planning components

PROJECT RESOURCE PLANNING	Project Management Maturity Levels						
	1	2	3	4	5		
Resource Management Planning		•					
Resource Estimation	~						
Resource Acquisition		•					
Team Development	~						
Team Management	•						
Resource Control	~						
Special Interest Component:							
Professional Development Management		v					

Note. Compiled by author.

4.1.7. Project Communications Management

Project communications management seeks to ensure that the collection, storage and dissemination of data and information is carried out in an effective manner. At PACT, there are no established standards for communication planning and to ensure that stakeholders get the information that they need. PACT has a Multimedia Officer that helps with communications management, both at the organizational level and at the project level. The Executive Director also plays a major role in determining what types of information are disseminated in order to ensure that the organization is represented well. PACT does not mandate the development of Communications Management Plans for projects. Similarly, a communications plan/strategy does not

exist since the last strategy expired in 2020. Nevertheless, it should be stated that project status reports are developed on a monthly and quarterly basis through the life cycle of projects that are either implemented or funded by PACT.

Communications management is facilitated through the storage and dissemination of information by the use of websites, social media, published and printed material. Communications monitoring includes the review of status reports for projects and the measurement of progress but excludes forecasting.

The Assessment of Project Communications Management at PACT therefore shows that that the organization is at level one. Chart 12 shows the maturity level of project communications management components.

Chart 12

Maturity level of project communications management components

Project Communications Management	Project Management Maturity Levels				
	1	2	3	4	5
Communications Management Planning	~				
Communications Management		~			
Communications Monitoring	✓				

Note. Compiled by author.

4.1.8. Project Risk Management

Project risk management aims to ensure the effective identification and analysis of risks involved so that appropriate proactive actions can be employed. This knowledge area involves risk management planning, risk identification, qualitative and quantitative risk analysis, risk response planning and implementation and risk monitoring.

PACT is well aware of the importance of risk management but has not instituted any standard practices for risk identification, analysis and response. In this regard, risk management plans are not developed for projects which affects the ability of the

organization to identify, evaluate and plan for risks that may arise in projects. Nevertheless, at the organizational level, risk management planning is carried out through the implementation of PACT's Environmental and Social Management Framework (ESMF), which ensures that actions are implemented to ensure the avoidance, minimization and mitigation of the adverse impacts that result from funded projects.

Risks are identified on a routine basis using the tools provided by the ESMF as is mandated to be carried out when screening projects that are funded by the organization. PACT also has an internal auditor that monitors financial risks in projects and who reports the finding on a routine basis.

Qualitative risk analysis at PACT takes the form of speculation about the impact of the risks on projects since no standard methodology is used to assess probabilities and impacts. Similarly, no quantitative analysis of risks is carried out to assign numerical ratings to risks and to determine financial impacts and effects on schedule and scope.

Risk response planning at PACT includes the documenting of strategies to address future project risks as they are identified during the project planning process. Recommendations for response planning are usually provided by senior management, personnel for the Conservation Investment Department and PACT's Internal Auditor. In the case of projects that are executed in conjunction with implementing entities, a generic list of risks and mitigation measures is provided. Nevertheless, it is expected that the Project Manager of the project would carry out detailed risk response planning activities. Even though responses may be identified for risks, it should be noted that PACT has not instituted any organizational mandate that ensures that the responses are implemented. In this regard, risk responses are implemented sporadically. Risks that have a negative effect on PACT's organizational outlook are more likely to be addressed.

It should be stated that risk owners are not assigned to risks. Therefore risk monitoring is not carried out in a structured manner. In this case, risks are tackled as they arise. As defined by the project manager, the most feasible options are usually chosen to address the risks as the they occur.

The Assessment of Project Risk Management at PACT therefore shows that that the organization is at level one. Chart 13 shows the maturity level of project risk management components.

Chart 13

Maturity level of project risk management components

PROJECT RISK MANAGEMENT	Project Management Maturity Levels						
	1	2	3	4	5		
Risk Management Planning	•						
Risk Identification		~					
Qualitative Risk Analysis	<u>~</u>						
Quantitative Risk Analysis	~						
Risk Response Planning	•						
Risk Response Implementation	V						
Risk Monitoring	•						

Note. Compiled by author.

4.1.9. Project Procurement Management

Project procurement management deals with the process of acquiring goods and services for the project. This knowledge area also involves the management of contracts through project execution and the orderly closing of contractual agreements. Important components to consider are project procurement, procurement solicitation, procurement requisition and procurement control and vendor management.

In terms of procurement management planning, PACT does not mandate the development of procurement management plans. Nevertheless, PACT's procurement policy and procurement schedule lays out the overarching principles and standards to assist in decision making for procurement purposes. Make or buy

decisions are made with the involvement of PACT's procurement officer, senior management and relevant staff. Further, procurement plans are developed for all projects that are funded through PACT.

Procurement solicitation and requisition is also guided by PACT's procurement policy. In the case where the goods/services are to acquired form outside of PACT, the standard procedure used includes the development of terms of references, and procurement notices in order to solicit expression of interests and technical and financial proposals from vendors outside of the company. Comparisons are then made between the vendors with respect to price, quality and the intended date of delivery of the goods/services requested. The procurement officer, accounts clerks and project staff are involved in the process of evaluating vendor information, contract negotiations and awarding the contracts.

Procurement control and vendor management is carried out using standard organizational processes as are stipulated by the procurement plan. In this regard, contracts are usually detailed and stipulates the duties of the vendor and of PACT. As per standard operating procedures, vendors and consultants are required to submit reports on a regular basis but the timeframe may be dependent on the decision of the procurement officer or project manager.

The Assessment of Project Procurement Management at PACT therefore shows that that the organization is at level three. Chart 14 shows the maturity level of project procurement management components.

Chart 14

Maturity level of project procurement management components

PROJECT PROCUREMENT MANAGEMENT	Project Management Maturity Levels					
	1	2	3	4	5	
Procurement Management Planning			~			
Solicitation and Requisition			~			
Procurement Control and Vendor Management			•			

4.1.10. Project Stakeholder Management

Project Stakeholder management is considered as a critical skill that can affect the success of a project. Activities in the knowledge area includes the identification of stakeholders, analysis and management of stakeholder expectations, addressing issues that affect stakeholders and putting strategies sin place to ensure that stakeholder requirements are met. Components include stakeholder identification, stakeholder management planning, managing stakeholder engagement, and monitoring stakeholder engagement.

There is no organizational plan or procedure to carry out stakeholder identification, analysis and for managing their engagement at PACT. Stakeholder identification is mainly carried out when there is need for engagement and feedback. Nevertheless, managing stakeholders' expectations and satisfaction has not been seen as a priority.

Similarly, stakeholder management planning is not governed by any standards at PACT but is carried out as needed on a project-by-project basis. It should be noted that, under the "Capacity Building for GCF Readiness" project, a generic stakeholder engagement plan was provided by the Green Climate Fund which helped with stakeholder engagement. Therefore, there remains a need for institutional standards at PACT that governs project stakeholder management.

The Assessment of Project Procurement Management at PACT therefore shows that that the organization is at level two. Chart 15 shows the maturity level of project stakeholder management components.

Chart 15

Maturity level of project stakeholder management components

PROJECT STAKEHOLDER MANAGEMENT	Project Management Maturity Levels					
	1	2	3	4	5	
Stakeholder Identification	~					
Stakeholder Management Planning	•					
Managing Stakeholder Engagement	•					
Monitoring Stakeholder Engagement	~					

Note. Compiled by author.

4.1.11. Overall Organizational Project Management Maturity Level

Chart 16 shows that PACT has been rated as being at level 1 for nine of the project management knowledge areas, including project integration management, project scope management, project schedule management, project cost management, project quality management, project resource management, project communications management, project risk management, and project stakeholder management. This rating was given based on the fact that there are minimal established organizational processes and standards that hold project managers and team members accountable for their performance in these knowledge areas. Many activities are carried out in an informal and unplanned manner. Nevertheless, management continues to be aware of the need for policy improvements in these areas.

In terms of project procurement and vendor management, PACT has been rated at level 3. This rating was given based on the fact that structured policies, processes and organizational standards exist to govern procurement at PACT. In addition, PACT takes great pride in hiring qualified procurement officers on an organizational

and project by project basis so as to ensure that procurement activities are carried out as efficiently as possible.

In assessing the overall maturity level of PACT, it should be noted that the lowest level assessed for the individual knowledge areas is the organizational project management maturity level. This is because the overall maturity level cannot be higher that the lowest score given in the individual knowledge areas. In this regard, the organizational project management maturity level of PACT is 1.

The results of the assessment indicate the need for a PMO to be instituted at PACT. Research has shown that the PMO is key to increasing project management maturity in organizations that were assessed as being at a low level. This is because the PMO acts as a focal point for the consistent application of processes and methodologies that are vital for success in project management. Also, the PMO can help PACT to move beyond the status quo to being a mature entity that facilitates organizational project management. Thus, the PMO is key to adding value to PACT by facilitating the institution of standards that act as a growth agent for project management maturity (Caliste, 2013).

Chart 16Organizational project management maturity level

KNOWLEDGE AREA	Project Management Maturity Levels						
	1	2	3	4	5		
Project Integration Management	✓						
Project Scope Management	~						
Project Schedule Management	<u>~</u>						
Project Cost Management	~						
Project Quality Management	<u>~</u>						
Project Resource Management	<u>~</u>						
Project Communications Management	~						
Project Risk Management	<u>~</u>						
Project Procurement and Vendor Management			•				
Project Stakeholder Management	•						
ORGANIZATIONAL MATURITY LEVEL	<u>~</u>						

4.2. Identification and examination of the different types of PMOs in order to determine the most suitable option for PACT

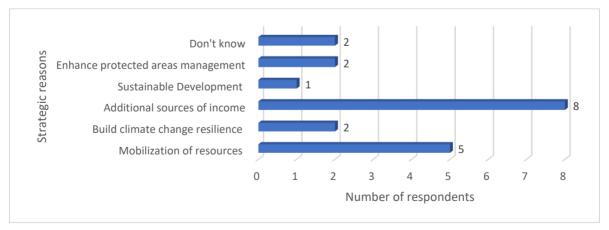
4.2.1. Does PACT need a PMO?

Project Management Offices (PMOs) provide effectiveness, efficiency, greater consistency and better management of costs in organizations. Overall PMOs promote good governance and help to boost the success rates of projects. Nevertheless, all PMOs are not successful. Approximately one third of all PMOs fail to achieve their goals because of various reasons. In this regard, it is important to determine if an organization needs a PMO before deciding on whether to establish one (Greengard, 2013).

The project maturity level of PACT (shown in chart 16) can provide enough justification for the need of a PMO within the organization. But there are other reasons to consider as are delineated further in this section.

PACT can be considered as a project-oriented organization. This fact can help to justify the need for the establishment of a PMO in PACT. As mentioned before, the organization acts as a fund manager that gives grants for the execution of projects by other organizations. Also, PACT acts as a fiduciary manager for third party projects and has been executing projects that are funded by international financial institutions (such as the World Bank).

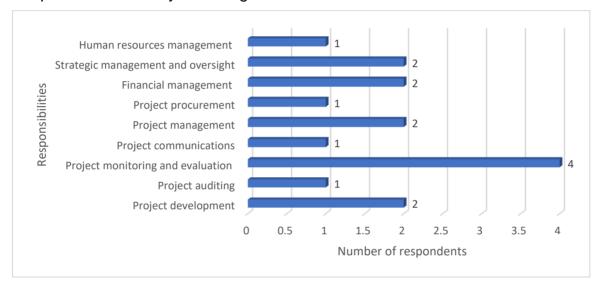
Figure 16
Strategic reasons for implementing projects



Note. Compiled by author.

According to questionnaire respondents, PACT has five strategic reasons for implementing projects (see figure 16). As shown in figure 16, the foremost reasons for project implementation at PACT are to acquire addition sources of income, and to mobilize resources. Other reasons include the building of climate resilience, enhancing protected areas management and the pursuit of sustainable development.

Figure 17
Responsibilities in Project management



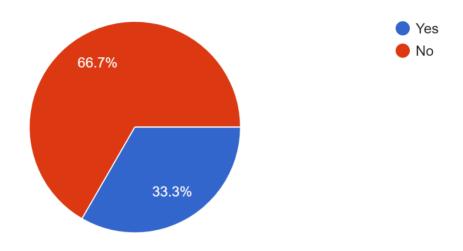
Note. Compiled by author.

The responsibilities of the twelve project related staff members at PACT are shown in figure 17. These responsibilities included project monitoring and evaluation which is carried out on projects that are funded by PACT through its grant-based mechanism. Other responsibilities included project development, auditing, communications, project management, project procurement, strategic management and oversight, financial management and human resource management. Nevertheless, only 33.3% of respondents stated that they had any project management training while the greater majority (66.7%) stated that they did not (see figure 18). This shows that there is a significant shortfall in capacity as it relates to

project management at PACT which indicates that there is an urgent need for a PMO that executes training and capacity building.

Figure 18

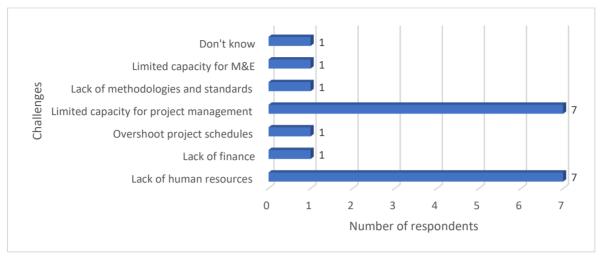
Percentage of respondents with formal project management training



Note. Compiled by author.

In conjunction with the lack of trained staff, it should be of no surprise that PACT faces a number of project management challenges, foremost of which is the lack of human resources and limited capacity for project management (see figure 19). Other challenges include the lack of finance, overshooting of project schedules, the lack of proper methodologies and standards and limited capacity for monitoring and evaluation. All these are telltale signs that PACT needs a PMO.

Figure 19
Challenges faced by PACT in managing projects



The solution to these challenges either includes the establishment of a PMO or the provision of various services which can be acquired from a PMO (See figure 20). The foremost solution which was suggested by staff members at PACT included the hiring of qualitied staff members which can be part of a PMO. The establishment of a PMO was suggested while other solutions included the standardization of project methodologies, training and capacity building, and improved project management planning.

Figure 20
Solutions to project Management challenges at PACT

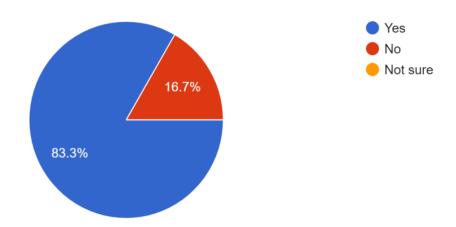


Note. Compiled by author.

In addition to the solutions stated above, most staff members of PACT agree that a PMO should be established within the organization. Figure 21 shows that 83.3% of respondents stated that PACT needs a PMO for defining, maintaining and ensuring project management standards across the organization.

Figure 21

The need for a PMO in PACT



Note. Compiled by author.

These respondents are of the opinion that the establishment of a PMO at PACT will receive the full support of senior management for its establishment. This information shows that the establishment of a PMO will have leadership buy-in which is critical for the PMO to provide substantial benefits to PACT. The PMO can then create a level of coordination that is important for boosting efficiency, ensuring speedy completion and trimming costs (Greengard, 2013).

4.2.2. The different types of PMOs

Project Management Institute (2017) clearly defined 3 types of PMOs which vary with regard to their level of control and influence within the organization (Project Management Institute, 2017). The 3 types of PMOs are as follows:

1. Supportive: These types of PMOs perform a counseling role for projects by helping to supply templates, training best practices, methodologies and lessons learned. There is no enforcement being carried out. The PMO acts as a project repository and its level of influence within the organization is low

- (Giraudo and Monaldi, 2015). This type of PMO is suitable for organizations that have functional of weak matrix types of organizational structures (Puri, 2020).
- 2. Controlling: This type of PMO provides support to projects but also requires compliance to project related requirements. The support includes training and assistance in the use of project management tools and software. Compliance may be required through various means including, the adoption of project management methodologies and frameworks, the adoption and use of templates processes, tools and forms, and the adherence to governance frameworks that are instituted in the organization. This PMO would act as a control mechanism to ensure that projects are standardized. This type of PMO has a moderate degree of control within the organization. This type of PMO is suitable for organizations with a balanced matrix type of organizational structure (Giraudo and Monaldi, 2015; Puri, 2020; Wedekind & Philbin, 2020).
- 3. Directive PMO: This type of PMO is more prone to take over projects with the aim of managing them directly. The PMO also institutes systems and processes to ensure the organization complies with project management standards and protocols. Project managers are assigned by the PMO, and they report to the PMO. The PMO would have a high degree of authority and control within the organization. Because the PMO has a single reporting structure, it helps to deliver a high degree of consistency across projects. This type of PMO is best suited for organizations with a strong matrix of projectized organizational structure (Giraudo and Monaldi, 2015; Puri, 2020; Wedekind & Philbin, 2020).

Figure 22
Types of PMOs



Note. From "PMO Types-Supportive, Controlling, Directive", by R. Puri, 2020, Copyright 2020 by R. Puri. Permission not sought.

PMOs can serve different roles in organizations and these roles can be classified as PMO frameworks. PMI (2013) describes five different PMO frameworks which are described as follows:

- Organizational Unit PMO/Business Unit PMO/Divisional PMO/Departmental PMO: This type of PMO provides project support within a department of an organization. The support includes human resources utilization, governance, operational project support and portfolio management (PMI, 2013).
- Project-Specific PMO/Project Office/Program Office: This type of PMO serves
 as a temporary entity within the organization to support a specific project. The
 services given include data management, and governance coordination, etc.
 (PMI, 2013).
- 3. Project Support/Services/Controls Office or PMO: This type of PMO is a permanent entity which provide support to projects on a continuous basis. The PMO supports, project, program and portfolio activities throughout the organization. The PMO uses the governance, processes and practices instituted by the organization to provide support to projects (PMI, 2013).

- 4. Enterprise/Organization-wide/Strategic/Corporate/Portfolio/Global PMO: This is the highest level PMO, and it helps to align project work to the organizational strategy (PMI 2013).
- Center of Excellence/Center of Competency: This type of PMO provides support by equipping the organization with methodologies, standards and tools needed to deliver projects successfully (PMI, 2013).

4.2.3. The most suitable PMO for PACT

Choosing the type of PMO to institute within an organization is a weighty decision to make. The decision should consider the organizational context so that the PMO can accommodate the needs of the organization. All three types of PMOs provide project documentation, templates and tools for the delivery of outputs to ensure that projects are implemented successfully. Nevertheless, it is worthwhile to identify the specific contributions that each PMO can make to the activities of PACT.

Chart 17
Summary of the contribution that each PMO type would give at PACT

Supportive Advise on the Preparation of calls for proposals (for potential grantees) and refining of grant requirements. Advising on the development of bidding documents and project proposals to access funds from international financial institutions such as the World Bank. Sharing project management best practices, tools and methodologies. Process outlines procurement, talent acquisition,	•	
 potential grantees) and refining of grant requirements. Advising on the development of bidding documents and project proposals to access funds from international financial institutions such as the World Bank. Sharing project management best practices, tools and methodologies. 	PMO Type	Contribution to PACT's Project related activities
		 Advise on the Preparation of calls for proposals (for potential grantees) and refining of grant requirements. Advising on the development of bidding documents and project proposals to access funds from international financial institutions such as the World Bank. Sharing project management best practices, tools and methodologies.

	 Tracking project work. Facilitate networking with various project implementation partners. Provide training on project management. 					
	 Debrief and analyze, processes, outcomes and lessons learned after project completion. 					
Controlling	 Helping to send out "calls for proposals" for the submission of grants. Helping to develop project proposals for submission 					
	 to the GCF and AF. Helps in the preparation of log-frames, budgets and workplans. 					
	 Assists in project proposal screening for grant issuance. 					
	 Ensures financial and technical reporting according to organizational requirements. 					
	 Ensuring that project management best practices, standardized tools and methodologies are adopted and used by PACT and Grantees. 					
	 Helps in making project resourcing decisions. 					
	 Provides training on project management. 					
	Facilitates project implementation.					
Directive	 Leading the issuance of "calls for Proposals." Leading the preparation and submission of project proposals. 					
	 Directly managing projects and ensuring that it is done according to the specified budget, schedule and other criteria. 					
	 Conduct risk management and risk mitigation during project implementation. 					

- Involved in stakeholder management, communications and managing PACT relationship with project implementation partners.
- Lead in monitoring and evaluation.
- Lead on reporting to funding agencies.
- Managing the closure of projects and contracts by ensuring that all documentation is completed as required by the organization.

Note. From "Research and Grant Management: The Role of the Project Management Office (PMO) in a European Research Consortium Context" by G Wedekind and S. Philbin, 2020, p. 50-51. Copyright 2020 by G Wedekind and S. Philbin. Permission not sought.

As shown in Chart 17, all PMO types can serve various roles within PACT. At PACT, a supportive PMO will serve more confined roles. The PMO's role would generally relate to the preparation of "Calls for Proposals" to assist in the issuance of grants and the provision of quidance for the submission of project proposals and the preparation of bidding documents so that PACT can access funds from international financial institutions, including the World Bank and the Green Climate Fund, among others. In the case of grant issuance, this PMO would add value by providing advice and training needed for effective grant management and the development of grant requirements. In the case where PACT is developing project proposals to apply for project funding, the PMO would share experiences and best practices. This means that the PMO would serve in an advisory role while remaining in close proximity to the actual project while it is being implemented. The supportive PMO can ensure that needed resources are available for executing project work and can help in the analysis of project work and lessons learned after project completion. The supportive PMO can also assist in ensuring that PACT networks effectively with grantees so that expert advice can be relayed to them in an effective manner (Wedekind & Philbin, 2020).

A controlling type of PMO would be more actively involved in the project and grant management activities of PACT. In the case where PACT is issuing grants, the PMO can help in the development of "calls for proposals" and the dissemination of those documents to the wider public in order to reach potential grantees. The PMO would also be active during the screening phase of grant issuance by helping to proofread and evaluate proposals that are submitted in order to ensure that project management best practices ae considered in the application. This PMO would also help in the preparation of log frames, budgets and work plans and would assist in the review of technical and financial proposals in support of grantees (Wedekind & Philbin, 2020).

In the case where PACT is applying for funding from other financial institutions, the controlling PMO would also assist in proofreading and pre-evaluating proposals and the provision of standardized templates and best practices. This type of PMO would help to drive bid submission and would be involved in actual project execution.

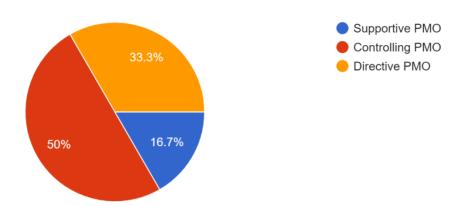
A directive type of PMO would play a leadership role in grant issuance. This PMO would also be involved in negotiations between PACT and potential grantees regarding payment provisions or intellectual property. In the case where PACT applies for funding from other financial institutions, the directive PMO would also drive the proposal development and application process and liaise with teams in financial institutions in order to submit required documents.

The directive PMO would also take charge of projects that are being executed by PACT ensure that projects are implemented according to specified budget, schedule and other criteria. This PMO would lead in the management of risks, stakeholder, communications and would be integrally involved in project monitoring and evaluation. This PMO adds value by ensuring that the project team carries out quality assurance, reporting (and other auxiliary tasks) and also stays in contact with funding authorities (Wedekind & Philbin, 2020).

As is shown in figure 22, respondents that were interviewed stated the type of PMO that they believe that PACT should implement. As the figure shows, most respondents believe that PACT should establish a controlling PMO (50%), the second highest number of recipients believe that PACT should establish a directive PMO (33.3%), and the lowest number of recipients believe that PACT should establish a supportive PMO (16.7%).

Figure 23

Type of PMO that is suitable for PACT



The results of the interviews give an indication of the level of standardization and governance that the staff members believe that the organization should reach, since most respondents indicated the need for a controlling PMO. Nevertheless, based on the level of project management maturity of the organization, in addition the other factors, the best type of PMO that should be implemented by PACT is the supportive PMO.

The following reasons are meant to justify the need for the establishment of a supportive PMO in PACT:

1. Low Project Management Maturity: PACT's project management maturity is considered to be low and has been assessed as being at level 1 (see section 4.1). This indicates that the organization lacks methodologies, procedures and basic project management tools across many knowledge areas. In the case where methodologies and tools exist, they are mostly not standardized across the organization. Project managers and other related staff lack knowledge and skills relating to project management standard practices and their need training and guidance from a PMO. According to Crawford (2021) organizations that are just starting the project management progression activities should begin with the establishment of a supportive PMO before progressing to a controlling PMO (Martinez 2020; Crawford, 2021).

- 2. Organizational needs: At PACT, there is urgent need for project support, mentoring processes and standards and training; all of which can be provided by a supportive PMO. This type of PMO can help project manager and teams in the creation of project workbooks, mentor project teams on project initiation and planning, provide project management processes and standards, train project managers and teams and provide software tools that are needed for effective project management.
- 3. Weak Matrix Organizational Structure: PACT has a functional or weak matrix type of organization structure. The organization is mainly divided into functional departments where the activities and the budget are controlled by the functional management, and in some cases, the Executive Director. Project Managers within PACT generally ensure that the project is coordinated and expedited according to the specified scope, schedule and budget constraints. Based on this type of organizational structure, practitioners have stated that a supportive PMO is more suitable for implementation (Puri, 2020).
- 4. Current Staffing needs: It should also be noted that PACT already has a complement of staff that are distributed in three functional departments (Accounting and Finance, Conservation Investment and Human Resources and Administration) and the Office of the Executive Director. These staff members are mandated to perform duties relating to project procurement, monitoring and evaluation, project management, project auditing, project communications project accounting, etc. In this regard, the establishment of a supportive PMO can play a major role in ensure the effective functioning of staff members within their departments by providing the training, standards, methodologies, mentoring and support needed for successful project implementation.

In accordance with the conclusions of Crawford (2021), since PACT has a low maturity level, the organization should adopt a supportive PMO which will ensure the implementation of basic project management standards and practices. As the organization matures a transition can be made from a supportive PMO to a

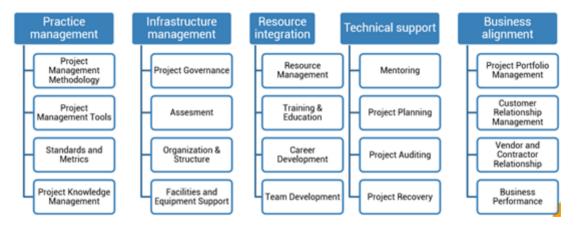
controlling PMO. Further maturity can lead to the establishment of a directive PMO at a later date. In terms of PMO frameworks, the PMO should serve as a center of excellence for Project Managers and for senior management. The PMO should be a one stop shop for project related methodologies, standards, tools, techniques and expertise within PACT. Also, this type of PMO can provide support to potential grantees who apply to PACT for funding the implement projects. The PMO can support every stage of the grant management process and help to facilitate the smooth transition of project proposals from phase to phase throughout to project execution and closure.

4.2.4. Supportive PMO Scope and Functions

The scope of the Supportive PMO will fall into various categories, which conclude: Practice management, infrastructure management, resource integration, technical support and business alignment (see figure 24).

Figure 24

The scope of the PMO



Note. From "The complete project management office handbook" by G. Hill, 2014,

p. 51. Copyright 2014 by G. Hill. Permission not sought.

1. Practice management

This category involves the provision of standard repeatable project management methodologies that can enhance the performance of the PMO and the organization as a whole. This includes the introduction of processes and practices of project management and the identification of best practices that are key for achieving PACT's strategic goals. Project management tools will also be recommended for application to project activities. Additionally, the PMO will be key for the provision of standards and metrics that provide the basis for performance measurement of the PMO, and project management activities being implemented by the organization (Ozmen, 2013).

This category also involves project knowledge management in which the PMO will ensure the use of recognized project knowledge management tools. The tools are aimed towards managing plans, reports and documents, and also to facilitate collaboration on project staff performance. Also, activities can be implemented for the development and provision of tools for the management of project information and for the creation of methods to enhance the compilation of lessons learned (Hill, 2014).

2. Infrastructure management

This scope category involves ensuring that the project management activities of PACT are carried out within an environment that is characterized by effective governance. In this regard, the PMO is key for ensuring that project management activities are carried out using the authority of the project charter and other overarching policy documents (Alie, 2015).

The PMO is also key for ensuring that assessments are carried out on people processes and practices. This also involves the assessment of the Project Manager's skill and knowledge, the evaluation of project team's capability and the continuous assessment of project management maturity. The PMO's scope would also include the facilitation of organizational alignment by defining and establishing project team member roles and relationships and by specifying organizational alignment.

The PMO will ensure that facilities and equipment needed are available for project management activities to be carried out. In this regard, the PMO would generally identify the facilitates and equipment that are needed to accomplish project tasks. The PMO would also monitor the availability of facilities and equipment so as to

ensure their availability and to ensure the improvement of performance within the project management environment (Hill, 2014).

3. Resource Integration

Under this scope category, resource management will be carried out in which the PMO will be able to assist the Human Resources and Administration Department in acquiring qualified staff, facilitating resource acquisition, managing resource assignments and to evaluating the effectiveness of resource performance. Additionally, the PMO will facilitate the enhancement of capacities with regards to project management by identifying the competencies that are needed for effective functioning, identifying what competencies currently exist, and developing programs which can be used to fill capacity gaps (Hill, 2014).

Career development is a key feature of the project scope and will facilitate the expansion of skills, knowledge and experience among project managers and project teams. In this regard, the PMO can help project related staff to enhance their career planning and professional development activities so that PACT can grow into a company with highly qualifies individuals (Aziz, 2014).

Team development is also a key part of the PMO scope that can be used to benefit and grow a small PMO. The aim of the PMO will be to manage integration among project teams, to implement guidance for team development and to address issues that may affect team performance (Rincon, 2014).

4. Technical support

The scope of PMO functions includes the mentoring of project team members and other staff through the transfer of knowledge, skills and experience regarding a specific topic or issue. Through mentoring, the PMO will be able to promote the use of best practices, establish professional development standards, and provide quick guidance and support to staff members as needed. These activities will also help to build the confidence of project related staff as they carry out their respective duties (Rincon, 2014).

The scope of PMO functions include the tracking of planned activities against actual implemented activities at regular intervals. The PMO would also be instrumental in developing standard approaches to project planning within the organization,

introducing planning tools and facilitating meetings which should decrease the time and effort used to plan activities for projects. The PMO would also help to strengthen the effectiveness of project auditing at PACT by helping to identify the efficiencies, qualities and values associated with projects at PACT (Hill, 2014).

Project recovery is a key aspect of the PMO's scope. In this regard, the PMO is key for implementing strategies for project recovery within the organization. The PMO will be instrumental in determining processes and criteria for project recovery (Van den Berg, 2012). Indicators are to be monitored by the PMO in order to detect problems and then recovery processes and procedures would be implemented to correct project failures and aid in recovery (Hill, 2014).

5. Business alignment

The PMO will be key for managing and coordinating the involvement of senior personnel in project work which will help to align projects with the strategic plan, ensure the allotment of PACT's resources to project work, the prioritization of strategic projects, and the review of ongoing projects. This would involve the provision of project data and information to senior personnel so that project oversight can be increased at the highest level (Hill, 2014).

Under this category, managing internal and external customer relationships will also be key in ensuring a high level of customer involvement. The PMO is important for establishing practices that enhance customer relations, applying guidance for this purpose, and evaluating customer satisfaction.

Vendor and contract management, including the management of external resources used for project implementation, also forms a key part of the scope of work for the PMO. The PMO would play a key role in helping to identify and qualify vendors and provide guidance on improving the vendor and contract management process (Crawford, 2021).

Chart 18

Alignment of PMO functional areas with PACT's strategic objectives

PMO Functions	PACT Strategic Objectives (SO)					
	SO 1	SO2	SO3	SO4	SO5	SO6
Project knowledge management	Х	Х		Х		X
and support				Α		Λ
Consulting and Mentoring	X	Χ	Х			
Processes, Standards and Metrics		Х	Х			X
Training and Education	X	Χ	X	X	X	
Project Management	X	Х	Х			X
Project Management software		X				Х
tools		, ,				, ,
Career Development	X	X	X			X

PACT's Strategic Objectives (SO) are as follows:

- SO1: Key stakeholder Buy-in.
- SO2: Alignment of Internal capacity, people and processes to fulfill PACT's mandate.
- SO3: Strategic partnerships between key NPAS Stakeholders.
- SO4: Proactive and innovative fund-raising and trust fund growth strategy.
- SO5: Responsive investment strategy which finances critical needs of NPAS.
- SO6: Systems to coordinate policy dialogue, planning and monitoring and evaluation (International Financial Consulting, 2017).

The supportive PMO can have the following functions, which are aligned with PACT's strategic objectives:

 Project knowledge management and support: The PMO will provide support for documenting lessons learnt, project scheduling, report production, report distribution, using project management software and maintenance of project related documents, project development, drafting bidding documents,

- implementing best practices, among others (Crawford, 2021). This function will help to achieve PACT's strategic objectives 1, 2, 4 and 6. Project knowledge management and support will lead to capacity building and enhanced communication which are key to achieving PACT's strategic objectives
- 2. Consulting and Mentoring: The PMO will function as an internal project management consultant. In this regard, the PMO will provide the expert advice needed by project related staff members in order to facilitate the effective execution of projects (Crawford, 2021). This function will help to achieve PACT's strategic objectives 1, 2 and 3. Consulting and mentoring will help to increase stakeholder relationships, coordination and capacity building which are key to achieving PACT's strategic objectives (International Financial Consulting, 2017).
- 3. Processes, standards and metrics: The PMO would help to develop and disseminate methodologies, processes and standards for effective project management throughout the organization (Crawford, 2021). This function will help to achieve PACT's strategic objectives 2, 3 and 6. Internal capacity building will be key to achieving these objectives.
- 4. Training and education: The PMO can train PACT's staff members, including Project Managers and other team members, in the use of best practices, tools, techniques, project management principles, and project development, etc. If the PMO doesn't do the training, then the PMO can work with the human resources department to select trainers (Crawford, 2021). Conducting this function would involve assessing training needs, determining training requirements, identifying resources needed for training, selecting training courses, conducting training activities and evaluating training activities that were executed (Hill, 2014). Training can be aligned with PACT Strategic Objectives 1, 2, 3, 4, and 5. Training will contribute to enhanced capacity building, enhanced strategic investments and increased capacity for resources mobilization which are key to achieving PACT's strategic objectives.

- 5. Project Management: The PMO can house project managers and can also provide human resources to fill specialty positions across the reorganization as it relates to projects. Project management can help to achieve strategic objectives 1, 2, 3, and 6.
- 6. Project Management software tools: The PMO can provide all of the software tools which support project management and implementation efforts. This will help to satisfy PACT's strategic objective 2 and 6.
- 7. Career development: The PMO can help to implement activities that can establish a career path for individuals within the organization. The PMO can accomplish this by helping to establish project management as a professional discipline within the organization, developing a career advancement plan, developing a project management certification program, facilitating technical and professional certification, providing general career guidance and providing support when needed (Hill, 2014). This PMO function can help to achieve strategic objectives 1, 2, 3 and 6. This will be achieved through enhanced capacity building, resource mobilization and coordination.

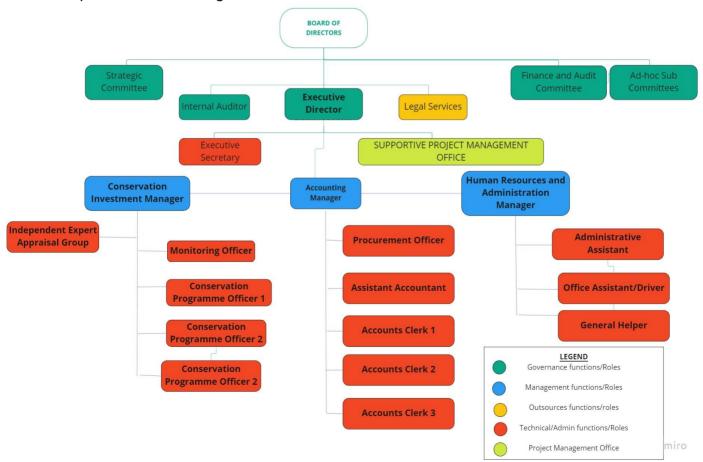
4.3. The best placement of the PMO in PACT's organizational structure, the best structure of the PMO and the roles of PMO personnel

4.3.1. The PMO's placement in PACT's organizational structure

The supportive PMO should have enough authority within PACT to carry out its functions. This authority can be given by ensuring that the PMO has the right placement within the organizational structure of PACT. Without the requisite authority and placement, other functional departments, which do not have a vested interest in project management excellence, will take the place of the PMO in applying general ad hoc practices rather than helping the organization to grow in project maturity (Hill, 2014). According to Greengard (2013), the placement of a PMO on the organizational chart would be a very important decision to make since successful

Figure 25

Proposed functional organizational structure for PACT



Note. Compiled by author.

PMOs are twice as likely to report to the head of the organization when compared to PMOs that are not successful (Greengard, 2013).

According to figures 3 and 4, the Office of the Executive Director holds the portfolio for project management at PACT. This functional department also holds the portfolio for important project related functions which include resource mobilization, networking, strategic management and project oversight. In this regard, it is recommended that the Supportive PMO be instituted within the Office of the Executive Director since this will necessitate the least change within PACT's current organizational structure for the accommodation of the PMO (See figure 25). The result of the interview shows that PACT's Executive Director prefers that the PMO be located in this functional department. Other senior managers at PACT also gave their full support for the placement of the PMO under the Office of the Executive Director. In this regard, this PMO would serve to incorporate the project management functions that already exist under the Office of the Executive Director and assimilate the function of Project Development Specialist which currently exists outside of the Office of the Executive Director.

By operating under the Office of the Executive Director, the PMO can have a high level of authority to do its work. At this level, PMO staff can work with the management and staff of the other departments to achieve its functions of proving training, consulting, mentoring, project management, project support, processes, standards and project management software tools for the accomplishment of PACT's strategic Objectives.

4.3.2. The structure of the PMO and the roles of PMO personnel

Initially, the PMO can have a simple structure, but efforts should be made to expand this structure as project management maturity improves and as the need for more organizational alignment arises.

As stated by Hill (2014) the needs of the organization would determine the functions of the PMO. This in turn would help to determine the staff complement and skill sets that are needed in the PMO for it to be effective in the organization. In this regard, functionality of the PMO is key too determining staffing requirements (Hill, 2014).

It is fairly common for a new supportive PMOs to have a PMO Director who would head the office. This individual would be seen as being competent in all areas of project management. It is advisable that this individual be a full-time staff member of the organization since this individual will have to be competent enough to accurately estimate workload requirements so that the PMO performance expectations can be met. To meet workload requirements the PMO Director will need to make decisions which can include the acquisition of reliable, part time staff, in addition to other full time staff members.

Since PACT is a small organization, it is recommended that the PMO be comparatively small with a complement of core staff members who are qualified to carry out the PMO's core functions.

Chart 19
PMO designation, roles and their alignment to PMO functions

Designation	Responsibilities	PMO Function Alignment
PMO Director	 Managing the PMO and staff performance. Ensuring that the PMO functionalities of project management oversight, and support are executed. Advising other senior managers and technical staff in professional project management practices. Contribute to the management of stakeholder, consultant and organizational relations. Creating strategies for effective project planning, initiation, execution, monitoring and evaluation and closure. Supporting project managers through all stages of the project cycle. Manage projects when required by PACT's management. Recruitment and setting up of project teams. Consulting and mentoring for project management within the organization. 	 Project Knowledge Management and Support. Consulting and Mentoring. Project management software tools. Career development.

	 Ensuring that adequate number of resources are available for project work. Lead the provision of project management software and tools. Lead career development efforts by developing and implementing a career development plan and certification program. 	
Project Manager	 Developing, implementing and providing guidance and support for the use of project management processes, standards or metrics. Providing support for project management activities, including the conducting of audits and reviews. Providing guidance for the implementation of project management tools. Consulting and mentoring for supporting project management activities. Developing and implementing plans for training an education as it relates to project management. Documenting lessons learned and providing project knowledge management support through report scheduling and development. Support the provision of project management software tools. 	 Training and education. Project Management. Process, standards and metrics. Consulting and mentoring. Project Knowledge management and support. Project management software tools. Career development.

- Support the development and implementation of a career development plan and certification program.
- Lead in progress reporting and monitoring of project management activities.
- Institute risk management and change control processes to assist project staff.
- Providing best practices, guidelines and support for communications and stakeholder management consultancy management, quality control and quality assurance.

Project Development Specialist

- Assist in the Preparation of calls for proposals (for potential grantees) and refining of grant requirements.
- Lead project design and proposal development in alignment with PACT's strategic objectives.
- Assist in carrying out activities relating to appraising projects, stakeholder consultations and environmental assessments.
- Serve as an expert for ensuring that the criteria, guidance and requirements of funders are met when PACT applies for project funding.
- Provide support to project reviews and performance measurement in projects.

- Project knowledge management and support.
- Consulting and Mentoring.
- Process, standards and metrics.

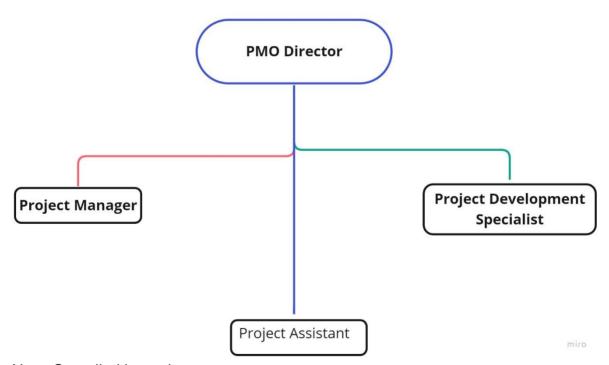
	 Identifying and collaborating with stakeholders and partners to determine their priorities and to align these with PACT's strategic plan. Assist in developing project schedules, budget, scope and resource requirements. 	
Project Assistant	 Support in maintaining and tracking project costs, schedules and resources. Collecting and distributing project related progress reports and other documentation. Provide materials and support for project performance analysis activities. Managing correspondents of the PMO. Logistical coordination of project management training activities. Maintaining the project management library and archives. Plan PMO related meetings, recording meeting proceedings and producing the meeting reports. 	 Processes, standards and metrics. Project knowledge management and support. Project Management software tools.

Note. Compiled by author.

Chart 19 shows the proposed PMO designations, responsibilities and their alignment with the functions of the PMO. It is noteworthy to state that the PMO functions were determined based on the project management needs of the organization. As such, it is only wise to ensure that staff designations and responsibilities are aligned with these functions. The proposed designations, for which details are given in chart 19, include the PMO Director, the Project Manager, the Project Development Specialist and the Project Assistant. It should be noted that PACT already has a project development specialist who was interviewed as part of the data collection process for this FGP. As mentioned before, the PMO should incorporate this position since the designate will contribute to the achievement of many PMO functions and strategic objectives of PACT.

Figure 26

Proposed organogram for Supportive PMO



Note. Compiled by author.

Figure 26 shows the proposed organogram for the supportive PMO. This organogram is a subset of the detailed PACT organizational structure that is shown in figure 25. As iterated earlier, the PMO Director will report to the Executive Director

of PACT. The Project Manager and the Project Development Specialist will provide technical and business support. The project assistant will provide administrative support to the PMO.

It is important for the PMO Director to lead the process of identifying gaps in PMO functions that are not fully covered by the current staff complement and to identify human resources needed to fill those gaps. This can facilitate the hiring of additional project managers, and other staff members, as needed. It should be noted that PMO growth should be an ongoing effort to prevent stagnation as the organization grows in project management maturity.

4.4. PACT's plan for PMO implementation and the improvement of project management maturity

4.4.1. A PMO implementation plan for PACT

Setting up a PMO is similar to launching a project. It involves an analysis of current circumstances, coupled with the development of a specific plan and the implementation of the plan. More specifically, establishing a PMO would involve four specific steps which are shown in figure 26. These steps include: 1. Current status analysis and general concept, 2. Preparation and specification, 3. PMO implementation and 4. PMO normal operations (The Project Group, 2020). See chart 20.

Step 1: Step one should take approximately 1 week and involves the execution of stakeholder analysis and organization gap analysis activities. Stakeholder analysis would involves determining the needs and expectations of stakeholders with regard to the implementation of a PMO. These stakeholders can include the executive director, board members, managers, potential project team members and other staff. After the expectations of stakeholders have been determined, it is important to carry out a gap analysis to determine the difference between the current situation and the defined future reality that the organization wants to accomplish. The results of the Project Management Maturity Assessment would be a key input to this process. The information gathered can be used to develop a list of actions that can be implemented to further ensure the establishment of the PMO.

Chart 20
Steps for PMO implementation

Steps	Description	Task	Detail	Timeframe
1 and General Concept		Stakeholder analysis	Interest groups and their requirements. Human resources (staff, skills set, funding tools, etc.).	1 Week
		Gap analysis	Current status vs. Desired Status. Organizational readiness.	
			Determining efficiency of current processes.	
Step 2	Preparation and specification	Establishing PMO Vision and Mission Establish PMO goals and objectives.	Provides PMO mandate and POMO policy and Direction. Establish PMO Critical success factors.	

		Determine training requirements	Project Management training, certification and skills development.	
		Develop the PMO business case	Highlighting high level requirements for the PMO.	
		Develop PMO deployment plan	Schedules, costs and resources	
		Finalizing organizational staffing requirements	Roles and responsibilities	Weeks 2 and 3
		Determining review processes,	Could include the use of tools such	
		standards, tools and	as the balanced scorecard and 360	
		performance metrics	feedback, etc.	
	Implementation	Training and capacity building	With focus on PMO staff.	Weeks 4 to
		Deploy PMO	Add PMO Staff.	8
Step 3			Pilot PMO	
Step 4	Ongoing operations	Communication with stakeholders	To ensure smooth implementation	
		Verifying standards and processes	To ensure that they are complete.	
		PMO integration	In the case of PMO implementation	
			by an external consultancy	

Note. Compiled by author.

Step 2: Step two will take approximately one to two weeks and involves preparation and the development of specifications. At this stage, the vision, mission, goals and objectives of the PMO should be developed and finalized. This will help to finalize the mandate for the PMO and should give the PMO a policy direction. Staffing requirements and training requirements are also finalized to ensure that the PMO is staffed with the requisite personnel. At this stage, it is important to have dearly defined standards and processes which are measurable. This will help the PMO to meet the success criteria.

Step 3: Step three will take approximately five weeks since it involves the acquisition of PMO staff members and the training of the staff. Currently, PACT has a temporary Project Management Specialist that can be integrated into the Project team. The current staff complement does not include qualified project staff that can be added to the PMO. As such it is expedient for PACT to hire competent project related personnel that can be used to staff the PMO. Judging from current procurement timelines, this process can take at least one month, hence the 5-week time allotment. After all staff members have been acquired, training should be carried out in order to ensure that the staff members are fully aware of their duties, and other processes, standards and tools that are necessary for the effective functioning of the PMO.

Step 4: This process would involve constant communication with stakeholders to ensure that the prescribed requirements are being met. It is also important to ensure that standards and processes are complete and that all governance and administrative functions are in place and working. If and external consultant was hired to facilitate the development of the PMO then PMO integration should occur. In this regard, the PMO responsibilities should be transferred to the employees of PACT at the end of the consultant's contract (The Project Group, 2020).

It is recommended that the four steps be carried out within 8 weeks since this will give the organization a good target and tangible product to achieve within a defined timeframe. It forces the PMO development team to focus on a few key objectives and deliverables that can be delivered within the period of 8 weeks (Merla, 2005). Success factors for the process include the following:

- Development of a sharp vision of what has to be achieved through PMO implementation.
- Determining clear leadership in terms of who is leading the PMO development processes (ex. Project sponsor).
- Determining clear expectations of what is to be achieved within the 30-day period.
- Defining the risks of the process including organizational risks.
- Defining the roles and responsibilities of each person involved in the process.
- Implementing a clear change management process during PMO implementation.
- The achievement of quick wins.

After the PMO has been established, it will be important to use Key Performance Indicators (KPI) to review the outcome of efforts. This is important since the continued existence of the PMO will be contingent on selling its usefulness and value to the organization. It is important for the PMO to understand how its stakeholders perceive value, which would lead to the alignment of performance metrics to the expectations of stakeholders. The assessment of performance using KPIs can help the PMO to establish best practices, avoid mistakes and change course and direction when required (Gijsen, 2020; Holicky, 2020).

The KPIs chosen for the PMO are not meant to cover every measurement since this can lead to confusion and disengagement. Specific KPIs were chosen based on their potential to explain how the KPI brings added value and improvements to the organization (Packebush, 2021). The KPIs chosen are shown in chart 21.

Chart 21
Key Performance Indicators for the PMO

Category	KPI	Detail	Measurement
			Timeframe
Optimized	Percentage	Percentage ROI of all	Annually
Finances	Return on	projects completed by the	
	Investment (ROI)	Organization per year.	

	Percentage budget variance	Percentage Variance of actual budget from projected budget per project per quarter.	Quarterly
	Percentage resource mobilization	Percentage of financial resources mobilized per year as compared to previous years.	Annually
	Cost Performance Index (CPI) Ratio	Ratio comparing budgeted costs of work accomplished to actual amount spent per project per quarter.	Quarterly
Project Completion Effectiveness	Percentage projects milestones completed	Percentage of completed projects compared to all planned projects per year.	Annually
	Percentage of cancelled projects	Percentage of cancelled projects compared to the total amount of projects in the pipeline per year.	Annually
	Percentage of projects completed on time	Percentage of projects competed on time compared to total amount of executed projects per year.	Annually
Resource Management	Number of training and capacity building activities completed	Number of training courses completed per year as compared to preceding years.	Annually

	Number of resource conflicts	Percentage of projects with resource conflicts compared to earlier years.	Annually
	Percentage resource utilization rate	Percentage of employee capacity planned or used on projects per quarter.	Quarterly
Project Quality	Percentage stakeholder satisfaction	Percentage of stakeholders satisfied per year compared to earlier years.	Annually
	Percentage employee satisfaction	Percentage of employees satisfied per year compared to previous years.	Annually

Note. Compiled by author.

The chosen KPIs can be divided in four categories which are optimized finances, project completion effectiveness, resource management and project quality. These KPIs are geared towards measuring the internal effectiveness and the outputs of the Organization as it relates to projects. It also helps to measure the percentage of resources mobilized from external funding institutions such as the World Banks, UNDP, etc. It is intended that the measurement of these KPIs would lead to the achievement of long-term results such as fewer project failures, higher productivity, increased business value and lower costs (Packebush, 2021).

4.4.2. Project Management Maturity improvement plan

The project management maturity assessment can be used to identify specific areas for improvement. Crawford (2021) recommends targeting project management improvements one level at a time over a 6-month timeline. In this regard, it will allow PACT to have some quick wins in order to show that the investment in a PMO is worth it. Quick wins over a six-month period will help to re-energize staff members and the company in a whole, which can pave the way for further improvements (Crawford, 2021).

Since PACT was assessed as being level 1, the next step will be to carry out actions which can improve the maturity of the organization to level 2, before moving on to level 3. Skipping levels can be counterproductive since each level forms a foundation on which to build other levels. In this way, the organization can keep the levels close to each other, so that there is no overreach in one knowledge area, relative to another. For instance, if the project management maturity of project cost management is at level 5, while the maturity of project schedule management is at level 2, then that could pose a problem for the organization. This is so because the benefits to be accrued from a level 5 maturity in one knowledge area may be erased if all of the other areas are assessed as being at level 2.

Appendix H shows the actions to be implemented for improving organizational project management maturity from the first level to the second level. The implementation plan covers a period of 6 months as recommended by Crawford (2021) and includes actions to develop project charters, develop project management plans, acquisition of templates and the establishment of processes, guidelines and best practices that are needed to improve project management maturity (Crawford, 2021).

It should be noted that the implementation plan in appendix H excludes knowledge areas and some components that were assessed to be at level 2 and above. For instance, project procurement management was assessed to be at level 3. As such, actions were not suggested for improvement in that knowledge area. On the other hand, priority is given for improvement in maturity of the other knowledge areas that were slated as being at level 1.

Training and capacity building are key to facilitating project management maturity improvement. In this regard, training and capacity building activities are planned at intervals throughout the six-month improvement period in order to build the knowledge of staff members relating to the project management areas. Training activities will also help to build capacity in staff members for the effective use of templates, and the efficient implementation of guidelines, processes and best practices. The project management improvement period will culminate with a project

management maturity assessment which is aimed at determining what improvements were made during the 6-month period.

4.5. Recommendations for alignment of the PMO to PACT's strategic needs

The PMO will help to achieve PACT's vision and mission by implementing the organization's strategic plan. The PMO will accomplish this task by choosing the right projects to deliver and by helping to ensure that delivery is done effectively, in sync with the strategy. In addition, the PMO will establish processes that help to deliver results and build talent through training and capacity building which will help the organization to avoid projects that are not in line with its strategy (PMI, 2014). In this case, ensuring the strategic alignment of the PMO with PACT's Strategic plan is of paramount importance. Alignment refers to a situation where all parts of the organization are operating in sync with each other and moving in the same direction. When alignment occurs, the roles and responsibilities are clear, overlaps between teams occurs at a minimal, there is controlled demand for resources, resource wastage is avoided and priorities between departments are aligned (ten six, 2016). Such as PMO is twice as likely to be high performing with the ability to create significant value for their host organization.

Since being strategically aligned to PACT's organizational strategy is so important to the success of the PMO, the following recommendations are being proposed.

1. Develop a PMO Strategic Plan

A PMO strategic plan is a document that identifies resources and tools needed to achieve business goals and to complete projects on time and on budget. The plan states clear long term and short-term objectives and sets out a strategy on how to achieve them. Research has shown that companies experience an increased project execution rate of 27% when the PMO strategy is created in line with the organizational strategy. This occurs because PMO staff members are able to make informed decisions, while communicating more with stakeholders and using resources wisely (Giffen, 2019).

Key steps to be taken to develop a PMO strategic plan for PACT include the following:

 Understand PACT's vision, mission and strategic goals: A top-down approach should be used to gain a clear understanding of where the organization is heading. Without this, the PMO strategic plan will not be align with the strategic plans of the organization. As part of this first step it may be worthwhile to do a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis to identify opportunities for growth in the organization that the PMO can facilitate (Giffen, 2019).

- Identify resources needed: It is important to carry out an analysis of the
 resources needed in order to put the strategic plan into action. In this regard,
 it is important to know the financial assets available for fund projects and the
 sources of those assets, the human skillset that is available to the
 organization and the tangible resources available and needed, etc. (Giffen,
 2019).
- Determine modes of communication: It is important for lines of communication to be clear and open. This would include using different modes of communication to for team members to communicate with each other, communicate status updates and convey deadlines and dependencies (Giffen, 2019).
- Establish and prioritize PMO goals: Determine goals for the PMO that are linked to the organization's strategic initiatives rather than initiatives being implemented at the departmental level. The Executive Director, the Managers, PMO staff and other staff members should determine these PMO goals in a coordinated effort (Alexander, 2018).
- Monitor and measure performance: It is important for performance indictors
 to be established which can be used to determine the strategic effectiveness
 of the PMO. Keep in mind that the indicators should be able to identify
 deficiencies and areas where assistance may be needed (Alexander, 2018).
- Determine the PMO's plan for meeting goals and avoiding risks: At this stage, after the goals have been determined, the development of the plan can begin. The plan would delineate the organization's vision, mission and goals, the strategy to be used by the PMO to achieve these goals, the resources to be used, the risks and actions to be used to reduce risks and how success will be measured (Alexander, 2018).

2. Provide executive support for the PMO's functions

Executive buy-in and support is key to facilitating strategic alignment of the PMO. A PMO that does not have executive support will not be able to function effectively in achieving the strategic plans and to add value to the organization. This is because the executive leadership is key for enabling a culture of change in the organization by giving their vocal support for new processes, and the institutionalization of those processes. With this kind of support the PMO will be able to support the organization from a tactical and strategic perspective (PMI, 2014).

3. Invest in an all-star PMO team

PMOs work well when they are equipped with talented leadership and team members. Studies have shown that high performing PMOs are more likely to have highly skilled staff when compared to low performing PMOs (58% vs. 27%) (PMI, 2014).

If PACT fails to invest in skilled staff, it can do that at the expense of the full implementation of its organizational strategy. In this regard, it is particularly important for PACT to invest in talented PMO staff members who understand project management processes and best practices and who can introduce the right tools within the organization for the implementation of the strategic plan.

PMI (2014) recommends for staff to be acquired who have strong skills in leadership and decision making, cost control, contract management, cost estimating, risk management, planning and scheduling and project procurement. In this way, the PMO would be influential in helping other staff members to understand the organization's strategic goals and in providing the organization with the tools that are necessary for the achievement of those goals (PMI, 2014).

4. Continuously measure value

Metrics are called the "lifeblood of the PMO" because they give an indication of whether the PMO is achieving its mandate. Measuring the value of the PMO using metrics produces data which can show the effectiveness of current trends when compared to the long-term performance of the organization. The data provided can also be used by PACT to make comparisons with the performance of other organizations (Singh, 2017). This data can be used to show strengths, weaknesses,

opportunities and threats which can help the PMO to chart a roadmap for improved implementation of PACT's strategic plan.

5. CONCLUSIONS

The investments made by PACT are critical for the conservation of protected areas and for the promotion of sustainable development. The organization invests millions of dollars per year and works in concert with NGOs and Protected Areas Comanagement organizations who apply for funding grants to facilitate project implementation. Additionally, as an accredited entity to the GCF and the Adaptation Fund, PACT applies for funding which facilitates the implementation of projects which aim to build resilience to climate change.

Nevertheless, PACT does not have a PMO, and this has resulted project management activities being implemented in an extemporized manner without the use of established project management processes. This results in projects not being able to keep within constraints relating to the project scope, schedule and budget. For this reason, this FGP was executed with the main objective which is develop a proposal for the establishment of a PMO within PACT. To support the main objective a Project Management Maturity assessment was carried out, the different types of PMOs were identified and examine the best fit for PACT, the PMO structure, personnel role and placement in PACT's organizational structure was determined, and an implementation plan was developed. In addition, the project resulted in the provision of recommendations which should aid in the alignment of the PMO with PACT's strategic plan.

 As part of objective 1, the Project Management Maturity level of PACT was assessed, and this was done using the PMMMSM. The PMMMSM model utilizes the ten knowledge areas of the PMBOK (6th Edition) to analyze the project maturity of the organization and presents 5 levels of maturity which shows the level of advancement of the organization being assessed. PACT was assessed as being at level 1 maturity for nine knowledge areas, including project integration management, project scope management, project schedule management, project cost management, project quality management, project resource management, project communications management, project risk management, and project stakeholder management. This means that ad hoc processes are carried out for project

management activities which do not hold individual project managers to account. Project procurement management was assessed as being at level 3 maturity, meaning that the organization has standards and processes that are implemented and repeated for all projects. The project management maturity of the entire organization was assessed to be at level 1 as stipulated by the guidelines of the PMMMSM model.

The results of the assessment indicate the need for a PMO to be instituted at PACT since the PMO is key to increasing project management maturity in organizations that were assessed as being at a low level. This is because the PMO acts as a focal point for the consistent application of processes, standards and methodologies that are vital for success in project management.

• As part of objective 2, different types of PMOs were identified and examined in order to determine the most suitable option for PACT. This included the identification of reasons to justify the inclusion of a PMO at PACT. The reasons identified include the fact that PACT is a project-oriented institution that operates at a low project management maturity level. Other reasons include the need to mobilize resources, build climate resilience, earn additional income, achieve sustainable development and enhance protected areas management.

Three types of PMOs were identified for consideration. These are as follows:

- The supportive PMO which helps to supply templates, training best practices, methodologies and lessons learned.
- The controlling PMO which provides support to projects but also requires compliance to project related requirements.
- The directive PMO which is more prone to take over projects with the aim of managing them directly.

Based on the level of project management maturity of the organization, in addition the other factors, the best type of PMO that should be implemented by PACT is the supportive PMO. As the organization matures a transition can be made from a supportive PMO to a controlling PMO. Further maturity can

lead to the establishment of a directive PMO at a later date. In terms of PMO frameworks, the PMO should serve as a center of excellence for Project Managers and for senior management. The PMO should be a one stop shop for project related methodologies, standards, tools, techniques and expertise within PACT. The PMO's scope and functions would encompass practice management, infrastructure management, resource integration, technical support, and business alignment.

Objective 3 sought to determine the best placement of the PMO in PACT's organizational structure, the best structure of the PMO and the roles of PMO personnel. As part of the assessment, it was concluded that the supportive PMO should have enough authority within PACT to carry out its functions. This is very important since successful PMOs are twice as likely to report to the head of the organization, when compared to PMOs that are not successful. In this regard, it was concluded that the Supportive PMO should be instituted within the Office of the Executive Director. This placement gives the PMO a high level of authority to do its work which encompasses the provision of training, consulting, mentoring, project management, project support, processes, standards and project management software tools for the accomplishment of PACT's strategic Objectives.

Initially, the PMO can have a simple structure, but effort should be made to expand this structure as project management maturity improves and as the need for more organizational alignment arises. The structure of the PMO would include the PMO Director, the Project Manager, the Project Development Specialist, and the Project Assistant. The roles of PMO personnel will include managing PMO staff performance, advising senior managers and technical staff about project management practices, proving guidance and support for the use of project management processes, standards and metrics, providing support for project management activities, assisting in the preparation of "call for proposals," leading project design and proposal development, schedules and resources.

Objective 4 facilitated the development of a plan for the establishment of the PMO and a plan for the improvement of project management maturity. Establishing the PMO would take four specific steps. Step one should take approximately 1 week and involves the execution of stakeholder analysis and organization gap analysis activities. Step two will take approximately 1 to 2 weeks and involves preparation and the development of specifications. At this stage, the vision, mission, goals and objectives of the PMO should be developed and finalized. Step three will take approximately 5 weeks since it involves the acquisition of PMO staff members and the training of the staff. Step 4 would involve constant communication with stakeholders to ensure that their requirements are being met.

After the PMO has been established, it will be important to use Key Performance Indicators (KPI) to review the outcome of efforts. The chosen KPIs can be divided in four categories which are optimized finances, project completion effectiveness, resource management and project quality.

A 6-month project maturity improvement plan was developed for PACT to facilitate movement from level 1 to level 2. Carrying out the plan over a period of 6 months will allow PACT to have some quick wins in order to show that the investment in a PMO is worth it. The quick wins will help to help to reenergize staff members and the company in a whole, which can pave the way for further improvements.

The plan includes actions to develop project charters, develop project management plans, acquisition of templates and the establishment of processes, guidelines and best practices that are needed to improve project management maturity. Training and capacity building are also included in the plan in order to facilitate improvements in project management maturity.

 Objective 5 facilitated the provision of recommendations for alignment of the PMO to PACT's strategic needs. Since being strategically aligned to PACT's organizational strategy is so important to the success of the PMO, five recommendations were proposed. The first is related to the development of a PMO strategic plan which identifies resources and tools needed to achieve PACT's strategic plan and to complete projects on time and on budget. It is possible that PACT can experience an increased project execution rate of 27% when the PMO strategy is created in line with the organizational strategy. The second recommendation was related to the provision of executive support and buy-in, which is key to ensuring that the PMO is empowered to carry out its strategic functions. A PMO that does not have executive support will not be able to function effectively in achieving the strategic plans and to add value to the organization since executive leadership is key for enabling a culture of change in the organization.

The third recommendation was related to the equipping of the PMO with skilled staff who can provide leadership in carrying out strategic functions. It is important for staff to be acquired who have strong skills in leadership and decision making, cost control, contract management, cost estimating, risk management, planning and scheduling and project procurement.

The final recommendation was related to the use of metrics to produce data which show the effectiveness of the PMO in achieving strategic goals. Metrics are called the "lifeblood of the PMO" because they give an indication of whether the PMO is achieving its mandate. The data provided can be used by PACT to make comparisons with the performance of other organizations and also to show strengths, weaknesses, opportunities and threats which can help the PMO to chart a roadmap for improved implementation of PACT's strategic plan.

6. RECOMMENDATIONS

This research project has presented pertinent information showing the level of project management maturity of PACT; the need for a PMO to facilitate improvements in project management maturity; the structure, functions and placement of the PMO; plans for the establishment of the PMO and for improvement project maturity; and recommendations for strategic alignment of the PMO. The following recommendations are therefore being provided to facilitate enhancement beyond the scope of what is presented in this project report so that PACT can truly achieve its long-term goals. The recommendations are as follows:

- 1. Project maturity is geared towards facilitating progressive improvements in management approach, methodologies and systems. Even though a project management maturity assessment was carried out as part of this project, it should not be a one-off event. Having the initial project management maturity score is not the goal. In this regard, PACT should be working to progressively enhance its maturity, and this can be supporting by a subjective maturity assessment of the organization at any point in time.
 - In this regard, it is recommended for the maturity assessment to be carried out regularly by the PMO Director, after the maturity improvement plan has been implemented. The repeated assessments can help to track progress against the improvement plan and can help to validate whether improvements are occurring while reinforcing the adoption of new standards. Carrying out recurring assessments can show whether the PMO is helping the organization to achieve its goals and can serve as a tool to communicate success and achievements to top management (Crawford, 2021).
- 2. The management and staff of PACT are in favor of establishing a controlling PMO, as is mentioned in the results. This is because of the need for PACT to provide processes, templates and guidelines to grantees and to monitor their implementation. Nevertheless, it is recommended for PACT to establish a supportive PMO and to facilitate improvement of its project maturity level to level 2 before considering the establishment of a controlling PMO. This is important because the implementation of a controlling PMO at the first

instance, without facilitating progressive improvements and a change in organizational culture, could generate resistance from stakeholders which would lead to PMO failure. As project management maturity increases, the PMO Director, in conjunction with executive management, should use the results of the project maturity improvement plan to gauge the readiness of PACT for the upgrading of the PMO from supportive to controlling. As project management maturity improves beyond level 2, it is recommended for PACT to establish a directive PMO. This process can take months to years, but it would serve the organization well in the long run.

- 3. As the PMO is set up, it is recommended for the Executive Director to ensure that a good change management program is put in place and that it is carried out concurrently to all other work being carried out. This is because staff may be skeptical about proposed changes at first and this can lead to resistance in the setting up of the PMO. In this regard, good change management should be practiced from the start since this can help to convince the staff members of the organization about the advantages of establishing a PMO, thereby gaining their acceptance (The Project Group, 2020).
 - Additionally, visible support from the Executive Director and functional managements should always be given as the PMO is being set up. This can help to motivate stakeholders to accept the PMO and the changes that would result from its establishment.
- 4. The PMO should be committed to continuous improvement. This means that the PMO should strive to improve in determining what project management activities are carried out and how these activities are carried out on a continuous basis. This is process should be led by the PMO Director and the Executive Director.
 - It should be noted that continuous improvement goes beyond the use of processes and standards. It means that there must be continuous strengthening of the people and the organization in its entirety. It is recommended for Deming's improvement cycle of Plan, Do, Check, Act be followed. See appendix I.

- "Plan" means that the objectives and means to improve must be put in place. "Do" means that the plan must be implemented. "Check" means that verification must be conducted to ensure that the activities are achieving the intended results. "Act" means that corrective actions should be implemented, based on the results of verification activities (Otterloo, 2017).
- 5. Of all the recommendations given for strategic alignment, the most important of those relates to the development of an all-star team in the PMO. The job of a PMO is to decide what needs to be done and to help the organization to do it well. This can only be accomplished if the PMO is staffed with skilled and qualified personnel. This is very important for PACT since interviews have shown that the organization has a high staff turnover and faces difficulties in keeping qualified staff. In this regard, great care should be taken to secure highly qualified individuals to staff the PMO. In addition, the Executive Director should execute an institutional analysis to determine the reasons for the high staff turnover at PACT. The results if the analysis should lead to changes within PACT that facilitate staff retention over the long term.

7. BIBLIOGRAPHY

- Adaptation Fund. (2021). Protected Areas Conservation Trust.

 https://www.adaptation-fund.org/ie/protected-areas-conservation-trust/
- Alie, S. (2015). Project governance: #1 critical success factor. Paper presented at PMI® Global Congress 2015—North America, Orlando, FL. Newtown Square, PA: Project Management Institute.
- Alexander, M. (2018). How to develop a PMO strategic plan.

 https://www.cio.com/article/221920/how-to-develop-a-pmo-strategic-plan.html
- Aziz, E. (2014). The PMO: your key to strategy execution and results delivery.

 Paper presented at PMI® Global Congress 2014—EMEA, Dubai, United

 Arab Emirates. Newtown Square, PA: Project Management Institute.
- Boyde, J. (2014). A Down-To-Earth Guide to SDLC Project Management: Getting your system / software development life cycle project successfully across the line using PMBOK adaptively. 2nd Edition. CreateSpace Independent Publishing Platform. South Carolina, United States.
- Brown, L. (2021). The Project Management Life Cycle, and Its 5 Phases. https://www.invensislearning.com/blog/5-phases-project-management-lifecycle/
- Caliste, A. (2013). The PMO, maturity and competitive advantage. Paper presented at PMI Global Congress 2013—North America, New Orleans, LA. Newtown Square, PA: Project Management Institute.
- Crawford, J. (2021). Project Management Maturity Model. Fourth Edition. Taylor and Francis Group. LLC, 6000 Broken Sound Parkway, NW, Boca Raton, Fl.
- Formplus. (2021). 7 Data Collection Methos and Tools for Research. https://www.formpl.us/blog/data-collection-method
- Giffen, P. (2019). Developing a strategic plan for your PMO. https://monday.com/blog/project-management/pmo-strategy/
- Wedekind, G. and Philbin, S. (2020). Research and Grant Management: The Role of the Project Management Office (PMO) in a European Research Consortium Context. ampusuci2.com/gspm/moodle3/my/index.php

- Gijsen, K. (2020). KPIs to measure the performance of your PMO. MOJEO. https://www.mojeo.nl/en/de-kpis-om-de-prestaties-van-je-pmo-te-meten/
- Giraudo, L. & Monaldi, E. (2015). PMO evolution: from the origin to the future.

 Paper presented at PMI® Global Congress 2015—EMEA, London, England.

 Newtown Square, PA: Project Management Institute.
- Greengard, S. (2013). No PMO? Know when you need one. *PM Network, 27*(12), 44–49.
- Green Climate Fund. (2019). Readiness Proposal.

 https://www.greenclimate.fund/sites/default/files/document/readiness-proposals-belize-pact-entity-support.pdf
- Hill, G. (2014). The complete project management office handbook. Boca Raton: Auerbach Publications, 6000 Broken Sound Parkway NW, Boca Raton, FL.
- Holicky, K. (2020). Measure the Success of Your PMO (PMO Part 4). https://meisterplan.com/blog/kpis-for-pmos/
- International Financial Consulting. (2017). Strategic Plan for The Protected Areas Conservation Trust (PACT). https://www.pactbelize.org/mdocs-posts/pact-strategic-plan-2017-2021/
- Juneja, P. (2021). What is a Project.

 https://www.managementstudyguide.com/what-is-project.htm
- Kotwani, D. (2019). Top 10 Project Management Knowledge Areas. https://www.smarttask.io/blog/project-management-knowledge-areas
- Martinez, R. (2020). The Project Management Office (PMO): 4 Steps to Choose Its Organizational Structure. https://www.project-management-podcast.com/articles?view=article&id=604&catid=52
- Merla, E. (2005). From zero to PMO in thirty days. Paper presented at PMI® Global Congress 2005—Latin America, Panama City, Panama. Newtown Square, PA: Project Management Institute.
- Mullaly, M. E. & Thomas, J. (2010). Re-thinking project management maturity: perspectives gained from explorations of fit and value. Paper presented at PMI® Research Conference: Defining the Future of Project Management, Washington, DC. Newtown Square, PA: Project Management Institute.

- National Climate Change Office. (2016). Belize's Third National Communication to The United Nations Framework Convention on Climate Change.

 https://unfccc.int/sites/default/files/resource/blznc3.pdf
- National Institute of Open Schooling. (2014). Overview of Information Sources. https://nios.ac.in/media/documents/SrSecLibrary/LCh-005.pdf
- Otterloo, S. (2017). Information security and PDCA (Plan-Do-Check-Act). https://ictinstitute.nl/pdca-plan-do-check-act/
- Ozmen, E. (2013). Project management methodology (PMM): how can PMM serve organizations today? Paper presented at PMI® Global Congress 2013—EMEA, Istanbul, Turkey. Newtown Square, PA: Project Management Institute.
- Packebush, S. (2021). 18 Project Portfolio Management KPIs to Measure PMO

 Performance. https://www.planview.com/resources/guide/projectmanagement-office-ppm-best-practices/project-portfolio-management-kpis/
- Pedamkar, P. (2020). Types of research Methodology. https://www.educba.com/types-of-research-methodology/
- Pennypacker, J. S. & Grant, K. P. (2002). Project management maturity: an industry-wide assessment. Paper presented at PMI® Research Conference 2002: Frontiers of Project Management Research and Applications, Seattle, Washington. Newtown Square, PA: Project Management Institute.
- Pfeiffer Library. (2020). Research Methodologies. https://library.tiffin.edu/researchmethodologies/whatareresearchmethods
- PMI. (2013). PMO Frameworks. PMO Frameworks Report | PMI Pulse of Profession
- PMI. (2014). The Project Management Office:
- Aligning Strategy and Implementation. https://www.pmi.org//media/pmi/documents/public/pdf/white-papers/pmo-strategy-implement.pdf
- Project Management Institute. (2017). A guide to the Project Management Body of Knowledge (PMBOK guide) (6th ed.). Project Management Institute.

- Protected Areas Conservation Trust. (2018). Conservation Investment Strategy 2018-2021. https://www.pactbelize.org/wp-content/uploads/2018/08/PACT-Conservation-Investment-Strategy.pdf
- Protected Areas Conservation Trust. (2019). Annual Report 2018/2019. file:///C:/Users/Admin/Downloads/PACT%20Annual%20Report%202018-2019.pdf
- Protected Areas Conservation Trust. (2020). Annual Report 2019/2020. file:///C:/Users/Admin/Downloads/PACT%20Annual%20Report%20FY%201 9-20.pdf
- Protected Areas Conservation Trust. (2021). Annual Report 2020/2021. https://www.pactbelize.org/?mdocs-file=4897
- Planisware. (2021). 5 major roles a Project Management Office plays within a company. https://www.planisware.com/hub/blog/5-major-roles-project-management-office-plays-within-company
- Prakash, O. (2021). What are PMO roles and responsibilities in an organization? https://www.saviom.com/blog/pmo-roles-responsibilities-organization/
- Puri, R. (2020). PMO Types-Supportive, Controlling, Directive. PMVIDYA. https://pmvidya.com/blog/pmo-types-supportive-controlling-directive/
- Rincon, I. (2014). Building a PMO from the ground up: Three stories, one result.

 Paper presented at PMI® Global Congress 2014—North America, Phoenix,

 AZ. Newtown Square, PA: Project Management Institute.
- Sagepub. (2013). The Selection of a Research Approach.

 https://us.sagepub.com/sites/default/files/upmbinaries/55588_Chapter_1_Sample_Creswell_Research_Design_4e.pdf
- Sindhuja. S. (2021). Project: Types, Objectives and Organization.

 https://www.businessmanagementideas.com/project-management/project-types-objectives-and-organisation-project-management/9992
- Singh, V. (2017). The Project Management Office: Aligning Strategy & Implementation. https://www.linkedin.com/pulse/project-management-office-aligning-strategy-vrijesh-singh/

- Streefkerk, R. (2021). Primary and secondary sources.

 https://www.scribbr.com/citing-sources/primary-and-secondary-sources/
- Taylor, P. (2021a). What is a project in project management?

 https://kissflow.com/project/what-is-a-project/
- Taylor, P. (2021b). 5 Phases of Project Management A Complete Breakdown. https://kissflow.com/project/five-phases-of-project-management/
- Ten Six. (2016). How PMOs contribute to organizational alignment. https://tensix.com/how-pmos-contribute-to-organizational-alignment/
- The Project Group. (2020). Establishing a PMO in 4 simple steps. The Project Group. https://www.theprojectgroup.com/blog/en/how-to-set-up-a-pmo/
- University of Bradford. (2007). Introduction to Research and Research Methods. https://www.unrwa.org/sites/default/files/introduction-to-research-and-research-methods.pdf
- University of Edinburgh. (2021). Literature Review. https://www.ed.ac.uk/institute-academic-development/study-hub/learning-resources/literature-review
- Van den Berg, H. (2012). Project recovery: don't always recover the project—
 rethink the business case. Paper presented at PMI® Global Congress
 2012—North America, Vancouver, British Columbia, Canada. Newtown
 Square, PA: Project Management Institute.
- Wedekind, G., & Philbin, S. (2020). Research and Grant Management: The Role of the Project Management Office (PMO) in a European Research Consortium Context. https://core.ac.uk/download/pdf/227106377.pdf
- World Bank. (2015). Belize Marine Conservation and Climate Adaptation. https://projects.worldbank.org/en/projects-operations/project-detail/P131408
- Young, C. (2008). Belize's Ecosystems: Threats and Challenges to Conservation in Belize. https://journals.sagepub.com/doi/pdf/10.1177/194008290800100102

8. APPENDICES

Appendix A

FGP Charter (Source: Compiled by author)

PROJECT CHARTER

Formalizes the project start and confers the project manager with the authority to assign company resources to the project activities. Benefits: it provides a clear start and well defined project boundaries.

provides a clear start and we	en denned project boundaries.
Date:	Project Name:
November 10 th 2021	Proposal for the establishment of a Project Management Office (PMO) for the Protected Areas Conservation Trust (PACT)
Knowledge Areas / PM Processes:	Application Area (Sector / Activity):
Knowledge areas: Project Integration Management, Scope Management, Time Management, Cost Management, Quality Management, Human Resource Management, Communication Management, Risk Management, Procurement Management & Stakeholder Management Process groups: Initiation, Planning, Execution, Monitoring & Control & Closing	Protected Areas Management
Project Start Date:	Project Finish date:
November 10 th 2021	April 1 st , 2022

Project Objectives (General and Specific):

General Objective:

To develop a proposal for the establishment of a Project Management Office in the Proteced Areas Conservation Trust (PACT) which should facilitate the delivery of high-quality projects with consistency and efficiency.

Specific Objectives:

- 1. To assess the project management maturity level of PACT which should give insights into the methodologies, approaches, strategies and decision making processes used for project management.
- 2. To identify and examine the different types of PMOs in order to determine the type that is most suitable for adoption by PACT.

- 3. To determine the best structure of the PMO, the roles of PMO personnel and the best placement of the PMO in PACT's organisational structure for ensuring consistent and effective project management.
- 4. To develop an implementation plan which outlines the main steps and procedures to be followed for the establishment of the PMO, policies on training and improvement of organisational maturity and guidelines for aquiring requisite personnel.
- 5. To provide recommendations which should ensure the allignment of the PMO with the Strategic needs of PACT so as to ensure that it provides added value to the organisation.

Project purpose or justification (merit and expected results):

PACT was established in 1996 to finance conservation activities in Belize's protected areas. In 2015, a new regulation was passed which mandated PACT to finance and manage the entire National Protected Areas System (NPAS) of Belize. This NPAS is comprised of 103 sites which includes Wildlife Sanctuaries, National Parks, National Monuments and Nature Reserves. PACT funds projects under the priority areas of Protected Areas Management and Conservation, Protected Areas Promotion and Development, Community Development in Protected Areas, and Environmental Education and Awareness. PACT is also accredited to the Adaptation Fund and acts as a National Implementing Entity (NIE) for Climate Change Adaptation Projects. PACT is also accredited to the Green Climate Fund (GCF) and acts as a Direct Access Entity for the implementation of Climate Change Mitigation and Adaptation projects.

PACT does not have Project Management Office (PMO). Project proposal development and Project implementation is carried out by Program Officer and a Climate Change Technical Officer. Project implementation at PACT, and at other organizations that are funded by PACT, is also supported by a Finance Officer and a Procurement Officer. The Finance Officer ensures effective fiduciary management of projects that are funded by PACT. In many cases, the lack of an office or unit that is dedicated to project management has led to the ineffective implementation of projects. Ineffective implementation has been demonstrated through inadequate project planning and execution, and projects being completed over budget and beyond the required schedule.

It is for this reason that assessments need to be carried out to find out more information about the project management practices of PACT, to validate the need of a PMO, to determine the best fit for a PMO within the organization and to identify ways in which a PMO can enhance PACT's ability to achieve its strategic goals. Through this research it was established that a PMO is needed for enhancing PACT's ability to plan, manage, implement and control projects. The PMO would help in standardization of methods and processes and would help PACT to produce consistent and accurate results through project implementation.

Description of Product or Service to be generated by the Project – Project final deliverables:

The products to be delivered by the project are as follows:

- 1. A report showing the results of the assessment of PACT's project management maturity level.
- 2. A section of the overall thesis document showing the results of the examination of different types of PMOs and a determination of the most suitable option for PACT.
- A section of the overall thesis document depicting the structure of the proposed PMO, the roles of PMO personnel and the placement of the PMO in PACT's organisational structure.
- 4. An implementation plan to support the establishment of a PMO within PACT.
- 5. A section of the overall thesis report presenting recommendations for allignment of PMO with the strategic needs of PACT.

Assumptions:

It is assumed that full permission for executing this research would be given by the Executive Director of PACT. It is also assumed that the cooperation of PACT's staff was given to the researcher. This cooperation would facilitate the provision of access to documents which are housed at PACT. It is also expected that staff would make themselves available for surveys and interviews as needed.

Constraints:

The thesis is to be executed in three (3) months. Due to the time constraint it is important for the scope of the thesis to be tailored according to the timeframe given by the University. If at any time the researcher believes that the project will go beyond the schedule, an extension was requested from the University.

Preliminary Risks:

The main preliminary risks are as follows:

- 1. If required documents and interviews are not provided early in the process, the project might be delayed and this can have a negative impact the project schudule and quality of the deliverables.
- 2. If support is not given for the project by PACT's Executive Director, then it might affect the researcher's ability to carry out the research at the organisation, which would have an impact on the project scope.
- 3. If significant unplanned purchases have to be made for the execution of the project, then it would affect the researcher's ability to aquire the items needed, and would thus have an impact on the project budget.

Buuget.				
The proposed budget	of the	project	is as	follows:

ITEM	COST
Materials and supplies (ex. Stationary)	USD\$200
Transportation	USD\$400
Tools and equipment (relevant software,	USD\$350
recorder)	

Subscription to relevant journals and	USD\$150	
supporting online platforms		
Miscellaneous Expenses	USD\$300	
TOTAL	USD\$1400	

Milestone	Start date	End date
Graduation Seminar Start	November 8th,	December 10th,
	2021	2021
FGP deliverables (Charter, WBS, etc.)	November 8th,	December 3rd,
	2021	2021
Graduation Seminar Approval	December 6th,	December 10th,
	2021	2021
Tutor Assignment	February 14th,	February 14th,
	2022	2022
Adjustments of previous chapters	February 17th,	February 23rd,
	2022	2022
Chapter 4- Development (Results)	February 24th,	April 25th, 2022
	2022	
Chapter 5- Conclusions	April 26th, 2022	May 2nd, 2022
Chapter 6- Recommendations	May 3rd, 2022	May 9th, 2022
Tutor Approval	May 9th, 2022	May 9th, 2022
Reading by reviewers	May 10th, 2022	May 30th, 2022

Relevant historical information:

PACT has had over 20 years of experience in funding and implementing projects. The agency also has significant experience in carrying out feduciary activities for agencies such as the World Bank, the Meso-American Reef Fund (MAR Fund), the Global Environment Facility (GEF). PACT is also accredited to the Adapation Fund and the Green Climate Fund for the development and implementation of climate change projects in Belize. PACT has a reputation of being an agency that has low capacity for the effective implemenation of projects due to the fact that it lacks many trained and qualified personnel and the absence of an office or unit dedicated to project management. A project is currently being implemented by PACT to enhance its readiness to acquire and manage project funds and to develop and implement projects. Nevertheless, the current project is focused on training and does not aim to consider the development of a PMO. As such, this is the first project of its kind to be executed on behalf of the organisation and which will provide results for effective management and execution of projects.

Stakeholders:

Direct stakeholders:

- 1. PACT Executive Director
- 2. PACT Programme Officer
- 3. PACT Monitoring Officer
- 4. PACT Conservation Investment Manager
- 5. PACT Climate Change Technical Officer

- 6. PACT Procurement Officer
- 7. PACT Finance Officer

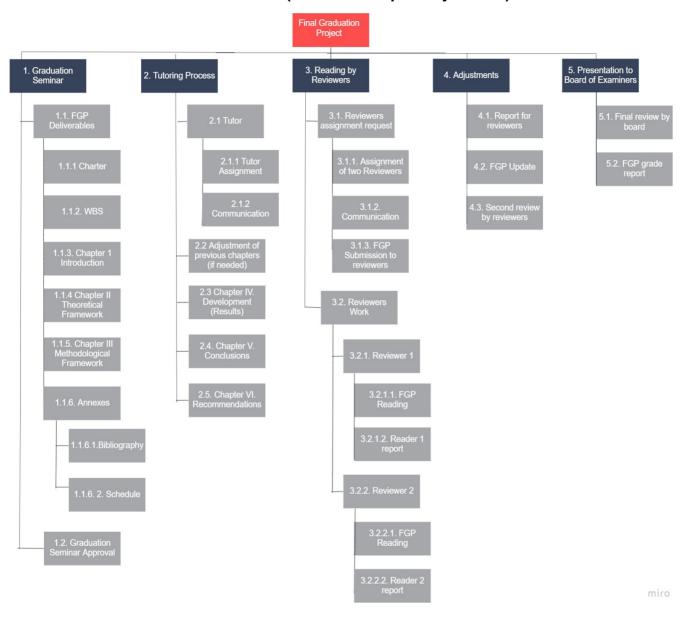
Indirect stakeholders:

- 1. Green Climate Fund Focal Point
- 2. Global Environment Facility Focal Point
- 3. Various Protected Areas Co-Managers
- 4. Association of Protected Areas Management Organisation
- 5. Chief Executive Officer, Ministry of Sustainable Development, Climate Change and Disaster Risk Management

Approval:	
	Signature: 🔏 📶
Project Manager: Colin Mattis	by life of the state of the sta
Authorized by: Colin Mattis	Signature:
	\

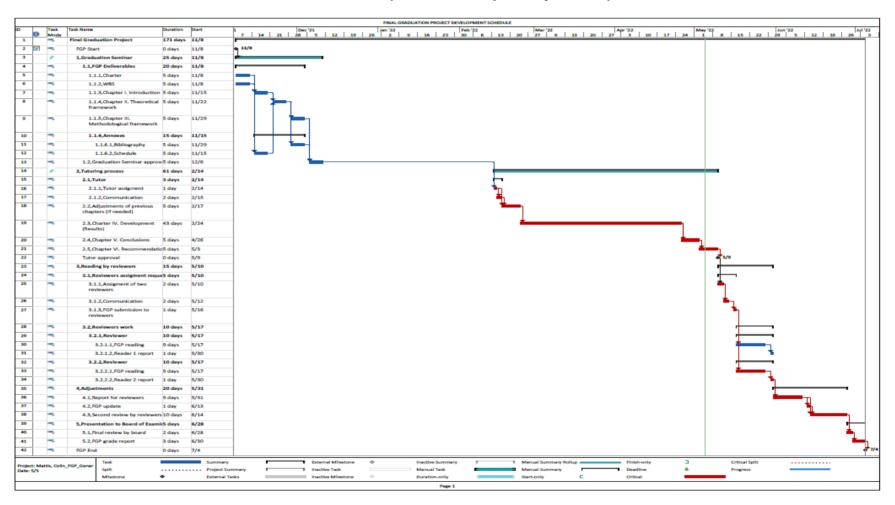
Appendix B

FGP WBS (Source: Compiled by author)



Appendix C

FGP Schedule (Source: Compiled by author)



Appendix D

Survey Instrument (Source: Compiled by author)

This survey is being undertaken as part of a research project to "develop a Proposal for the establishment of a Project Management Office in the Protected Areas Conservation Trust" being carried out by Mr. Colin Mattis in partial fulfilment of the Master of Project Management at the Universidad para la Cooperacion Internacional (UCI).

Specifically, the project aims to determine the project management maturity level of the organization using the Project Management Maturity Model. The project also seeks to determine the best type of PMO for PACT, determine the best structure of the PMO, development of an implementation plan for the establishment of the PMO and to provide recommendations which ensure that the PMO is aligned with the strategic needs of PACT.

The procedure involves filling out the survey, which will take approximately 5 minutes. The survey will be confidential, and the responses will only be used for scholarly purposes. If you have any questions about the survey, or the study, please contact Mr. Colin Mattis by calling 6374926 or by sending an email to csmattis@yahoo.com.

1. Name		
2. Gender Male Femal		
3. What is your age range?		
<20 years 21-25 years 36-40 years >40 years	26-30 years	31-35 years

	4.	How long na	ve you worked at the F	Protected Areas Cons	ervation Trust?
<1	ye	ar 🔙	2-3 years	4 to 5 years	> 5 years
	5.	What is the h	nighest level of educati	on that you have attai	ined?
As Ba Ma	ssoc ache aste	School Diplom ciated Degree elors Degree ers Degree or of Philosoph			
Υє		Do you have	any formal training in	project management?	•
Υє	7. es [Do have any	experience in managi	ng projects?	
	8.	If you have a	inswered yes to the ab	ove, how much exper	ience do you have?
<1	ye	ar 🔲	2-3 years	4 to 5 years	> 5 years

Appendix E

Interview schedule (Source: Compiled by author)

This interview is being undertaken as part of a research project to "develop a Proposal for the establishment of a Project Management Office in the Protected Areas Conservation Trust" being carried out by Mr. Colin Mattis in partial fulfilment of the Master of Project Management at the Universidad para la Cooperacion Internacional (UCI).

Specifically, the project aims to determine the project management maturity level of the organization using the Project Management Maturity Model. The project also seeks to determine the best type of PMO for PACT, determine the best structure of the PMO, development of an implementation plan for the establishment of the PMO and to provide recommendations which ensure that the PMO is aligned with the strategic needs of PACT.

The interviewer will take notes of the discussion, and although participants' professions and place of employment may be revealed the final report, no quotes or attributed opinions will be used without express permission by the interviewee. Given permission, the interview will also be recorded to back up any written notes.

Name of Interviewee:

Designation:

Date of Interview:

Time of interview:

INTRODUCTION

- 1. What is your responsibility in project management and implementation at PACT?
- 2. Has PACT been involved in the management of projects?

- 3. If yes, how long has PACT been involved in the management of projects?
- 4. What are the main strategic objectives that PACT seeks to accomplish through project management and implementation?
- 5. Does PACT have a specialized organizational unit or office for the management of projects?
 - a. If yes, how many staff members does the unit/office have and what are their designations and responsibilities?
 - b. If no, do you have intentions to develop such a specialized Unit for the management of projects?
- 6. How many employees at PACT can be considered as having project management certification and experience?
- 7. What challenges, if any, does PACT face in the management of projects?
- 8. In your opinion, what are the solutions to these challenges?

TYPES OF PMOs AND PLACEMENT WITHIN PACT

- 9. Does PACT need a PMO to define, maintain and ensure project management standards across the organization?
- 10. If yes, kindly state your opinion on what should be the main roles of the PMO. Should the PMO play a supportive, controlling or directive role within the organization?¹

¹ **Supportive PMO**- Supportive PMO's act as a repository to your organization's projects. It supplies templates, best practices, training and keeps track of lessons learned. These have a very low degree of control in projects. You can adopt this if your organization has a functional or weak matrix type. In functional or weak matrix organizations, project managers have very little control. Functional managers manage virtually all activities, and the budget is under their sole control. Project managers are generally in project expedition or project coordinator roles.

- 11. If a PMO is set up within PACT, will the office have the full support of senior management?
- 12. Is funding readily available or obtainable for the establishment of a PMO? Explain.
- 13. If a PMO is set up within PACT, at what level within the organizational structure should the PMO be placed?

Controlling PMO- Controlling PMO's act as the auditor of the company. They check whether organizational tools, processes, and standards are applied in projects. They have a moderate degree of control in projects, they are well suited to an organization with a balanced matrix model. In balanced organizations, project control is shared among functional manager and project manager. They manage the project activities and budget together. Controlling PMO's check whether the processes, tools, and standards are being applied or not. Corrective actions are taken in case of problem in application or efficiency of processes, tools, and standards.

Directive PMO- As the name suggests, Directive PMO's manage and have a high degree of control in projects. They are suitable for an organization that is a strong matrix or projection type. In strong matrix or projectized organizations, the project manager controls the project. The ultimate authority in relation to the project lies with the project manager. Directive PMO's take complete control of all the projects executed within the organization.

Appendix F

PMMM Self-Assessment Survey Checklist (Source: Compiled by author)

This self-assessment survey is being undertaken as part of a research project to "develop a Proposal for the establishment of a Project Management Office in the Protected Areas Conservation Trust" being carried out by Mr. Colin Mattis in partial fulfilment of the Master of Project Management at the Universidad para la Cooperacion Internacional (UCI).

Specifically, the project aims to determine the project management maturity level of the organization using the Project Management Maturity Model. The project also seeks to determine the best type of PMO for PACT, determine the best structure of the PMO, development of an implementation plan for the establishment of the PMO and to provide recommendations which ensure that the PMO is aligned with the strategic needs of PACT.

The student will take notes of the discussion, and although participants' professions and place of employment may be revealed the final report, no quotes or attributed opinions will be used without express permission by the interviewee. Given permission, discussions will also be recorded to back up any written notes.

		Project Management Maturity Levels				
	Answers	1	2	3	4	5
PROJECT INTEGRATION MANAG	EMENT					
Has PACT instituted any formal						
requirements for Project Charter						
Development? Are project						
charters developed for projects?						
Has PACT instituted any formal						
requirements for Project						
Management Plan						
Development?						
At PACT, is project execution						
usually carried out through the						
implementation of a Project						
Management Plan?						

D 0.071			1		
Does PACT have established					
processes for Project Knowledge					
Management? What processes					
exist for the use of current					
knowledge or the creation of new					
knowledge through project					
implementation?					
Does PACT have established					
processes for Monitoring and					
Controlling Project Work in					
order to keep projects on track					
within the parameters of the scope					
statement?					
Are there arrangements in place					
for Integrated Change Control at					
PACT? Explain.					
What processes are in place for					
orderly Project or Phase					
Closure?					
Special Interest Component:					
Does a Project Management					
Office (PMO) exist within PACT?					
PROJECT SCOPE MANAGEMENT	u.	ı			
Has PACT instituted any formal					
requirements for Scope					
Management Planning? Are					
scope management plans					
developed for projects?					
Do processes, standards and					
procedures exist for					
Requirements Collection					
(Business and Technical) for					
projects?					
Do processes exist for developing		П			
a detailed Scope Definition for					
each project? Are project scope					
statement documents compiled?					
Are Work Breakdown Structure					
documents developed during the					
scope definition process?					
Do processes exist for Scope					
Validation? That is, do processes					
exist to facilitate the formal					
	i	1	1	1	1
acceptance of completed deliverables?					

What processes exist for Scope Change Control ? Do procedures exist to monitor project status and manage scope baseline?				
PROJECT SCHEDULE MANAGEN	IENT	I		
Has PACT instituted any formal requirements for Schedule Management Planning ? Are schedule management plans developed for projects?				
Do processes exist for Activity Definition to produce the products and services identified in the WBS?				
Is Activity Sequencing carried out to determine when each product or service must be accomplished relative to other activities?				
What procedures exist for Activity Duration Estimating to determine the time needed to complete activities?				
Do processes exist for Schedule Development ? That is, do processes exist for determining durations and calculating the start and finish dates of project activities using project network diagrams and other tools?				
Do procedures exist for Schedule Control to ensure project completion within the required timeframe?				
Do processes exist for Schedule Integration? Are major components of project schedules integrated throughout the organization?				
PROJECT COST MANAGEMENT				
Has PACT instituted any formal requirements for Cost Management Planning? Are cost management plans developed for projects?				

Are factors, equations, relationships, expert knowledge(and other tools and techniques) used for Cost Estimating?					
What processes exist for Budget Determination , including the determination of cost baselines?					
What procedures exist for Cost Control to ensure that the project is completed within the approved budget?					
PROJECT QUALITY MANAGEME	NT				
Has PACT instituted any formal requirements for Quality Management Planning? Are quality management plans developed for projects?					
What processes, procedures and standards exist for Quality Management or quality assurance?					
What procedures and standards exist for Quality Control to ensure that project comply with established quality standards?					
Special Interest Component:					
Is there in-depth Management Oversight for projects? Does top management understand, support and participate in project management activities?					
PROJECT RESOURCE PLANNING	.	T	T		T
Has PACT instituted any formal requirements for Resource Management Planning? Are resource management Plans developed for projects? What processes are used for identifying, documenting and assigning project roles and responsibilities for project teams?					
What procedures exist for Resource Estimation? How are team resource activities and					

	Т	ı	I	I	I	
physical resource quantities estimated?						
What processes exist for Resource Acquisition? That is, what process exist for the identification, solicitation and acquisition of project resources?						
Does PACT ensure that project Team Development occurs? Does PACT implement activities to create synergies, improve competencies and facilitate interaction among project team members?						
Do processes and procedures exist for Team Management to ensure team buy-in for projects? Do team members participate in requirements analysis, scope development and other project activities?						
What procedures are in place for Resource Control? That is, how does PACT monitor the planned vs. actual use of resources during project implementation. Special Interest Component:						
Does PACT carry out Professional Development Management? That is, does PACT implement activities to ensure the professional development of project management personnel?	ANAGEMENT					
PROJECT COMMUNICATIONS MADE Does PACT have any established processes for Communications Management Planning in projects?	ANAGEMENI					
Does PACT have established processes for Communications Management? That is, does PACT employ processes to ensure that information is						

disseminated to project stakeholders?				
Stationolders:				
Does PACT include procedures				
and processes for				
Communications Monitoring?				
That is, does PACT employ				
procedures and processes for				
status reporting, progress				
measurement, and forecasting?				
PROJECT RISK MANAGEMENT				
Has PACT instituted any formal				
requirements for Risk				
Management Planning? Are risk				
management plans developed for				
projects?				
What procedures exist for Risk				
Identification and				
documentation?				
Does PACT carry out Qualitative Risk Analysis for projects?				
Does PACT carry out				
Quantitative Risk Analysis for				
projects?				
Is Risk Response Planning				
carried out at PACT? That is, has				
PACT identified processes to be				
used for risk identification? Has				
PACT defined steps to manage				
identified risks?		 		
Does PACT carry out Risk Response Implementation? That				
is, does PACT ensure the				
implementation of planned risk				
responses that were agreed on				
during risk response planning?				
Does PACT carry out Risk				
Monitoring? Are risks controlled				
according to a risk management				
plan and other established				
procedures?				
PROJECT PROCUREMENT MANA	AGEMENT			
Does PACT carry out				
Procurement Management				
Planning through the				

development of a procurement				
management plan? What				
procedures are used by PACT to				
determine whether to procure or				
produce materials? Does PACT carry out procurement				
Solicitation and Requisition?				
That is, does PACT use specific				
approaches to acquire materials				
for projects?				
Does PACT carry out procedures				
for Procurement Control and				
Vendor Management? That is,				
does PACT implement processes				
for managing contracts over the				
entire period of the project life				
cycle?				
PROJECT STAKEHOLDER MANA	GEMENT			
Does PACT carry out processes				
and procedures for Stakeholder				
Identification? That is, are				
established standards used to				
identify and analyze stakeholders				
and for monitoring and controlling stakeholder engagement?				
Does PACT carry out				
Stakeholder Management				Ш
Planning? That is, are strategies				
developed and used to manage				
and engage stakeholders				
throughout the project lifecycle?				
Does PACT implement				
established standards for				
Managing Stakeholder				
Engagement? That is, are				
processes employed for				
continuously communicating with				
stakeholders and for ensuring that				
their needs are met?				
Does PACT implement				
established standards for				
Monitoring Stakeholder Engagement? That is, are				
processes carried out to monitor				
the engagement satisfaction of				
stakeholders.				
	1			

KNOWLEDGE AREA MATURITY I	EVEL			
Project Integration Management				
Project Scope Management				
Project Schedule Management				
Project Cost Management				
Project Quality Management				
Project Resource Management				
Project Communications Management				
Project Risk Management				
Project Procurement and Vendor Management				
Project Stakeholder Management				
ORGANIZATIONAL MATURITY LEVEL				

Appendix G

Characteristics of Project Management Maturity Levels (source: Crawford, 2021)

KNOWLEDGE AREAS		Proje	ect Management Maturit	y Levels	
	1 Initial Process	2 Structured Process and Standards	3 Organizational Standards and Institutionalized Process	4 Managed Process	5 Optimizing Process
Project Integration Management	 No established processes and procedures exist which leads to activities being implemented in an ad hoc manner. Minimal documentation of ad hoc processes. Total lack of a PMO or the existence of a rudimentary PMO with one or 2 staff members. 	 Basic processes and procedures are in place for project integration management. Processes are not considered to be organizational standards. A basic PMO exists with individuals who might have part time roles. Work reports are developed 	 Most processes and procedures for project integration management are standardized for the organization. A PMO exists to facilitate the process of integration management. The PMO is part of the organizational project management landscape. There are standard practices for 	 All processes are in place for integration management, and these are used for all projects. Project activities, processes and procedures are aligned with corporate processes and the organization's strategic plan. A PMO exists and helps to facilitate information and reporting systems. Best practices for project implementation are collected and 	 Project integration management processes are in place and are used by the organization. Lessons learnt are documented and regularly used within the organization. A PMO exists which provide tools, methodologies and training for the organization.

		as a result of activities implemented. - Management participates in large projects that are strategically important to the organization.	project management. Documentation is standard for implemented processes and actions.	maintained by the PMO.	
	Level 1	Level 2	Level 3	Level 4	Level 5
Project Scope	 Scope definition may be generic by just basically stating requirements. No scope management plan for projects but scope is defined through other documents. Project requirements are collected informally. A basic scope statement may exist and may contain the first 	 Basic processes exist for project scope management. Management partially participates in processes for scope management. Scope management plan is developed. Methods exist for requirements collection and for ensuring 	 Rigorous documentation exists for project management processes. A template for the development of scope management plans is used consistently for all projects. Standard processes exist for the collection of requirements. Standard processes exist for definition project scope 	 Institutionalized processes are used for all projects. All projects are measured with an organizational view where management understands and participates in the project management process. Scope management planning is conducted with the use of expert judgement and 	 Major focus is placed on the effective management of current projects and ensuring the improvement in the management of upcoming projects. Scope management plan is developed with a key focus of ensuring value and ensuring improvements.
Management	level of the WBS.	quality.			-

- The organization may have a basic WBS or might not have one at all.
- Scope is validated in an ad hoc manner.
- Scope changes are monitored and carried out in an ad hoc manner.
- A template for scope statement is available for use.
- A template for WBS development exists.
- Basic processes and templates exist for scope validation and control.
- within the organization.
 Standard processes exist for the
 - development of the WBS.
 Outputs are the WBS, the WBS dictionary, the scope baseline, and the requirements traceability

matrix.

- lessons learnt from past projects.
- Requirements are collected in full detail and are fully documented.
- Scope definition takes account of existing functions, systems and projects in the organization.
- The WBS is created and is part of the change control process.
 The WBS is closely aligned with deliverables.
- Scope validation includes methods to allow actions based on feedback given.
- All scope changes are carried out by established process and are documented in detailed.

- Change in requirements are fulling documented when it occurs.
- Processes for developing scope definitions are inspected and refined so that they can be enhanced.
- Processes for developing the WBS are regularly inspected so that they can be improved.
 Scope
- validation is conducted by ensuring that deliverables are measures against industry standards.
- The scope change control process is continually improved.

	Level	Level	Level	Level	Level
	1	2	3	4	5
Project Schedule Management	 There are no established planning or scheduling standards. Schule management plans are not developed for projects. Activities are defined in an ad hoc manner. Project activities are not sequenced in most cases. No standard processes ae used to estimate activity durations. Its left up to the project managers. Ad hoc processes are used to facilitate schedule development and does not include the use of network 	 Basic standards and procedures exist for schedule management. A schedule management plan exists and is used to guide the schedule management process. Processes exist for scope development and for preparing the scope statement but there is no organizational mandate to adhere to the process. A simple process exists for activity sequencing. 	 There are well established schedule management processes which are used in most projects. Templates are available for schedule management planning. Methods are employed to determine the best scheduling methodology to use (waterfall, adaptive, omdemand, etc.) Scope statements, (including assumptions and constraints) and the WBS are used for activity definition and to determine the required resources. 	 Historical data is used to forecast future performance in schedule management. Schedule management planning is mandated to be conducted for all projects. Processes for activity definition are used for all projects and the activities are monitored regularly. Project dependencies are determined and regularly monitored. Activity duration estimation is carried out regularly and the information is used for project related decision making. 	 The schedule management process is continually optimized. Lessons learnt are used to forward the optimization process. Schedule management planning is carried out in such a way as to ensure value creation and improvement. Processes are available to continuously improve activity definition, sequencing and duration estimation. Schedule development is continuously improved using project work

diagrams and Though not Activity Schedule diagrams, development baseline mandatory for sequencing is established projections, etc. conducted, use, tools and incudes the use of activity Schedule control techniques baseline estimates showing durations. is conducted are used to dependencies, and influences baselines, etc. informally with estimate successor and decision making. Processes are Schedule control available for activity predecessor project managers durations. activities. is carried out continuous Activity duration choosing their using regular improvement in own methods. estimation is assessments. schedule Schedule carried out using Earned value and control and integration is performance integration. activity either not carried templates. reporting is also out or is done carried out. Dependent informally. external activities | -An integrated and are identified. organized process and historical for schedule integration exists information is and is fully used. The process is documented. documented. Schedule development is conducted using automated tools that are standard of the organization. A historical database exists for collecting and analyzing project duration information.

			- Processes exist for schedule integration, change control, schedule reporting and earned value analysis and these processes are followed by the project teams.		
	Level	Level	Level	Level	Level
	1 - Management	2 - Processes	- Processes for	- Coat management	5 - Lessons
	recognizes the	exist for cost	cost	planning is	learned are
	need for	management,	management are	mandated to be	sued to
	processes, but	and it includes	in place and are	carried out for all	improve the
	established standards are	the development	considered to be organization	projects. The amount of detail is	cost management
	not in place.	of a cost	standards.	related to the size	process.
	- Cost	management	- Cost	and type of	- Cost
	management	plan.	management	project.	management
	plans are not	- A	plans are	 Cost estimating is 	planning is
	developed, and	documented	developed.	integrated with	carried out in a
	budgets are	progress	Budgets are	PMO finance,	way that
	loosely defined Cost estimating	exists for cost estimated and	determined using scope	accounting and human resource	ensures value creation and
	is done in an ad	facilitates the	statements,	systems.	continuous
	hoc manner and	preparation of	schedules and	- Budget	improvements.
	estimates may	cost	estimates, etc.	determination and	- Processes
	be incomplete.	estimates,	 Cost estimating 	cost control are	exist to ensure
Project Cost	- Different	scope	is carried out and	carried out using	continuous
Management	methods may be	statements	includes	well documented	improvements

used to developed budgets but there is no organizational standard Project managers for different projects apply their own approaches for cost control. Cost control is not regularly managed or monitored.	WBS templates and summary cost schedules. - Baselining is not common in budget determination and is not an industrial standard. - Cost control reports are published and distributed. - Cost metrics such as "planned budget and percentage complete" are not collected.	alternative cost analysis. The process is repeated for projects. - Budget determination includes the development of project baselines at the lowest reasonable level. - All project teams follow cost control, cost reporting and performance measurement processes.	and established processes that are integrated with other organizational systems.	in cost estimating which will help the organization to enhance cost forecasting and improve cost management efforts Processes are in place to improve the budget determination process. This includes the use of lessons learnt to improve cost baselining Cost control processes are continuously improved. Cost assessments and lessons learned are uses to improve cost monitoring and control.
--	---	--	--	--

	Level	Level	Level	Level	Level
	1	2	3	4	5
Project Quality Management	- There are no established processes for project quality management and quality management plans are not developed No established processes exist for quality assurance. Project Managers have the option of doing ad hoc checks to ensure the team members are following procedures Established processes do not exist for quality control, but team members have the options of asking colleagues to review work	- Basic quality standards have been adopted by the organization Quality management plans are developed and used for all projects Basic processes exist for quality assurance Guidelines for quality control includes document review, inspections and tests Management oversight is large on highly visible projects but not on small projects.	 There are well established quality standards that are mandated to be followed through the organization. Management participates in the quality management process. Quality management planning is mandated to be carried out in all projects. Quality management plans are developed and are tailored to the size and type of project. Quality management for large projects includes tools and techniques for quality assurance. All 	- Quality is managed using an organizational perspective. All projects are mandated to follow quality management processes Quality management planning seeks to ensure the creation of value and ensuring improvements occur Quality management is carried out using tools and techniques such as walk-throughs and reviews Policies, procedures and guidelines are included in an organizational quality management system.	- Lessons learned are gathered from the quality management planning process and these are used to improve the process Lessons learned from the quality assurance process are sued to improve quality management of all future projects The results from quality control activities are used to make decisions relating to usability, fitness and acceptability of the

	before it is finalized. - Management understands the need for project management but only intervene on a limited basis.		members of the project team are involved in quality assurance. - Quality control includes measuring progress against established organizational standards. - Management is involved actively in project management activities.	 The results from projects are evaluated and reviewed against established quality management performance standards. Management is integrally involved in project management processes and execute their duties in an excellent manner. 	product/service Processes exist to improve the participation of top management in quality management activities.
	Level 1	Level 2	Level 3	Level 4	Level 5
Project Resource Planning	 Even though recognizes the need for project resource management, no repeatable process exists for this purpose. Resource management plans are not developed for projects. Resources for projects are 	 There are repeatable processes in place for managing human and physical resources. Resource management plans are created for projects. Project managers 	 There are established resource management processes that are followed by most projects. Resource management plans are developed for projects. Project managers use standardized 	 Forecasts are used for resource planning and prioritization. Resource management planning is incorporated into resource pool management and prioritization. Detailed resource estimation processes are in place, and these 	 Established human resource planning processes are used for all projects. Resource management planning processes are evaluated routinely to facilitate improvements.

- determined in an ad hoc manner.
- There are no repeatable processes for resource estimation and acquisition. Both are carried out in an ad hoc manner.
- Team
 development is
 not carried out
 regularly.
 Individuals are
 assigned to
 activities based
 on their skill set.
- Team
 management
 takes the form of
 occasional
 meetings which
 are used to
 explain the
 direction of
 projects.
- Resource control is carried out loosely.
 Optimization is not ensured, and

- create an overview of the human and physical resources needed for projects and the timeframe in which they are needed. Resources
- estimation is carried out for near-term efforts.
 Methods such as bottom-up, analogous and parametric are used to estimate resources for larger projects.
 Procedures
- Procedures
 exist for the
 acquisition of
 skilled staff for
 projects.
- Procurement processes are used to acquire

- processes for estimating and acquiring project resources.
- The WBS is used to estimate resources needed for project activities. Resource estimation also involves the use of industry standards.
- The PMO is involved on ma aging resources. Standardized procurement processes are used to acquire resources.
- Team developed is ensured by the project managers who encourage a collaborative, problem-solving environment.
- Team management includes the use of conflict

- are being used by call projects.
 Resources are estimated on a regular basis.
- Resource
 acquisition
 processes are
 incorporated at the
 corporate level
 with other
 procurement and
 finance processes.
- Team
 development is
 carried out by
 ensuring that staff
 members are
 trained ad that
 they demonstrate
 improvements.
- Team
 management
 involves the
 execution of
 performance
 evaluations for
 team members
 and the existence
 of a conflict
 management
 process to be
 used by all project
 teams.

- Resource
 estimation
 process is
 improved
 continuously to
 ensure that the
 type and
 quantity of
 resources
 needed are
 identified as
 early as
 possible.
- Enterprise resource forecasting is carried out for resource acquisition.
- requests are evaluated against the resource pool constraints and ensure that acquisition is carried out effectively and efficiently.
- Team development is ensured by carrying out

involves the use of alternative analysis to correct variance in the use of resources. Professional development management involves the integration of project related competencies into the organizational human resources structure. Project staff are hire based on their knowledge and experience. Straining activities. Lessons learned are used to improve team management processes and team satisfaction is evaluated. Lessons learned are used to improve resource control processes. Lessons learned are used to improve resource control processes.

	Level	Level	Level	Level	Level
	1	2	3	4	5
Project Communication s Management	- Ad hoc processes are used for project communications management Communications management plans are not developed Communications monitoring is carried out informally with infrequent reporting.	- Basic communications management processes exist in the organization Communications management plans are developed for large and highly visible projects, but their use is encouraged for all projects The Communications management plan includes all communication needs for all phases of the project life cycle Communications	 The communications management process is institutionalized, and communications management plans are required for all projects. Communications management includes the use of a formal information retrieval system and a formal information distribution system. Communications monitoring includes the use of s-curves, histograms and narrative reports of project status and progress. 	 Communications management planning processes are incorporated into the corporate communications structure and is mandated for all projects. Methods exist for the updating and refining of communications management plans. A project management information system exists which helps in the retrieval and archiving of information. Communications monitoring includes and carrying out of performance measurements. 	- Processes exist to continuously improve communication s management in projects Communicatio ns management planning documents and lessons learned are analyzed to ensure that improvements are made, and that value is added Communicatio ns management incudes the provision of total documentation to all stakeholders in a timely fashion.

		management is carried out by ensuring that information is distributed via hard copy and electronic means. A shared site is used to distribute communicatio n information to stakeholders Status, phase completion and summary reports are used for communicatio ns monitoring.			- Communications monitoring utilizes performance metrics to ensure effectiveness and efficiency.
	Level 1	Level 2	Level 3	Level 4	Level 5
Project Risk Management	- Even though management recognizes the need for risk management, there are no established	- Risk management plans are developed for projects, especially for large and	 Risk management is carried out using organizations standards and processes. Risks management 	 Organization wide risk management processes are utilized for all projects. Risk management planning is required for all 	- Risk management plans are developed to ensure the creation of value and to

- processes in place.
- Risk management plans are not developed for projects.
- Risk
 management
 panning is
 carried out in an
 ad hoc manager
 and the risks to
 realizing benefits
 are not
 considered by
 the project team.
- Risks are identified on an ad hoc basis and not routinely.
- Little or no qualitative and quantitative risk analysis is carried out.
 Project managers speculate on if the risk will occur and the impact of the risk.
- Risk response planning is

- highly visible projects.
- Risk
 identification
 involves the
 use of
 documented
 processes.
 These
 processes are
 mostly used
 by large
 projects.
 Qualitative
- risk analysis
 involves using
 methodologie
 s for
 assessing
 probabilities
 and impacts
- and impacts.

 Quantitative risk analysis involves methods to rate risks, determine financial impacts of risks using probability and value

calculations.

- plans are developed and applied to all projects.
- Documented and repeatable processes are used for risk identification.
- Risk registers are used to identify risks.
- A fully
 documented and
 repeatable
 process is used
 for qualitative
 risk analysis.
- Advanced procedures are sued to quantify risks. This involves the use of multiple criteria for prioritizing risks.
- Risk response planning involves the use of standard processes and templates.
- Risk response implementation

- projects. Planning strategies are tailored to the size and type of project.
- Risk identification involves the use of documented processes to identify total risks for all projects ad integrated risks.
- Qualitative and quantitative risk analysis involves the use of documented processes and includes the analysis of risks on cost management, time management, strategic planning processes, finance and accounting systems.
- Risks response planning processes are documented and is integrated within the cost management, time

improvements.
Processes are in place to facilitate continuous improvements in risk identification in order to ensure that risks are

identified as

completely as

facilitate

possible. Processes are in place to facilitate continuous improvements in qualitative and quantitative risk management. Lessons learned are captured and used as part of this process. Risk response planning includes the

use of project

reserves.

	minimal. Risks are addressed as they arise. Risk response implementation does not always occur. Responses are not always implemented after they are determined. Risk monitoring is hardly carried out. Day to day problem solving of risks is carried out.	 Risk response planning is carried out using procures that are specified by the risk management plan. Risk response implementatio n occurs for large visible projects and the tasks are incorporated into the project schedule. Risks owners are responsible for risk monitoring and for implementing responses. 	is mandated by the organization as a response to identified risks. - Risk monitoring involves routinely checking risks and taking corrective actions.	management, strategic planning processes, finance and accounting systems and the PMO. - Risk management planning ensures that risks are incorporated within cost management, time management, strategic planning processes, finance and accounting systems. - A fully documented risk monitoring system is utilized.	Lessons learned are captured and used to facilitate improvements Risk response implementation involves the use of lessons learned to facilitate improvements Documented processes are used to carry out and improve risk monitoring. Lessons learned are used to improve risk monitoring processes.
	Level	Level	Level	Level	Level
Duningt	1	2	3	4	5
Project	No project	٨	Thoro oro	All project	Tho
Procurement	- No project	- A	- There are	- All project	- The
Management	procurement	documented	specific	managers are	procurement
	standards are in	process	organizational	mandated to	process is
	place.	covers the	standards for the	comply with	reviewed, and

- Procurement management planning is carried out on an hoc basis. There is no recognized process.
- Procurement solicitation and requisition does not involve the use of specific approaches for covering vendor contracts, evaluations and negotiations.
- Procurement and vendor management includes the loose management of contracts.

- an re d
 - process.
 Procurement
 management
 planning
 involves
 project
 managers and
 includes the
 use of scope
 statements
 and statement
 of work in
 order to make
 decisions.

procurement

services, but it

considered to

be a standard

organization

of good and

is not

Procurement solicitation and requisition includes the use of processes for evaluating bids and for acquiring items from vendors.

- procurement process.
- Procurement management planning involves the execution and presentation of formal makeor-buy analysis.
- Procurement requisition and solicitation includes the use of expeditious processes to access vendors. A preferred vendor list is maintained by the organization.
- Procurement control and vendor management includes the use of organizational processes and standards that all contractors and vendors are asked to comply with.

- procurement procedures of the organization.
- Procurement
 management
 planning is carried
 out by the entire
 team, including
 the project
 manager, the
 project sponsor,
 senior
 management and
 the purchasing
 department.
- Procurement solicitation and requisition ensures that procurement and requisition practices are fully integrated into the organization's procurement process and organizational solicitation process.
- As part of procurement control and vendor management processes.

- enhancements are made periodically.
- Procurement management planning activities and processes are evaluated so that enhancements can be made routinely.
- Procurement solicitation and requisition includes the use of contract vehicles and lists of preferred vendors.
- Procurement control and vendor management includes the evaluation of contractors using effectiveness and efficiency metrics.

		- Procurement control and vendor management includes the provision of status reports by vendors with no specific format or frequency.		vendors are required to plan their activities using the organization's standard techniques and to report progress routinely.	
	Level 1	Level 2 - Basic project	Level 3 - Standard	Level 4 - Stakeholder	Level 5 - Processes
Project Stakeholder Management	stakeholder management processes are carried out. There are no established standards for identifying and analyzing stakeholder needs or for reengaging stakeholders. No process exists for the development of stakeholder	stakeholder management processes exist. Processes exist for the identification and analysis of stakeholders Stakeholder management plans are developed for large and highly visible projects.	processes for managing stakeholders exist and are implemented across the organization. - Stakeholder management plans are developed for all projects. - Standard approaches are used throughout the organization for developing stakeholder	management plans are developed and are mandated to be used in all projects Processes exist for the updating of stakeholder management plans as projects progress through the distinct phases Automated information retrieval systems are used to	exist for the continuous improvement of project stakeholder management. - Stakeholder identification documentation and lessons learned are compiled and used to improve value in stakeholder management activities.

Management management management Stakeholder manage plans. of stakeholder strategies. The stakeholder needs engagement Stakeholder level of practices are on demand. engagement continuously needs are engagement is Performance varies from addressed when project to determined using measurements are reviewed, and analytical tools used to monitor tools are used requests are project. made. Methods for stakeholder to facilitate and expert Stakeholder handling judgement. engagement in all continuous monitoring does projects. stakeholder Stakeholder improvements. analysis results Monitoring not occur. engagement issues are not are used to includes the develop uniform. use of communications **Procedures** performance for monitoring management metrics and stakeholder plans which are lessons used to address learned to engagement exist but are the needs of facilitate not standard. stakeholders. continuous They vary Stakeholder improvements from project to engagement and project. activities are enhancements. continuously monitored using standard tools that capture,

store and distribute information.

Appendix H

PACT's 6-month Project Management Maturity improvement plan (Source: Compiled by author)

PROJECT	Aim	ACTION	OWNER	DURATION
MANAGEMENT				
KNOWLEDGE AREA				
	PROJECT	INTEGRATION MANAGEMENT		
Project Charter	Introduce the use of	Acquire project charter template. Ensure	Executive	Week 1 to 3
Development	project charters.	that project charter forecast benefits to	Director	
		be delivered.		
		Estimate value metrics for benefits.		
Project Management	Introduce the use of	Acquire project management plan	Project	Week 1 to 3
Plan Development	Project Management	template and institute a process for	Director,	
	Plans.	project management plan development.	PMO	
		Institute benefits management plan as		
		part of the project management plan.		
Project execution	Project management	Assign work and resources using the	Project	Week 1 to 3
	plan is used for project	project management plan. Document	Director, PM	
	execution.	information on work results and project	0	
		status.	5	144 1 4 4 0
Project Knowledge	Improve the	Develop process and template for	Project	Week 1 to 3
Management	documentation of	documenting lessons learned and	Manager,	
	lessons learned and	create folder archives for storage.	PMO	
NA	analysis of results.	Barrier Hater Landers (co.	B.A 'to . '	M
Monitoring and	Introduce the collection	Develop and introduce process for	Monitoring	Week 1 to 3
Controlling Project	of basic metrics.	collecting and integrating metrics, time	Officer,	
Work		spent on activities, variance analysis	Conservatio	
		and performance measurement	n Investment	
		analysis.	Investment	
			Department	

Integrated Change Control	Develop and use integrated change control process.	Acquire templates for change request form and change request log for use in integrated change control process.	Project Manager, PMO	Week 1 to 3
Project or Phase Closure	Institute process for project of phase closure.	Develop process for formal acceptance of deliverables and the closure of contracts, especially for cancelled projects. Develop process for the collection of artifacts to ensure organizational learning.	Project Manager, PMO	Week 1 to 3
Training and Capacity Building	Improve capacity in Project Management knowledge areas	Execute online training course for PACT staff.	PMO Director, PMO	Week 1 to 4
	PROJE	CT SCOPE MANAGEMENT	•	1
Scope Management Planning	Ensure the development of scope management plans.	Acquire templates for scope management plan to that can be used in scope management planning.	PMO Director, PMO	Week 4 to 6
Requirements Collection	Collect requirements suing formal process.	Develop or acquire standard methods and templates for collecting business and technical requirements.	Project Officer, PMO	Week 4 to 6
Scope Definition	Ensure the documentation of project scope statements.	Acquire or develop template and process for the development of project scope statements.	Project Officer, PMO	Week 4 to 6
Work Breakdown Structure	Ensure the development of the WBS for projects.	Acquire WBS template. Develop documented process for completing template.	Project Officer, PMO	Week 4 to 6
Scope Validation	Use documented process for scope validation.	Develop and institute a documented process for validation of project deliverables by management and project team.	Project Officer, PMO	Week 4 to 6

Scope Change Control	Institute process and standards for change control.	Acquire of develop templates to monitor project status and the scope baseline. Develop change control process to be used by projects.	Project Officer, PMO	Week 4 to 6
	PROJEC	T SCHEDULE MANAGEMENT		
Schedule Management Planning	Ensure the development of schedule management plans for projects.	Acquire template and develop process for schedule management plan development.	PMO Director, PMO	Week 7 to 9
Activity Definition	Institute processes, standards and guidelines for activity definition.	Acquire templates and develop repeatable process for scope statement development and activity definition.	Project Officer, PMO	Week 7 to 9
Activity Sequencing	Institute process for activity sequencing.	Develop a documented process to be used for activity sequencing. This should include the identification of precedence, dependencies constraints and assumptions.	Project Officer, PMO	Week 7 to 9
Activity Duration Estimating	Develop standard process for activity duration estimation.	Acquire and institute standard tools and techniques for activity duration estimating.	Project Officer, PMO	Week 7 to 9
Schedule Development	Institute organizational process for schedule development.	Develop guidelines to institute a repeatable and fully documented processes for developing schedules.	Project Officer, PMO	Week 7 to 9
Schedule Control	Ensure that a process exists for schedule control.	Develop a process for managing and controlling project schedules and institute a schedule change control system.	Project Officer, PMO	Week 7 to 9

Schedule Integration	Ensure that a process exists for schedule integration.	Develop and institute process for manually integrating schedules at the summary and detailed levels.	Project Officer, PMO	Week 7 to 9
	PROJ	ECT COST MANAGEMENT		
Cost Management Planning	Institute the development of cost management plans.	Acquire template and develop process for the development of cost management plans.	Assistant Accountant, Accounting and Finance Department	Week 10 to 12
Cost Estimating	Institute standards and processes for cost estimating.	Acquire template and develop documented process for cost estimating.	Assistant Accountant, Accounting and Finance Department	Week 10 to 12
Budget Determination	Develop and use a standard process for developing cost baselines.	Acquire templates and develop documented process for developing cost baselines and for allocating and time phasing projects.	Assistant Accountant, Accounting and Finance Department	Week 10 to 12
Cost Control	Improve cost control procedures.	Acquire templates and institute process for collecting and reporting metrics such as "planned budget and percentage complete".	Assistant Accountant, Accounting and Finance Department	Week 10 to 12
Training and capacity building	Improve capacity to use templates, processes and guidelines.	Execute 2-day training workshop	PMO Director, PMO	Week 12

	PROJE	CT QUALITY MANAGEMENT		
Quality Management Planning	Institute process for quality management planning.	Acquire template and develop process for the development of quality management plans. Ensure that quality planning is mandatory for all projects and that the process is tailored from project to project.	PMO Director, PMO	Week 10 to 12
Quality Management	Institute a process for quality assurance at PACT.	Develop and institute processes tools and techniques for quality assurance. Ensure that checklists are used to check and promote quality throughout project lifecycles.	PMO Director, PMO	Week 10 to 12
Quality Control	Institute practices and standards for controlling quality.	Acquire templates and develop a process for quality control which includes tests, inspections and reviews.	PMO Director, PMO	Week 10 to 12
	PROJE	ECT RESOURCE PLANNING		
Resource Management Planning	Institute process for resource management planning.	Acquire templates for the development of resource management plans. Develop documented process for resource management planning to be used by project managers.	Manager, Human Resources and Administrati on Department	Week 13 to 15
Resource Estimation	Institute process to be used for resource estimation.	Develop a process to be used for resource estimation, including resource listing and methodologies that help to identify quantities.	Manager, Human Resources and Administrati	Week 13 to 15

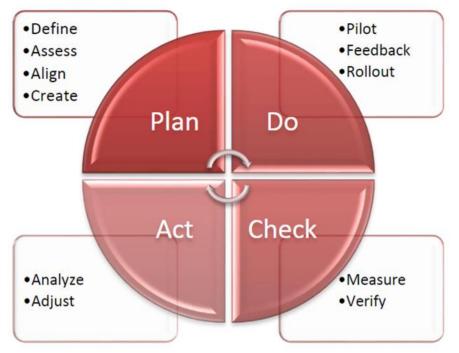
			on Department	
Team Development	Ensure that a process is carried out regularly for team development.	Develop and institute a process to be used for including team members in project planning and scope and workplan development.	Manager, Human Resources and Administrati on Department	Week 13 to 15
Team Management	Institute processes and activities for team management.	Develop processes to involve staff in team meeting, status reviews and regular project reviews.	Manager, Human Resources and Administrati on Department	Week 13 to 15
Resource Control	Institute process for effective resource control.	Develop process which is used to manage resources by time and place. Develop process for tracking resource expenditure.	Manager, Human Resources and Administrati on Department	Week 13 to 15
	PROJECT CO	MMUNICATIONS MANAGEMENT		
Communications Management Planning	Develop standards for communications management planning.	Acquire templates and develop process for the development of communications management plans. The process should also dictate the drafting of regular summary reports for large projects.	Manager, Conservatio n Investment Department	Week 16 to 18

Communications Monitoring	Improve communications monitoring.	Acquire templates and develop process for the provision of status, progress and phase completion reports.	Manager, Conservatio n Investment Department	Week 16 to 18
	PROJ	ECT RISK MANAGEMENT		
Risk Management Planning	Institute processes for the development of risk management plans.	Acquire template and develop templates for the development of risk management plans.	Project Officer, PMO	Week 16 to 18
Risk Identification	Improve risk identification processes.	Develop and document a process that is to be used on all projects.	Project Officer, PMO	Week 16 to 18
Qualitative Risk Analysis	Develop a process to be used to qualitative risk analysis.	Acquire templates and develop standard methodologies that can be used to assess probabilities and impacts of risks.	Project Officer, PMO	Week 19 to 21
Quantitative Risk Analysis	Develop a process to be used to quantitative risk analysis	Acquire templates and develop methodologies that can be used to assign numeric ratings to risks and to quantify potential impacts on a project-by-project basis.	Project Officer, PMO	Week 19 to 21
Risk Response Planning	Develop process for risk response planning.	Ensure that risk management plans contain strategies to be used to manage risks and ensure that risks owners are assigned.	Project Officer, PMO	Week 19 to 21
Risk Response Implementation	Develop a process to be used for risk response implementation.	Integrate risk response tasks into the schedule of projects and ensure that they are carried out on all projects, especially the large ones.	Project Officer, PMO	Week 19 to 21

Risk Monitoring	Institute a process which ensures that risk monitoring is carried out.	Develop process which mandates risk owners to monitor and to document risk status.	Project Officer, PMO	Week 29 to 21
	PROJECT S	STAKEHOLDER MANAGEMENT		
Stakeholder Identification	Develop and implement processes for stakeholder identification.	Acquire templates and develop process for stakeholder analysis. Ensure that stakeholder management plans are developed for projects.	Project Officer, PMO	Week 22 to 24
Stakeholder Management Planning	Improve stakeholder management planning.	Develop process to ensure that's stakeholders provided with documents relating to status reports, progress reports and phase completion reports.	PMO	Week 22 to 24
Managing Stakeholder Engagement	Develop a process to be used to stakeholder engagement.	Develop an organizational process which helps to address stakeholder issues through the lifecycles of projects.	Project Officer, PMO	Week 22 to 24
Monitoring Stakeholder Engagement	Ensure that stakeholders are monitored for satisfaction.	Develop and institute a process for monitoring stakeholder engagement in all projects.	Project Officer, PMO	Week 22 to 24
Training and capacity building	Improve capacity to use templates, processes and guidelines.	Execute 2-day training workshop	Project Officer, PMO	Week 23
Project Management Maturity Assessment	To determine PACT's improvement in project management maturity.	Carry out PMMM self-assessment survey for the entire organization.	PMO Director, PMO	Week 24

Appendix I





Note. From "Information security and PDCA (Plan-Do-Check-Act)" by S. Otterloo, 2017. Copyright 2017 by S. Otterloo. Permission not sought.

Appendix J

Philological Revision Certificate

Revision Certificate

This is to certify that Mr. Colin Mattis has submitted the final graduation project entitled, "PROPOSAL FOR THE ESTABLISHMENT OF A PROJECT MANAGEMENT OFFICE (PMO) FOR THE PROTECTED AREAS CONSERVATION TRUST (PACT)", for revision.

I Mrs. Medeline Guzman- Campbell, former secondary and tertiary level English Language and Communications instructor and current high school Administrator with a Bachelor's Degree in English Language and a Master's Degree in Educational Leadership, endorse that this document has been extensively revised and that all suggested corrections have been completed.

During the revision process, errors in these areas were identified and corrected: spacing, use of indentation, minor grammatical errors, repetition, incorrect subject verb agreement, incorrect word choice, errors in parallelism, comma splices, run-on sentences, wordiness and paragraph structure. The proper use of in text citation was also addressed. These errors were highlighted in colors of red (needs revising) green (needed clarity) and yellow (suggested changes). These were forwarded to Mr. Mattis for the necessary amendments. Relevant documents on the use of APA citations were also forwarded.

The paper was well written, highly relevant and precise. I hereby extend my full approval and support and render this project for submission.

Sincere Regards,

Medeline Guzman - Campbell M.Ed.

Appendix K

Philologist's Undergraduate Degree Certificate

University of Belize



The Board of Crustees of the University of Belize upon recommendation of the faculty of Education and Arts, has conferred on

Medeline Marie Brown

who has completed the p<mark>rescribed studies and</mark> fulfilled all requirements thereof the degree of

Bachelor of Arts in English

with all the rights and privileges pertaining to that degree, given at Belmopan, Belize, this eighteenth dap of June, two thousand and five.

DEAN Vilma Joseph, Ph.D.

PROVOST - Henry N. Anderson, M.B.A.

PRESIDENT - Corinth Morter-Lewis, Ph.D., C.A.P.

CHAIRMAN, BOARD OF TRUSTEES Louis Zabaneh, Ph.D.

Appendix L

Philologist's Postgraduate Degree Certificate

Maiversity of North Morida
has conferred on

Medeline Marie Brown

the degree

Master of Education

Educational Leadership

and all the rights and privileges thereunto appertaining. In Vitness Whereof, this diploma, duly signed, has been issued and the seal of the University affixed.

Issued by the Issued of Constees upon recommendation of the Faculty of the College of Education and Amson Services at Ischsonville, Alorida, Chia Vourteenth Bay of Becember, A.D., 2007.

Gatherine

16. Brundayle

Providen

Lary D. Samuel