UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL (UCI)

FINAL GRADUATION PROJECT NAME (PROJECT MANAGEMENT OFFICE (PMO) PROPOSAL FOR THE INSTITUTE OF ARCHAEOLOGY WITHIN THE NATIONAL INSTITUTE OF CULTURE AND HISTORY (NICH) OF BELIZE

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DEDICATION

To my Grandparents who paved the way for my family and I to have the life that we have today, may you both continue to rest in peace. To my parents who, despite challenges, have always supported me one way or another. To my allies, who have listened and provided guidance in completing this master's program. Most importantly, to my significant partner, who despite everything going on in life, have always been beside me, motivating, educating and all in all, provided a safe environment for me throughout my studies.

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"Earned and never given." - Edson.

ABSTRACT

The objective of this document is to propose the establishment of a Project Management Office (PMO) at the Institute of Archaeology (IA) within the National Institute of Culture and History (NICH) of Belize to enhance project management practices and promote sustainable development initiatives. In the context of the IA, there is a pressing need to improve project management processes to ensure effective utilization of resources, preservation of cultural heritage, and alignment with organizational goals.

The proposed PMO aims to streamline project management practices, integrate cultural, environmental, and historical preservation requirements, and align projects with the IA's strategic objectives. To achieve this, a comprehensive methodology is utilized which includes conducting face-to-face interviews with key stakeholders, reviewing official documents, and analysing existing project management practices.

The findings of this proposal underscore the importance of establishing a PMO to enhance

project management effectiveness, promote sustainable practices, and accomplish long-term

organizational goals. In conclusion, the establishment of a PMO at the IA is critical for

improving project management practices and promoting sustainable development initiatives.

Through effective implementation of the proposed recommendations, the IA can strengthen

its project management capabilities, achieve greater alignment with strategic objectives, and

enhance its contribution to cultural preservation and sustainable development in Belize.

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INDEX OF ABBREVIATIONS AND ACRONYMS

ASEM	American Society for Engineering Management
CMMI	Capability Maturity Integration
EIA	Environmental Impact Assessments
FGP	Final Graduation Project
GPM	Green Project Management
HR	Human Resource
IA	Institute of Archaeology
ICA	Institute of Creative Arts
ISCR	Institute for Social and Cultural Research
MPM	Master's In Project Management
NGOs	Non-Governmental Organizations
NICH	National Institute of Culture and History
NPOs	Non-Profit Organizations
OPM	Organisational Project Management
OPM3	Organisational Project Management Maturity Model
OPMMM	Organizational Project Management Maturity Model
P3M3	Programme, and Project Maturity Model
PM	Project Management
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute's
PMMM	Project Management Maturity Model
РМО	Project Management Office
PO	Project Office
SDGs	Sustainable Development Goals
UCI	Universidad Para La Cooperacion Internacional
UNESCO	United Nations Educational, Scientific and Cultural Organization
WBS	Work Breakdown Structure

EXECUTIVE SUMMARY

The Final Graduate Project (FGP) aimed to address critical challenges in project management at the Institute of Archaeology within the National Institute of Culture and History (NICH) of Belize, with a focus on enhancing regenerative and sustainable development practices. Recognizing the importance of efficient project management in achieving sustainable outcomes, the project sought to establish a Project Management Office (PMO) to streamline processes, optimize resource allocation, and integrate cultural and environmental considerations into project frameworks.

The problem identified was the lack of centralized project management practices at the IA, leading to inefficiencies, resource misallocation, and insufficient consideration of cultural and environmental factors in project planning and implementation. This fragmented approach hindered the organization's ability to achieve its objectives effectively and sustainably.

The justification for the FGP rest in the urgent need to improve project management practices at the IA to align with principles of sustainability and regenerative development. By establishing a PMO and integrating cultural and environmental considerations into project frameworks, the organization could enhance its capacity to deliver projects efficiently while preserving cultural heritage, protecting the environment, and promoting long-term sustainability.

The general objective of the project was to propose the establishment of a Project Management Office (PMO) at the Institute of Archaeology (IA) within NICH to enhance project management practices and promote regenerative and sustainable development. The specific objectives were to conduct a maturity assessment of the Institute of Archaeology within NICH; to conduct an analysis of current project management practices and identify gaps in the Institute of Archaeology within NICH; to assess the current project management needs and capabilities within the Institute of Archaeology to inform the design of a tailored PMO structure and a systematic implementation plan for the PMO.

The methodology for this FGP was a mixed research approach, combining qualitative and quantitative methods to collect and analyse data. Primary data was gathered through face-to-face interviews with key stakeholders at the IA, while secondary data was obtained from literature reviews and official documents. Analysis involved both statistical techniques for quantitative data and thematic analysis for qualitative data, allowing for a comprehensive understanding of project management practices and requirements.

Overall, the FGP aimed to contribute to the advancement of sustainable development goals by improving project management practices at the IA and fostering a culture of regenerative development within the organization. Through the establishment of a PMO and integration of cultural and environmental considerations, the project sought to enhance project outcomes, promote community engagement, and safeguard cultural heritage and natural resources for future generations.

The assessment of the IA's project management maturity reveals a current state characterized by moderate adherence to project management principles, with notable strengths in scope and communications management but areas for improvement in cost, integration, schedule, and risk management. Recommendations include the establishment of a PMO to centralize and standardize processes, supplemented by a 12-month implementation plan outlining key steps such as stakeholder engagement, policy development, and training.

In conclusion, the research suggests a need for a Centralized PMO to improve the IA's project management maturity level and address identified areas for improvement. Establishing a Centralized PMO will help the IA optimize resource allocation, standardize processes, enhance risk mitigation, improve stakeholder engagement, and promote continuous improvement, aligning with the IA's mission and objectives. Overall, the implementation of a PMO represents a strategic opportunity for the IA to enhance its project management practices, drive project success, and advance its mission of cultural and historical preservation.

INTRODUCTION

1.1 Background

The Institute of Archaeology within the National Institute of Culture and History (NICH) of Belize, established in 2002 under the National Institute of Culture and History Act, is a pivotal organization dedicated to the preservation and promotion of Belize's rich cultural, environmental, and historical heritage (Government of Belize, 2003). With a mission to foster an environment where Belizeans can celebrate their diverse cultural identities and heritage. The IA plays a crucial role in safeguarding the nation's historical sites, artifacts, and traditions for future generations (National Institute of Culture and History, n.d.).

Over the years, the IA has spearheaded numerous projects aimed at cultural preservation and environmental conservation, including archaeological research, heritage site restoration, and community outreach programs. These initiatives reflect the organization's commitment to promoting sustainable development while preserving Belize's unique cultural and natural heritage (National Institute of Culture and History, n.d.). However, despite its noble objectives and significant accomplishments, the IA faces challenges in effectively managing its projects and resources. The absence of a standardized project governance framework and centralized project management office (PMO) has led to ad hoc project management practices and fragmented decision-making processes (Mian, 1999). This decentralized approach often results in projects been executed without clear prioritization, risk management strategies, or efficient resource allocation (Monterio, 2016). Additionally, the lack of a centralized reporting system further compounds these challenges, making it difficult for the IA to monitor project performance, budget utilization, and milestone achievements (Braybrooke, 2010).

To address these issues and enhance project management effectiveness, there is a need for the IA to establish a dedicated PMO tailored to its specific needs. By implementing a standardized project governance framework and centralizing project management functions, the IA can improve project prioritization, risk management, and resource allocation. Ultimately, ensuring the successful execution of its initiatives and the preservation of Belize's cultural and environmental heritage.

1.2 Statement of the problem

The IA typically leads its own projects with the director and associate directors overseeing the main operations. However, these projects are led based on ad hoc project management practices and using the directors & associate directors previous project management experiences. This decentralized approach highlights the absence of a standardized project governance framework, leading to inconsistent project management processes, for instance, when securing external funding, such as a project funded by the U.S. Embassy in Belize for research in the Caracol Archaeological Reserve, management lacks a cohesive strategy for project execution. Instead, projects are managed on an ad hoc basis, with responsibilities dispersed among various stakeholders. Consequently, there is a lack of prioritization based on strategic objectives, inadequate risk management measures, and inefficient resource utilization in project management processes. Additionally, the absence of a centralized reporting system further compounds these challenges, hindering the organization's ability to monitor project performance, budget utilization, milestone achievements, and mitigate project risks.

The absence of a structured approach to project management at the IA has significant implications for the organization's ability to effectively fulfil its mandate of cultural, environmental, and historical preservation. Without a centralized PMO and strategic project governance framework, projects may lack clear prioritization, risk management measures, and efficient resource allocation. This decentralized approach also contributes to challenges in project oversight and reporting, inhibiting the organization's ability to monitor project performance, budget utilization, and milestone achievements.

Therefore, the lack of standardized project management processes hampers the IA's capacity to safeguard Belize's cultural heritage and promote sustainable development effectively. Therefore, establishing a dedicated PMO tailored to the IA's specific needs is essential to address these challenges and ensure the successful execution of its initiatives while aligning with international best practices in project management (Braybrooke, 2010; PMI, 2021).

1.3 Purpose

The purpose of this FGP is to develop a comprehensive proposal for the establishment of a Project Management Office (PMO) at the Institute of Archaeology within the National Institute of Culture and History (NICH). The research aims to investigate existing project management practices at the IA, aligning with the recommendations of the Project Management Institute (PMI, 2021), to assess the

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organization's maturity level and gain insights into methodologies, approaches, strategies, and decision-making processes used for project management. By integrating specific cultural, environmental, and historical preservation requirements into the framework of the proposed PMO, drawing on best practices and lessons learned from various PMO types, this study seeks to enhance project management effectiveness within the IA.

Through development of a modern PMO it will provide an optimal structure at the IA. This will specify the roles of PMO personnel and strategically placing the PMO within the organizational structure to ensure consistent and effective project management aligned with cultural and historical preservation goals. Through a thorough analysis of the organization's needs and objectives, informed by literature insights, the proposed PMO is designed to facilitate the seamless execution of projects while upholding the company values. By leveraging the expertise of project management professionals and integrating sustainable practices recommended by the PMI (2021), this FGP aims to provide the IA with actionable recommendations for the successful implementation of the PMO and the advancement of its strategic objectives.

1.4 General objective

To develop a proposal for the establishment of a Project Management Office at the Institute of Archaeology within National Institute of Culture and History (NICH) Belize which allows the consistent and efficient delivery of high-quality projects in cultural, environmental, and historical preservation.

1.5 Specific objectives

- 1. To conduct a maturity assessment of the Institute of Archaeology within NICH.
- 2. To conduct an analysis of current project management practices and identify gaps in the Institute of Archaeology within NICH.
- 3. To assess the current project management needs and capabilities within the Institute of Archaeology to inform the design of a tailored PMO structure.
- 4. To design an implementation plan for the establishment of a PMO within the Institute of Archaeology.

THEORETICAL FRAMEWORK

2.1 Company/Enterprise framework

2.1.1 Company/Enterprise background

The Institute of Archaeology within the National Institute of Culture and History (NICH) of Belize was established on 28 August 2003 with the primary objective of elevating culture and arts to their rightful place in the preservation of Belize's rich cultural heritage (Government of Belize, 2003). In its foundational years, the IA brought together individuals from diverse backgrounds, including cultural enthusiasts, professionals, and civilians, who collaborated with British trainers to enhance their capabilities in cultural preservation and promotion.

Since its inception, the IA has been entrusted with the responsibility of safeguarding Belize's cultural identity and heritage. The institute's mandate encompasses a wide array of functions, including the preservation of archaeological sites, historic buildings, and intangible cultural heritage, as well as the promotion of traditional arts, crafts, and performing arts. Furthermore, the IA plays an active role in supporting civil authorities in maintaining cultural order and harmony within the nation.

With a commitment to fostering socio-cultural development, the IA engages in initiatives aimed at enhancing public awareness and appreciation of Belizean culture (NICH Act, 2011). Through strategic partnerships with governmental agencies, non-profit organizations, and international stakeholders, the IA works tirelessly to ensure the sustainability and vitality of Belize's cultural heritage for future generations.

2.1.2 Mission and vision statements

The IA, as established by the Belize National Institute of Culture and History Act (2011), was tasked with the legal governance of Belize's cultural and historical archaeological artifacts and sites. Despite this legal mandate, the IA currently operates without a specified mission and vision. The FGP emphasizes the importance of having a clear mission and vision. Therefore, in aligning with established project management practices (Project Management Institute, 2021), it is recommended that the IA develops and incorporates a mission and vision to guide its cultural preservation initiatives effectively. Here is a recommended mission and vision:

- I. Mission To safeguard Belize's rich cultural heritage through proactive preservation, inclusive engagement, and dynamic educational initiatives.
- II. Vision A vibrant Belize that values cultural diversity, and safeguards historical treasures for the future.

2.1.3 Organizational structure

The organizational structure of the National Institute of Culture and History (NICH) of Belize comprises of four distinct institutes, namely the Institute of Archaeology (IA), the Institute for Social and Cultural Research (ISCR), the Museum of Belize and Houses of Culture, and the Institute of Creative Arts (ICA). Each institute has assigned associate directors who report directly to the main Director of NICH.

The Institute of Archaeology (IA), which is the primary focus of this FGP, is dedicated to managing the preservation and excavation of archaeological sites. The IA ensures the safeguarding of Belize's rich historical heritage and engages in various collaborative projects to enhance archaeological research and conservation efforts.

Meanwhile, the ISCR is responsible for conducting extensive research in historical, socioeconomic, cultural, and anthropological domains and disseminating the findings to contribute to Belize's cultural knowledge base. The ICA focuses on promoting creative arts, encouraging the expression and preservation of Belizean culture through various initiatives. Lastly, the Museum of Belize and Houses of Culture manages community-based cultural centres established throughout Belize, fostering cultural engagement at the local level.

This organizational framework emphasizes centralized leadership while allowing for specialized focus areas, ensuring comprehensive coverage of cultural and historical endeavours within Belize. For the purpose of this FGP, the PMO proposal is specifically concentrated on the Institute of Archaeology. The organizational structure of the IA is illustrated in Figure 1, which shows the hierarchical arrangement. At the topmost level is the Director of the IA, who oversees all operations within the institute.

Figure 1

Organizational structure of the Institute of Archaeology (IA).



Note: Sourced from the Associate Director - Enforcement and Compliance. Institute of Archaeology. 2022.

2.1.4 Products offered

The National Institute of Culture and History (NICH) in Belize comprises four institutes, each dedicated to preserving and promoting different aspects of Belizean culture and heritage. These institutes play crucial roles in research, education, and public outreach contributing to the country's cultural preservation and tourism development. The Institute of Archaeology (IA), the FGP's focus, is focused on studying and preserving Belize's rich archaeological heritage, conducting excavations, research, and conservation efforts at various archaeological sites throughout the country (Garber et al., 2004). Their work sheds light on ancient civilizations like the Maya, providing insights into their social structures, economic systems, and cultural practices. The Institute of Social and Cultural Research (ISCR) is dedicated to documenting and studying Belize's contemporary cultural heritage including its diverse ethnic groups, languages, and traditions. Through ethnographic research and community engagement, ISCR contributes to the preservation and promotion of Belizean cultural identity (National Institute of Culture and History [NICH], n.d.). The Institute of Creative Arts (ICA) supports Belizean artists and cultural practitioners, fostering creativity and innovation in various artistic disciplines such as music, dance, visual arts, and literature. Through workshops, exhibitions, and performances, ICA enriches the cultural landscape of Belize while providing platforms for local artists to display their talents (NICH, n.d.).

Lastly, the Museum of Belize and Houses of Culture serves as a repository of Belizean history and heritage, housing artifacts, exhibits, and interactive displays that educate visitors about the country's past. The museum's collections span from preColumbian artifacts to colonial-era objects, offering visitors a comprehensive journey through Belize's history and culture (NICH, n.d.). Together, these four institutes under NICH's umbrella contribute significantly to the preservation, promotion, and celebration of Belize's rich cultural heritage.

2.2 Project Management concepts

2.2.1 Project management principles

The twelve principles of project management, outlined in the PMBOK Guide 7th Edition, are intentionally crafted to complement, and align with the values of the PMI Code of Ethics and Professional Code of Conduct (Project Management Institute, 2021). These principles serve as a foundational guide, strategically influencing strategy development, decision-making processes, and effective problem solving. Their applicability is crucial in shaping the development of an implementation plan for implementing a PMO at the IA within NICH. By adhering to these principles, a robust framework will be established, ensuring effective project management practices essential for successful planning, execution, and governance within the cultural and historical preservation context of the IA. The principles:

 Be a diligent, respectful, and caring steward – a crucial principle as it emphasizes to be responsible and considerate in managing cultural and historical artifacts. In the context of IA's mandate, this principle underscores the importance of acting with integrity and trustworthiness in preserving Belize's cultural heritage. Embracing this principle, instils confidence in fulfilling fiduciary responsibilities and ensures the careful stewardship of resources allocated for cultural preservation.

- 2. Create a collaborative project team environment collaborative teamwork is crucial for the IA to ensure alignment with organizational culture and effectively execute cultural preservation projects. By fostering an environment that encourages open communication and mutual respect, project teams can harness the collective expertise of their team for more impactful outcomes.
- 3. Effectively engage with stakeholders The IA should emphasize effective stakeholder engagement, especially considering the diverse range of stakeholders involved in cultural preservation initiatives. Proactive engagement strategies will foster stronger partnerships and ensure broader support for the conservation of Belize's cultural heritage.
- 4. Focus on value The IA, as the regulatory body for cultural preservation it should consistently prioritize the ultimate objective of ensuring that cultural interventions align with business objectives and contribution to the preservation of Belize's heritage. By focusing on the value proposition of each preservation effort, the IA can maximize the impact on both the present and future generations.
- 5. Recognize, evaluate, and respond to system interactions in the dynamic field of cultural preservation, the IA should retain flexibility in thought and action to navigate the complexities presented by system interactions and ensure the continued relevance of preservation strategies. Regular evaluation and responsive actions will enhance the adaptability of preservation initiatives.

- 6. **Demonstrate leadership behaviours** leadership within the project environment is crucial for the IA, ensuring effective governance and stewardship in the preservation of Belize's cultural and historical artifacts. By exemplifying ethical and visionary leadership behaviours, the IA can inspire confidence and commitment among its team members and stakeholders.
- 7. Tailor based on context recognizing the uniqueness of each cultural artifact, the IA should tailor approaches based on the specific context to effectively manage and preserve the diverse array of historical treasures. Customized strategies will ensure that preservation efforts respect the distinctiveness of each cultural element.
- 8. Build quality in processes and deliverables The IA plays a critical role in safeguarding historical treasures, necessitating a focus on building quality into processes and deliverables for effective cultural preservation. Quality assurance measures will uphold the integrity and longevity of preserved artifacts.
- 9. Navigate complexity The IA must navigate the intricacies inherent in cultural preservation, demonstrating flexibility and adaptability to address challenges to ensure the success of preservation initiatives. By proactively managing complexities, the IA can enhance the resilience of its preservation programs.
- 10. Optimize risk responses playing a role as a steward of cultural heritage, the IA should enhance its capacity in risk planning and response to effectively mitigate potential challenges and uncertainties associated with cultural preservation. A proactive and comprehensive approach to risk management will safeguard against unforeseen disruptions to preservation initiatives.

- 11. Embrace adaptability and resiliency given the changing cultural landscape, the IA should learn to embrace adaptability and build resiliency into its cultural preservation projects to ensure continued effectiveness in the face of evolving challenges. This proactive approach will strengthen the IA against the impact of external factors on cultural heritage preservation.
- 12. Enhance change to achieve the envisioned future state The IA, as the regulatory authority, should focus on enhancing change within cultural preservation initiatives to achieve the envisioned future state for Belize's rich cultural heritage. By actively promoting and managing change, the IA can ensure the sustainability and relevance of its cultural preservation endeavours.

2.2.2 Project management domains

In the PMBOK® Guide 7th Edition, there are eight Performance Domains, which incorporate interrelated activities essential for achieving successful project outcomes (Project Management Institute, 2021). These domains encompass various aspects of project management and contribute collectively to project success. Each of these domains plays a unique role in ensuring that projects are effectively planned, executed, and controlled.

- Stakeholders a project will not perform well if you do not engage your stakeholders. Effective engagement with stakeholders is crucial to garner support for the establishment of the PMO (Project Management Institute, 2021). This would ensure alignment with organizational goals in cultural and historical preservation.
- 2. **Team** you need to establish a capable project team, which is central to a PMO's success. Within the IA, the team domain becomes instrumental in forming a skilled

and collaborative team dedicated to overseeing projects related to archaeology, social and cultural research, and creative arts.

- 3. Development approach to life cycle The development approach domain aligns with the unique nature of cultural and historical preservation projects undertaken by the IA. Tailoring development approaches within the PMO ensures strategies that fit the specificities of the IA 's objectives.
- Planning thorough planning is the foundation to the PMO's role at the IA. This domain supports the PMO in creating comprehensive project plans, a crucial component for effective cultural and historical preservation initiatives (Project Management Institute, 2021).
- Project work the project work domain emphasizes the efficient execution of project plans, directly influencing the PMO's ability to oversee archaeological explorations, cultural research, and creative arts initiatives in line with the IA's legal mandates.
- Deliver successful project delivery should be a primary focus of the PMO at the IA. This domain will ensure that the PMO aligns project outcomes with the organization's mission to preserve Belize's cultural and historical artifacts for future generations.
- Measurement the measurement domain is vital for the PMO's oversight at the IA. Monitoring and evaluating project performance allows the PMO to assess the impact of cultural preservation initiatives, ensuring alignment with organizational goals and objectives.

8. Uncertainty – recognizing the dynamic nature of projects is crucial for the PMO's success at the IA. This domain enables adaptive strategies to navigate the uncertainty inherent in cultural and historical preservation projects, ensuring successful outcomes in a complex environment.

2.2.3 Predictive, adaptive and hybrid projects

Figure 2

Development approach



Figure 2-7. Development Approaches

Note: From "PMBOK Guide. Figure 2-7, pg.35, section 2.3.3. Project Management Institute.

As the PMBOK Guide 7th Edition states, "these approaches are often viewed as a spectrum, from a predictive approach on one end of the spectrum, to the adaptive on the other end." (PMBOK Guide, 7th Edition, 2021).

As defined by the Project Management Institute (PMI, 2021), project types are categorized into predictive, adaptive, and hybrid approaches. Predictive projects, often associated with traditional project management methodologies, involve well-defined plans and are suitable for situations where the project scope and requirements are clear from the onset (PMI, 2021).

Figure 3

Sample predictive life cycle



Figure 2-9. Sample Predictive Life Cycle

Note: From "*PMBOK 7th Guide, 2021. Figure 2-9, Pg.43, section 2. Project Management Institute.*

In the context of cultural preservation initiatives managed by the IA, such as archaeological excavations or monument restoration projects, a predictive approach may be appropriate when the objectives and scope are well established and unlikely to change significantly throughout the project lifecycle (Garber et al., 2004).

However, given the evolving nature of cultural and historical preservation projects and the potential for unforeseen challenges, an adaptive strategy may be more fitting. Adaptive projects are characterized by a more flexible and iterative approach, allowing for adjustments in response to changing circumstances (PMI, 2021). This flexibility is particularly advantageous in dynamic environments where the project requirements may evolve over time, such as when unexpected archaeological discoveries alter the original project scope (NICH, n.d.).

Figure 4

Hybrid approach



Figure 2-8. Iterative and Incremental Development

Note: From "PMBOK Guide, 7th Edition. Figure 2-8, pg. 37, section 2. Project Management Institute."

Moreover, a Hybrid Project Management model could be most effective for this FGP, allowing for a structured foundation while incorporating adaptive elements to address the unique dynamics of cultural and historical initiatives. By blending elements of both predictive and adaptive methodologies, a hybrid approach offers the benefits of both approaches, striking a balance between structure and flexibility (PMI, 2021; Garber et al., 2004). This hybrid model enables the FGP to maintain a level of predictability and control while also being responsive to changing project requirements and environmental factors (NICH, n.d.).

2.2.4 Project management

Project management encompasses the administration, direction, or management of projects, and guiding a team towards achieving predetermined objectives within defined constraints (PMI, 2021). Datz (1977) provides a broad perspective on project management, emphasizing the dynamic composition of project elements through meticulous organization, coordination, and strategic decision-making. Effective communication, adaptable planning, and a team-oriented approach are highlighted as crucial factors for project success (Datz, 1977). Ahmed (2007) further supports this by emphasizing the importance of risk management techniques in projects which align with the need for strategic decision-making to mitigate potential risks.

Building upon Datz's (1977) foundational work, other authors offer further insights into project management principles, for instance, Garber et al. (2004) emphasizes the significance of flexibility and adaptability in project management, particularly in the context of archaeological excavations and monument restoration initiatives. They underscore the need for project managers to navigate evolving project scopes and unforeseen challenges, requiring agile responses to changing circumstances. Similarly, the Project Management Institute (2021) underscores the importance of leadership, adaptability, and the integration of various project management skills. PMI's contemporary understanding of project management emphasizes its pivotal role in translating innovative ideas into tangible realities (PMI, 2021). This aligns with Datz's emphasis on strategic planning and efficient resource management as essential components of effective project leadership.

Furthermore, Burton (2003) provides an unlikely and rigorous set of conditional design guidelines for project organization, highlighting the importance of adapting project management approaches based on environmental, technological, demographic, and management style variables. Burton's (2003) research emphasizes the need for project managers to tailor their management strategies to suit the specific context of each project.

Lastly, the IA's approach to project management, as evidenced by their cultural preservation initiatives, reflects an amalgamation of these principles. Their management of archaeological excavations and monument restoration projects requires a blend of effective communication, adaptable planning, and strategic decision-making to navigate the complexities of cultural heritage preservation (NICH, n.d.).

In summary, project management, as explained by Datz (1977), Garber et al. (2004), PMI (2021), Ahmed (2007), and Burton (2003), involves dynamic leadership, strategic planning, and efficient resource management to achieve project goals within defined constraints. The IA's implementation of these principles in their cultural preservation efforts highlights the importance of adaptability, communication, and effective leadership in managing complex projects with diverse stakeholder interests.

2.2.5 Project management knowledge areas and processes

There are ten knowledge areas in project management.

- Project Integration Management essential for project success, it involves organizing diverse project elements, both physical and digital. In addition, it includes managing relationships between stakeholders while addressing changes that may arise (Datz, 1977).
- 2. **Project Scope Management** ensures project objectives are met within resource and time constraints. This involves tasks like developing a project plan, task sequencing, cost estimation, and progress tracking (PMI, 2021).
- Project Schedule Management integral for successful planning, it includes creating timelines, setting deadlines, scheduling resources. In addition, it involves allocating time to tasks or resources required for project completion (PMI, 2021).
- Project Cost Management focuses on managing costs to ensure on-time, budgetcompliant, budget setting, expense tracking, and cost reduction strategies (PMI, 2021).
- Project Quality Management ensures deliverables and processes meet established quality standards through quality assurance plans, product testing, and result audits (PMI, 2021).
- Project Resource Management involves managing people and resources effectively, including recruiting, task assignment, and resource monitoring throughout the project lifecycle (PMI, 2021).
- Project Communications Management ensures that stakeholders are informed about project progress through communication plans, channel establishment, and conflict management (PMI, 2021).

- 8. **Project Risk Management** focuses on identifying potential risks, developing response plans, and conducting quantitative risk analysis to minimize adverse impacts throughout the project lifecycle (PMI, 2021).
- Project Procurement Management focused on acquiring external goods and services, involving vendor selection, contract negotiation, and compliance with legal requirements (PMI, 2021).
- 10. **Project Stakeholder Management** integral for project success, which involves identifying, engaging, and responding to stakeholders throughout the project's lifecycle to ensure their interests are considered in decision-making (PMI, 2021).

There are five project management process groups:

- Initiating project goals are established, stakeholders are identified, and project approval is secured.
- Planning the planning phase delves into detailed project planning, translating overall objectives into specific milestones.
- Executing the execution phase is the primary stage for delivering project work.
 Following the roadmap provided by the Planning group, this step involves working through planned activities and providing updates to stakeholders as identified during the Initiating phase.
- 4. **Monitoring and Controlling** in the monitoring and controlling phase, the team regularly assesses project progress, ensures alignment with proposed goals and schedules. Serving as a liaison between all process groups, monitoring and

controlling interact with initiating, planning, executing, and closing groups to facilitate goal achievement and make informed adjustments as needed (PMI, 2021).

 Closing – The Closing phase finalizes the project upon achieving objectives. Led by the project manager, this phase involves concluding project activities, reviewing outcomes, and formally archiving essential project details.

2.2.6 Project life cycle

The project life cycle refers to the series of phases that a project progresses through from initiation to completion. Specific activities, deliverables, and milestones characterize each phase, and the sequence and duration of these phases are determined by the organization's control needs and project requirements (PMI, 2004). In the context of a hybrid project life cycle, such as the one adopted in the Flexible Grid Project (FGP), elements from both traditional Waterfall and Agile methodologies are integrated to suit project's needs and goals.

Figure five (5) below, provides a visual representation of the sequence of activities from initiation through acceptance, routine, and infusion. It offers a comprehensive overview of the chronological progression and critical phases involved in implementing an ERP system within an organization.

Figure 5

Research model



Note: From "Somers, 2004. A taxonomy of players and activities across the ERP project lifecycle. Information & Management, 41, 257–278."

The Agile framework within the hybrid project life cycle allows for iterative and incremental development, featuring shorter sprints, daily stand-up meetings, and continuous customer feedback (PMI, 2004). The Scrum framework, chosen for its ability to manage changing requirements and enhance transparency, plays a central role in this approach (PMI, 2004). The project team actively engages in regular retrospectives to identify areas for improvement, fostering a culture of continuous learning and adaptation (PMI, 2004). However, challenges such as cultural shift and increased customer participation underscore the importance of ongoing education and executive support to ensure successful project outcomes (PMI, 2004).
Figure six (6) below provides a visual representation of the sequential stages that a project progresses through from the initiation to termination phase. This is a valuable tool for project managers to understand the overarching structure of the project and strategically plan and manage each phase accordingly.

Figure 6

Phases in the project life cycle



Note: From "Adams & Barndt, 1978; King & Cleland, 1983."

The project life cycle, as defined by PMBOK Guide, provides a structured framework for managing projects, while the hybrid approach in the FGP emphasizes both structure and adaptability to meet the project's unique characteristics and requirements (PMI, 2004; Braybrooke Press Ltd., 2010; Somers & Nelson, 2004; Pinto & Slevin, 1988). By combining elements from traditional and agile methodologies, the hybrid project life cycle offers flexibility to address changing needs and uncertainties while maintaining control and ensuring project success (Somers & Nelson, 2004; Braybrooke Press Ltd., 2010).

2.2.7 Company strategy, portfolios, programs, and projects

The IA currently lacks a formal project management process that organizes its various initiatives into portfolios. The organization primarily operates and secures funding through grants such as from the US Embassy in Belize, implementing projects through its respective institutes. Despite the absence of a direct company strategy, the IA, drawing on its years of experience since establishment, has developed ad-hoc processes to manage an average annual revenue of between \$4-5 million Belize dollar. These funds are usually allocated to cover operational and overhead costs. Currently, the institution's strategic planning is a work in progress.

While the years of experience have enabled the implementation of effective processes, the absence of a formalized strategic plan limits the organization's ability to align its projects with a cohesive company strategy. Consequently, the IA occasionally seeks external grants to supplement its budget, allowing for the implementation of additional projects, potentially construction of buildings within archaeological reserves. The establishment of a Project Management Office (PMO) becomes pivotal in this context, as it can provide the structure needed to organize projects into portfolios, ensuring alignment with the organization's evolving strategic direction. Through the PMO, the IA can enhance its project management capabilities, optimize resource allocation, and contribute more strategically to the cultural and historical landscape of Belize.

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

2.3.1 Current situation of the problem or opportunity in study

The IA generates roughly between \$5-7 million Belize dollars annually, and it is reinvested into mostly overhead costs. While the institution is set up to meet minimum requirements, there is an opportunity to establish a PMO that can oversee and implement projects to streamline processes. Currently, the institution lacks processes and systems for managing archaeological sites. However, the PMO proposal presents an opportunity to implement a standard process and system.

The current situation is that the institution reflects a decentralized approach to project management. This is due to the different departments that implement projects in silo, thus operating with a centralized project management office. This decentralized method of project implementation can lead to potential inefficiencies and challenges in project delivery, indicating a need for a more systematic and coordinated approach. In addition, this can lead to challenges in monitoring and evaluating project activities, possibly impeding the achievement of organizational objectives.

The existing literature, as highlighted in the preliminary bibliographical research, reveals a significant gap in research concerning the implementation of a PMO tailored specifically to the cultural and heritage sector. Alsadeq, et al (2011), Crawford (2009), Dinsmore (2001), and others provide valuable insights and frameworks that can inform the development of a tailored PMO for the IA. These documents emphasize the importance of flexible and adaptable approaches, efficient resource management, and the value proposition of a PMO in enhancing overall project management practices.

Therein lies the opportunity for the improvement through the establishment of a dedicated PMO at the IA. The objective will be to introduce a structured PMO framework that will serve as a guiding force for project initiation, execution, and monitoring. This proposal intends to fill the existing gap by integrating tailored strategies for cultural and historical preservation initiatives, ensuring consistency and efficiency in project delivery.

2.3.2 Previous research done for the topic in study

The inclusion of Project Management Institute's standards (2018) and "A Guide to the Project Management Body of Knowledge PMBOK Guide Seventh Edition" (2021) are a crucial reference point for the FGP. These standards ensure a robust theoretical platform to incorporate practical insights and methodologies validated by a globally recognized authority.

Alsadeq (2011) introduced the agile approach for establishing a PMO, emphasizing flexibility, adaptability, and quick wins. This methodology aligns well with the IA PMO proposal, highlighting the need for a non-fixed approach tailored to the unique cultural and historical context.

Crawford's work (2009) emphasized resource management challenges as predominant issues in contemporary project management. This aligns with the core objectives of the FGP, which aims to address resource management practices through the establishment of a PMO. Crawford's paper (2006) explored the dynamic interplay between practitioners and academics in constructing the field of project management. The FGP aims to bridge the gap between theoretical principles and practical experiences within the cultural and historical preservation context, aligning with the discourse analysis of principles.

Dinsmore's (2001) provided insights into the challenges and benefits associated with implementing a Project Office (PO). The Work Breakdown Structure (WBS) outlined contributes to a structured approach for cultural change, which is relevant to the FGP of establishing a PMO.

Kwak (2000) reinforced the justification for establishing a PMO at the IA, emphasizing the value of managerial, administrative, training, and technical services that a PMO can provide. This validated the FGP's objective to strategically integrate the PMO for improved project management practices.

Lahbar (2023) highlighted the efficiency of PMOs in identifying and mitigating risks in the perspective of financial implementation and human resource practices. While the report focused on the e-commerce industry, the principles discussed can inform the FGP's proposals emphasis on risk management and resource practices.

Olin (2023) focused on studying project management maturity models. The emphasis on measuring maturity was to reveal strengths, weaknesses, and areas for improvement. Therefore, this is in alignment with the FGP's commitment to evaluate and improve the organizational need based on identified maturity levels.

2.3.3 Other theory related to the topic in study

Do Valle et al., (2008) present that it is evident that Project Management Offices (PMOs) hold a pivotal role in optimizing project management processes and ensuring successful project outcomes. This study emphasizes the significance of PMOs in standardizing project procedures, implementing best practices, and managing risks effectively. In addition, the research highlights the need for a quantitative assessment framework to measure the value and effectiveness of PMOs (Monteiro et al., 2016). This framework would provide valuable data and information on structural components and measure the impact on project performance (Monteiro et al., 2016). The role of PMOs extends beyond project completion, contributing to product lifecycle management and addressing interface gaps between different phases (Paton & Andrew, 2019). Aligning with these findings, the FGP emphasizes the potential benefits of a well-structured PMO in providing strategic alignment, coordination, and support for successful project outcomes.

METHODOLOGICAL FRAMEWORK Introduction

Methodological frameworks serve as structured models for executing research processes effectively. These frameworks provide researchers with a systematic approach to conducting studies, offering a roadmap that outlines key steps, methodologies, and procedures. They play a crucial role in ensuring the reliability, validity, and rigor of research endeavours across various disciplines. Maussi (2019) highlights the significance of conceptual frameworks in research design, emphasizing their role in guiding the formulation of research questions, selection of appropriate methods, and identification of potential validity threats. Additionally, McMeekin (2020) underscores the importance of methodological frameworks in providing a theoretical foundation and conceptual structure for organizing research endeavours. Overall, methodological frameworks contribute to enhancing the clarity, coherence, and replicability of research studies, thereby advancing knowledge within academic and professional domains.

3.1 Information sources

The research will primarily rely on primary and secondary sources, supported with references. Sources of information refer to the diverse array of materials and references utilized to gather data, support arguments, or substantiate claims within academic research, professional reports, or other academic works. These sources encompass a wide range of formats, included but not limited to scholarly articles, books, conference papers, reports, websites, and primary documents.

Understanding and effectively utilizing various sources of information are fundamental aspects of conducting rigorous research and producing credible and authoritative content. As Mian and Dai (1999), Somers and Nelson (2004), Braybrooke Press Ltd. (2010), and Pinto and Slevin (1988) refer too, the selection, evaluation, and integration of appropriate information sources play pivotal roles in shaping the quality, validity, reliability of scholarly discourse and contribute significantly to the advancement of knowledge within respective fields of study.

3.1.1 Primary sources

As defined by Ajayi (2016), primary sources encompass original materials or records of events that are firsthand and devoid of interpretation or commentary. These sources represent the initial presentation of information or original thinking, often serving as the foundation for further research. Some examples include scholarly articles, government reports, personal narratives, interviews, and conference proceedings. For this FGP, the primary sources will include interviews from stakeholders of the IA.

3.1.2 Secondary sources

According to Ajayi's (2016) definition, secondary sources refer to data or materials collected by entities other than the researcher, often after undergoing analysis or interpretation. These sources provide insights derived from primary information and may include books, journal articles, government publications, and websites. Unlike primary sources, secondary sources do not originate directly from the events being studied but rather offer interpretations, analyses, or summaries of primary data. For this FGP, several secondary sources will be referred to inclusive of the PMBOK Guide 6th and 7th Editions.

Chart 1

Information sources

Objectives	Information sources	
	Primary	Secondary
To conduct a maturity	Face-to-face	PMBOK 6 th and 7 th Edition. Establishing a project
assessment of the Institute of	interviews with key	management office (PMO) using the agile approach.
Archaeology within NICH.	staff from the IA, the	Mastering resource management: the PMO's role.
	Director, Associate-	Implementing project office cultural change.
	Directors, Site	Financial Implementation and Human Resource (HR)
	Managers and Park	Practices of Project Management Office: Its
	Rangers.	Competencies in the Ecommerce Industry. The
	Official documents	Journey to Project Management: Navigating the
	requested from the	Transition from a Non-Project Environment. Defining
	IA's Associate-	Project Management Maturity Level when
	Director Enforcement	Establishing Project Management Office. Five Ways
	and Compliance was	Future PMOs Will Support Organizations, An
	reviewed.	organizational PM maturity model.
To conduct an analysis of	Face-to-face	PMBOK 6 th and 7 th Edition. Establishing a project
current project management	interviews with key	management office (PMO) using the agile approach.
practices and identify gaps	staff from the IA, the	Mastering resource management: the PMO's role.
in the Institute of	Director, Associate-	Implementing project office cultural change.
Archaeology within NICH.	Directors, Site	Financial Implementation and Human Resource (HR)
	Managers and Park	Practices of Project Management Office: Its
	Rangers.	Competencies in the Ecommerce Industry. The
	Official documents	Journey to Project Management: Navigating the
	requested from IA's	Transition from a Non-Project Environment. Defining
	Associate-Director	Project Management Maturity Level when
	Enforcement and	Establishing Project Management Office. Five Ways

Objectives	Information sources	
	Primary	Secondary
	Compliance, was	Future PMOs Will Support Organizations, An
	reviewed.	organizational PM maturity model.
To assess the current project	Face-to-face	PMBOK 6 th and 7 th Edition. Establishing a project
management needs and	interviews with key	management office (PMO) using the agile approach.
capabilities within the	staff from the IA, the	Mastering resource management: the PMO's role.
Institute of Archaeology to	Director, Associate-	Implementing project office cultural change.
inform the design of a	Directors, Site	Financial Implementation and Human Resource (HR)
tailored PMO structure.	Managers and Park	Practices of Project Management Office: Its
	Rangers.	Competencies in the Ecommerce Industry. The
	Official documents	Journey to Project Management: Navigating the
	requested from IA's	Transition from a Non-Project Environment. Defining
	Associate-Director	Project Management Maturity Level when
	Enforcement and	Establishing Project Management Office. Five Ways
	Compliance, was	Future PMOs Will Support Organizations, An
	reviewed.	organizational PM maturity model.
To design an	Face-to-face	PMBOK 6 th and 7 th Edition. Establishing a project
implementation plan for the	interviews with key	management office (PMO) using the agile approach.
establishment of a PMO	staff from the Institute	Mastering resource management: the PMO's role.
within the Institute of	of Archaeology, the	Implementing project office cultural change.
Archaeology.	Director, Associate-	Financial Implementation and Human Resource (HR)
	Directors, Site	Practices of Project Management Office: Its
	Managers and Park	Competencies in the Ecommerce Industry. The
	Rangers.	Journey to Project Management: Navigating the
	Official documents	Transition from a Non-Project Environment. Defining
	requested from IA's	Project Management Maturity Level when
	Associate-Director	Establishing Project Management Office. Five Ways
	Enforcement and	

Objectives	Information sources		
	Primary	Secondary	
	Compliance, was	Future PMOs Will Support Organizations, An	
	reviewed.	organizational PM maturity model.	

Note: From Author, self-produced.

3.2 Research methods

Research methods involve a systematic approach to collecting, analysing, and interpreting data to understand a particular phenomenon (Williams, 2007). For this FGP, three common methods are proposed: qualitative, quantitative, and mixed methods. Qualitative research will involve a holistic approach to exploring and describing phenomena through narratives, observations, and interpretations. Quantitative research, on the other hand, will focus on numerical data and employ statistical analysis to establish patterns, relationships, and predictions. Mixed methods research will combine elements of both qualitative and quantitative approaches, to gather a comprehensive understanding of the research study by utilizing both numerical and narrative data collection and analysis techniques.

3.2.1 Quantitative Method

Quantitative research involves a structured approach to collecting and analysing numerical data to uncover patterns, relationships, and predictions within a given phenomenon (Williams, 2007). This method relies on statistical techniques to quantify observations and draw objective conclusions. Typically rooted in the positivist theory, quantitative research aims to establish causal relationships and generalize findings to broader populations. It begins with a hypothesis, followed by systematic data collection using predetermined instruments, such as surveys or experiments (Creswell, 2003). The resulting data undergoes rigorous analysis, often employing statistical tests to validate hypotheses and derive meaningful insights. Through its emphasis on objectivity and generalizability, quantitative research offers valuable contributions to evidence-based decision-making in diverse fields. With this research method, the results of interviews will be analysed statistically to measure variables and relationships.

3.2.2 Qualitative method

Qualitative research adopts a holistic approach to understanding the phenomena by exploring subjective experiences, meanings, and perspectives within their natural context (Williams, 2007). Unlike the quantitative method, qualitative research focuses on in-depth exploration, interpretation, and description rather than quantification (Creswell, 2002). It aims to capture the richness and complexity of human behaviour, social interactions, and cultural phenomena through methods such as interviews, observations, and document analysis. Grounded in interpretivism and constructivism, qualitative research acknowledges the role of the researcher in shaping knowledge and emphasizes the importance of reflexivity (Creswell, 2002). Findings from qualitative studies often contribute to theory development, offering nuanced insights and deepening our understanding of social phenomena.

3.2.3 Mixed Methods

Mixed methods research combines quantitative and qualitative approaches within a single study, allowing researchers to collect and analyse both numerical and narrative data to address research questions in a comprehensive manner (Dawadi, 2021).

This research method will provide a better and less biased result compared to individual

methods.

The summary of research methods is shown in Chart 2 below.

Chart 2

Research Methods

Objectives	Research methods		
	Quantitative Research Method	Qualitative Research Method	Mixed Research Method
1. To conduct a maturity	This method was	This method was applied	This method
assessment of the Institute	applied to analyse the	to collect and analyse	incorporates both
of Archaeology within	primary data and	information specific to	qualitative and
NICH.	information collected	this objective. This	quantitative methods
	through surveys and	method included review	using both primary
	interviews. Several	of secondary sources,	and secondary sources
	steps were taken: (i)	official documents	to develop charts and
	developing a survey	requested and	draft conclusions.
	instrument, (ii)	summarizing in a	
	sampling strategy, (iii)	qualitative method.	
	data collection, (iv)		
	data analysis, and (v)		
	interpretation and		
	reporting.		
2. To conduct an analysis of	This method was	This method was applied	This method
current project management	applied to analyse the	to collect and analyse	incorporates both
practices and identify gaps	primary data and	information specific to	qualitative and
in the Institute of	information collected	this objective. This	quantitative methods
Archaeology within NICH.	through surveys and	method included review	using both primary
	interviews. Several	of secondary sources,	and secondary sources

Objectives	Research methods		
	Quantitative Research Method	Qualitative Research Method	Mixed Research Method
	steps are taken: (i)	official documents	to develop charts and
	developing a survey	requested and	draft conclusions.
	instrument, (ii)	summarizing in a	
	sampling strategy, (iii)	qualitative method.	
	data collection, (iv)		
	data analysis, and (v)		
	interpretation and		
	reporting.		
3. To assess the current		This method was applied	
project management needs		to collect and analyse	
and capabilities within the		information specific to	
Institute of Archaeology to		this objective. This	
inform the design of a		method included review	
tailored PMO structure.		of secondary sources,	
		official documents	
		requested and	
		summarizing in a	
		qualitative method.	
4. To design an		This method was applied	
implementation plan for the		to collect and analyse	
establishment of a PMO		information specific to	
within the Institute of		this objective. This	
Archaeology.		method included review	
		of secondary sources,	
		official documents	
		requested and	

Objectives	Research methods		
	Quantitative Research Method	Qualitative Research Method	Mixed Research Method
		summarizing in a	
		qualitative method.	

Note: From Author, self-produced

3.3 Tools

Tools refer to instruments, methods, software, or resources utilized to collect and analyse data (Cole, n.a.). These tools encompass a wide range of tangible and intangible elements, including survey instruments, laboratory equipment, statistical software, and theoretical frameworks. All of which are essential for conducting accurate and systematic research across various fields.

The summary of tools is shown in Chart 3 below.

Chart 3

Tools

Objectives	Tools
1. To conduct a maturity assessment of the Institute of	Project Management Maturity Model
Archaeology within NICH.	(PMMM) to be used in assessing and
	improving project management processes
	and capabilities.
	Literature review to provide a
	comprehensive overview of existing
	research findings.

Objectives	Tools
	Surveys and questionnaires to gather
	quantitative data from a large sample of
	respondents.
	Structure interviews to facilitate in-depth
	exploration of specific topics through
	predetermined questions.
2. To conduct an analysis of current project management	Literature review to provide a
practices and identify gaps in the Institute of Archaeology	comprehensive overview of existing
within NICH.	research findings.
	Surveys and questionnaires to gather
	quantitative data from a large sample of
	respondents.
	Structure interviews to facilitate in-depth
	exploration of specific topics through
	predetermined questions.
3. To assess the current project management needs and	Literature review to provide a
capabilities within the Institute of Archaeology to inform	comprehensive overview of existing
the design of a tailored PMO structure.	research findings.
	Surveys and questionnaires to gather
	quantitative data from a large sample of
	respondents.
	Structure interviews to facilitate in-depth
	exploration of specific topics through
	predetermined questions.
4. To design an implementation plan for the	Literature review to provide a
establishment of a PMO within the Institute of	comprehensive overview of existing
Archaeology.	research findings.

Objectives	Tools
	Surveys and questionnaires to gather
	quantitative data from a large sample of
	respondents.
	Structure interviews to facilitate in-depth
	exploration of specific topics through
	predetermined questions.

Note: From Author, self-produced

3.4 Assumptions and constraints

An assumption refers to a belief that is considered true, without proof based on project plans (Project Management Institute, 2021). A constraint indicates specific factors that restrict the options available to the project team, such as scope, budget, resources, and quality management (Project Management Institute, 2021).

Chart 4

Assumptions and constraints

Objectives	Assumptions	Constraints
1. To conduct a maturity assessment of the Institute of Archaeology within NICH.	Assume that management of the IA will be readily accessible for interviews.	The availability of historical data or documentation regarding project management practices, which may limit the depth and accuracy of the analysis.
2. To conduct an analysis of current project management practices and identify gaps in the Institute of Archaeology within NICH.	That there is sufficient stakeholder awareness and support to integrate cultural, environmental, and historical preservation requirements into the proposed PMO framework.	Scarcity on availability of resources, including funding, expertise, and time to research, design, and implement the integration of cultural, environmental, and historical preservation requirements into the proposed PMO framework.
 3. To assess the current project management needs and capabilities within the Institute of Archaeology to inform the design of a tailored PMO structure. 4. To design an implementation plan for the establishment. 	That there is organizational readiness and support for establishing and implementing the PMO.	Limited financial resources which may impact the ability to fully implement the optimal structure of the PMO to function effectively.
of a PMO within the Institute of Archaeology.	organizational commitment form key stakeholders to facilitate the	Time limitation due to tight deadline for implementing the PMO and associated

Objectives	Assumptions	Constraints
	establishment of the PMO and	plans, leading to rushed decision-
	implementation of proposed plans.	making.

Note: From Author, self-produced

3.5 Deliverables

Project Management Institute (2021) defines deliverables as "any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project." This comprises of tangible outputs, such as reports, as well as intangible outcomes, such as achieved milestones (Project Management Institute, 2021). The main deliverable of this FGP is a proposal for the establishment of the Project Management Office (PMO) at the Institute of Archaeology within NICH.

The summary of deliverables is shown in Chart 5 below.

Chart 5

Deliverables

Objectives	Deliverables
1. To conduct a maturity assessment of the Institute	A complete Project Management Maturity
of Archaeology within NICH.	Model (PMMM) report to determine the
	organization's maturity level used for
	project management.
2. To conduct an analysis of current project	A framework encompassing all benefits for
management practices and identify gaps in the	the proposed PMO, incorporating best
Institute of Archaeology within NICH.	practices, and lessons learned from other
	PMO types.
3. To assess the current project management needs	A revised organizational chart that reflects
and capabilities within the Institute of Archaeology	the optimal structure of the PMO.
to inform the design of a tailored PMO structure.	
4. To design an implementation plan for the	A PMO implementation plan outlining the
establishment of a PMO within the Institute of	main steps and procedures for establishment
Archaeology.	of the PMO.

Note: From Author, self-produced.

RESULTS

In accordance with the National Institute of Culture and History (NICH) revised act (2017), the Institute of Archaeology (IA) stands as the foremost legal authority in Belize dedicated to the conservation and preservation of the nation's cultural heritage, specifically archaeological reserves. The institute assumes a pivotal role in safeguarding Belize's historical legacy for present and future generations. As shown in figure 7, the IA maintains consistent presence in 14 archaeological reserves, totalling 29,227.43 acres.

As the primary custodian of the country's archaeological treasures, the IA operates on a multifaceted approach aimed at ensuring the protection and promotion of Belize's cultural wealth. Central to its mandate is the mobilization of funds, a process vital for the sustenance of ongoing projects essential to the fulfilment of its mission. The main funding source of the IA is through its visitor fees at archaeological reserves, collected through a ticketing system. Currently, the IA has taken initiative to increase its fee structure to meet the current situation of the economy. As of 1 November 2024, the increase in fees will take into effect, as per a formal correspondence shared with its stakeholders (Note, the formal correspondence is confidential, but the Director's approval was sought specifically to only reference within the thesis). The IA through collaborative efforts and continuous stakeholder engagement has kept a transparent and approachable process in adjustment of its fee structure. With these adjustments, not only does the IA stand to benefit, but also stakeholders can adjust their fees, which assists the economic welfare of grassroots community members. Prior to 2022, the IA generated roughly BZD \$3.5 million dollars and based on its new fee structure it is projected to reach roughly \$5 million Belize dollars in

2024, and \$7 million Belize dollars in 2025. Note that the fee structure is based on the tiers that each specific archaeological reserve is categorized under; as such the fees differ in price.

The IA also derives its revenue through various channels, including government allocations, grants, and donations, all of which are strategically utilized to support a wide array of initiatives ranging from archaeological excavations and site preservation to educational programs and community outreach efforts. By effectively mobilizing its financial resources, the IA endeavours to uphold its commitment to safeguarding Belize's cultural heritage while actively engaging in endeavours aimed at fostering a deeper appreciation and understanding of the nation's rich historical tapestry.

The IA currently has 11 ongoing projects as of April 2024, all internally funded by the revenues its collects. It carries out its monitoring, procurement of activities, and day-today operations of the projects. However, there is lack of strategic plans to guide the process. Although the IA utilizes the program budget per fiscal year, which includes strategic objectives that aim to be achieved at the end of the year. Nevertheless, to analyse existing project management practices at the IA a self-assessment was conducted utilizing a Project Management Maturity (3PMM) assessment tool. It also helps pave the way in determining the right structure of the PMO to complement the staff and develop an implementation plan to help establish the PMO within the current organizational structure. The data and information collected was compiled, reviewed, and analysed to generate the results needed to satisfy the thesis objectives. The tool results are presented below which provides a snapshot, and high-level assessment of the institutes current organizational

portfolio, programs, and project management maturity (3PM).

Figure 7

List of the archaeological reserves managed by the Institute of Archaeology.

NAME	STATUS	IUCN_CAT	GAZETTTE	ACRES	HECTARES	NOTES	MGMT
Cahal Pech	Archaeological Reserve	II	1995/22	22.4	9.07		NICH/DOA
Barton Creek	Archaeological Reserve	II	2001/04/	5.02	2.03		NICH/DOA
El Pilar	Archaeological Reserve	II	1998/052	1,901.42	769.48		NICH/DOA
Altun Ha	Archaeological Reserve	II	1995/12/	93.12	37.69		NICH/DOA
Cerro Maya	Archaeological Reserve	II	1976 (15	37.87	15.32		NICH/DOA
Lamanai	Archaeological Reserve	II	1985/03/	885.45	358.33		NICH/DOA
Lubaantun	Archaeological Reserve	II	2009/69	40.01	16.19		NICH/DOA
Nimli Punit	Archaeological Reserve	II	1995/02/	122.12	49.42		NICH/DOA
Santa Rita	Archaeological Reserve	II	1995/02/	3.7	1.5		NICH/DOA
Xunantunich	Archaeological Reserve	II	1995/02/	44.42	17.98		NICH/DOA
Caracol	Archaeological Reserve	II	1995/55	25,475.07	10,309.40		NICH/DOA
Serpon Sugar Mill	Archaeological Reserve		2009/72	125.71	50.87		NICH/DOA
Yarborough Cemetary	Archaeological Reserve		2009/71	1.62	0.65		NICH/DOA
Nohoch Cheen	Archaeological Reserve	II	2009/70	469.5	190.6		NICH/DOA
				29,227,43	11.828.52		

Note: From author, self-produced.

4.1. Objective 1

To conduct a maturity assessment of the Institute of Archaeology within NICH.

The assessment of the IA's project management maturity utilized the Project

Management Maturity Model (3PM¹) Assessment tool, developed by Sean Whitaker.

Unlike other complex tools on the market, this tool simplifies the process with a user-

friendly set of questions in Microsoft Excel, offering high-level insights into strengths and

weaknesses.

This model facilitated the evaluation of project management maturity, analysing existing practices and devising an improvement plan. It operates on the ten knowledge

¹ 3PM Self-assessment project management maturity tool.

areas outlined in the PMBOK 6th Edition, aligning each area to gauge the IA's maturity level.

Crawford (2021) presents the levels of project management maturity as follows:

- I. Level 1 the initial process, where organizations that have ad hoc processes and no project managers exists. Although management acknowledges the importance of project management; documentation is currently being handled in an ad hoc manner.
- II. Level 2 there is some structured processes and standards compared to level 1. These organizations prioritize projects and maintain fundamental processes, although they may not be consistent across all projects. Typically, these processes are applied primarily to large projects that offer significant visibility to the organization. At this stage, project estimates and schedules are formulated based on expert insight and generic tools.
- III. Level 3 organizations have standards and have institutionalized processes that are repeatedly implemented across all projects. This level consists of project estimates and schedules utilizing organizational standards. This level also includes informal analysis of project performances.
- IV. Level 4 at this level is where organizations have managed and integrated processes within every project. This practice helps in maintaining compliance throughout the organization. Project estimates and schedules are typically established based on organizational standards, and actual data informs decision-making. Organizations

operational at this level conduct formal and comprehensive analysis of project performance.

 V. Level 5- organizations use elevated processes to ensure project effectiveness and efficiency. All processes have been put in place to measure project performance with continuous improvement in project management practices.

Using the 3PM self-assessment tool, the IA completed the self-assessment to determine its project management maturity based on the ten knowledge areas (appendix 5). While the tool presented additional areas, only ten knowledge areas were focused on as guided by the PMBOK 6th Edition (2021).

As mentioned, the tool presents a high-level representation of the organization's maturity level. In addition, where a knowledge area score is not a whole number then the level of maturity is considered to the closest tenth. Example, if a knowledge area score is 2.5, then the maturity level 3 is considered. However, if a knowledge area score is 2.4, then we considered a maturity level of 2.

Figure 8

The 3PM maturity assessment results.



Note: from self-assessment tool, self-produced.

As figure 8 presents, the priority knowledge areas for improvement are generally the lowest scoring areas. However, that does not exclude that the other knowledge areas should not be focused on.

In analysing the scores achieved in each knowledge area of the project management, it indicated the current state of project management practices within the IA. Here's a breakdown based on the provided scores:

Scope Management: The organization seems to have a relatively strong focus on managing project scope, with a score of 3.00, maturity level 3, indicating competency and consistency in this area.

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.

Although this was one of the highest knowledge area scores, the interviews validated that there are no scope management plans developed for projects. Scope is inferred through other documents, which include the logical framework matrix, an essential management tool. Data 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. The main process that the IA has in place, is that a project completion report is compiled although until at the end of project. In essence, there is no established process or formal documents used for scope validation, which are important for project implementation.

PMBOK 6th Edition requires that scope statements are developed, however the process is not existent within the institute's processes. Essentially, the associate director for

enforcement and compliance leads and provides guidance to the organization based on expertise and knowledge of project management processes.

Communications Management: Similarly, communication management is rated at 3.00, suggesting a solid foundation in ensuring effective communication within projects. Project Communications Management involves planning, managing, and distributing project information to stakeholders effectively. It ensures clear communication channels throughout the project lifecycle, contributing to collaboration, expectation management, and project success.

There is no formal process for communication management at the IA, with staff members only utilizing social media to inform its stakeholders. However, there is a website which is under maintenance and expected to be the main form of communication once completed. The IA does not set any requirements to development communication management plans for projects, as its main stakeholders are kept informed through social media platforms, mainly Facebook. Given that projects are internally financed through its revenue collection modality, its main stakeholders are satisfied. However, in keeping with best project management practices, the processes, and systems would benefit from a communication management plan to be developed.

Cost Management: Cost management is rated at 2.50, indicating some level of competency, although there may be room for improvement in this area. Project Cost Management involves the processes of estimating, budgeting, and controlling costs within a project. It encompasses activities such as cost estimation, cost budgeting, and cost control,

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aiming to ensure that the project is completed within the approved budget while meeting its objectives.

Currently, there's no formal process for determining project budgets; they're developed and presented by the director based on on-the-ground situations without a cost management plan in place. Budgeting for the programmatic work has relied on previous experiences, specifically from management, with final approval by the board of directors, and staff then implement projects internally. While there are no constraints on budget allocation, instituting a cost management plan would aid in prioritizing activities. Cost reporting and performance tracking, managed by the finance department overseeing all four institutes, lead to delays and financial discrepancies, hampering project progress. Introducing a Project Management Office (PMO) could streamline cost management and enable real-time monitoring of funds, enhancing efficiency.

Integration Management: Integration management scores 2.40, suggesting awareness and some implementation, but there may be inconsistencies or areas for enhancement.

Project Integration Management is a comprehensive approach that ensures all elements of a project are effectively coordinated and integrated to achieve its objectives. It involves processes such as project charter development, project planning, execution, monitoring and controlling, and project closure.

There are no formal processes for project charter development, meaning that these are not used to approve projects or allocate funds. Project authorization occurs once the budget presented by the director the board of director has been approved. Thereafter, project information is verbally passed on to the associate directors and staff members. Thus, the lack of developing logical framework, results matrix, and monitoring and evaluation plans presents lack of documentation that would have improved inconsistencies in project implementation. Secondly, no change control process exists and are not documented; changes are approved ad hoc and requires either the associate directors or directors' approval, for example, external funded projects by the US Embassy does not require any reports to be submitted. This allows the IA to continue ad hoc processes that are inconsistent with the knowledge areas. Since no plans are developed, assignment of work is carried out in an informal manner, therefore, project evaluations can present incomplete information.

Quality Management, Resource Management, Procurement Management, and Stakeholder Management: These areas all have identical scores of 2.33. This suggests a moderate level of implementation and awareness, with room for improvement in consistency and effectiveness.

Quality Management encompasses the processes and activities that ensure a project meets the requirements and expectations of stakeholders in terms of quality. It involves processes such as quality planning, quality assurance, and quality control. The IA does not have established standards for quality management. Quality management plans are not developed or considered throughout any of their processes. The main quality control in place is that management provides oversight to staff members in implementing project activities. Quality management varies on a day-to-day basis to ensure project outcomes are met.

Resource Planning involves the systematic allocation and optimization of resources required to execute a project effectively. It includes processes such as identifying the types and quantities of resources needed, acquiring those resources, and managing them throughout the project lifecycle. There is no resource management plan in place, which would be beneficial in assigning roles and resources. In lieu, the monitoring and evaluation place can serve as a resource management plan, which outlines the roles and responsibilities of the project team. However, an employee handbook would also benefit the IA in providing information on the human resources and skillsets needed for project staff.

Procurement Management involves the processes necessary to acquire goods and services from external sources to fulfil project requirements. It includes activities such as procurement planning, solicitation, source selection, contract administration, and contract closeout. There is currently no procurement management plan established. Procurement is conducted solely through approved purchase orders initiated by the associate director or director, with processing handled by the finance department. However, there is a lack of additional structure beyond purchase orders. Implementing standard procurement guidelines would provide a structured framework for procurement activities, ensuring consistency, transparency, and efficiency in the procurement process.

Stakeholder Management involves identifying, analysing, and engaging with individuals or groups who have an interest in or are impacted by the project. It encompasses

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processes such as stakeholder identification, stakeholder analysis, stakeholder engagement planning, and stakeholder communication. The institution has no stakeholder engagement plan in place, either project specific or institutional level. There is no stakeholder identification or analysis done, as stakeholders are set by default based on historical information. Nonetheless, stakeholder expectations and satisfactions are not managed. However, it would be beneficial to conduct a stakeholder satisfaction survey to establish baseline information for future assessment and actions.

Schedule Management and Risk Management: Both areas have scores of 2.00, indicating a need for improvement in these aspects of project management. There may be challenges in managing schedules effectively and addressing project risks appropriately. Project Schedule Management encompasses the processes involved in developing, maintaining, and controlling the project schedule. It includes activities such as defining activities, sequencing them, estimating resource requirements, estimating durations, developing the schedule, and controlling changes to the schedule.

There are no processes for schedule management at the IA. Schedule management plans are not developed or defined workplans. No process exists for activity definition is conducted on an ad hoc basis. Activity estimation is done through an ad hoc basis as well. The basis on which activities are implemented is based on staff knowledge and guidance provided by management. Project Risk Management involves the systematic identification, assessment, and mitigation of potential risks that may affect a project's objectives. It includes processes such as risk identification, risk analysis, risk response planning, and risk monitoring and control.

The IA is not aware of risk management and has not instituted any process for risk identification, analysis, or management. No risk management plans are developed for projects, which can affect risk mitigation measures to be put in place. With no plans in place, it is recommended to utilize open-source templates that can provide risk management strategies to ensure risk mitigation of funded projects. Lastly, risk response planning can be incorporated within the operations manual, which includes documenting of strategies for future project risks.

Risk monitoring is not carried out in a structured manner. In this case, risks are tackled as they arise. As defined by the field staff and is reported to management. The most feasible options are usually chosen to address the risks as they occur. In principle, the monitoring and evaluation framework and operations manual would both provide guidance for in these knowledge areas, resulting in status reports and management of change.

Overall, the current state of the IA is a maturity level 2, which serves as the baseline information. This rating was assigned due to the limited presence of established organizational processes and standards that enforce accountability for project managers and team members in the knowledge areas. Numerous activities are conducted informally and without prior planning. Nonetheless, management remains cognizant of the necessity for policy enhancements in these areas. In following best practices for project management, figure 9 below presents a visual representation of the project management maturity model (Crawford, 2021).

Figure 9

Project Management Maturity Model



Note: sourced from Crawford, J. (2021)

Figure 9 presents a visual representation of the knowledge areas and the level of maturity.

Utilizing the tool, we can visualize where each of the knowledge areas stand for the IA.

Figure 10



Overall 3PM score based on the maturity self-assessment tool.

Note: from author, self-produced.

The overall score of 2.42 (Averaged to 2.0) suggests a moderate level of maturity in its project management processes. Essentially, the maturity level of the IA is level 2- where some structured process and system exists in place but requires improvements. This
signifies the presence of structured processes but highlights the need for enhancements. While the IA shows competency in certain aspects, there is room for consistency and optimization across all projects, as per Crawford's insights.

According to Crawford's (2021) Project Management Maturity Model, a score of 2.42 (i.e., 2.0) suggests that the organization may be aware of project management principles and practices but may not consistently apply them across all projects or may not use them to their fullest potential. Lastly, the future state is where the IA should aim to be by their next assessment, whether it is scheduled for 1-2 years or however the IA sees fit to re-conduct the self-assessment.

The interviews with management and staff members at the IA provided valuable insights into the existing project management practices and validated the project management maturity assessment results. Across the board, a consistent theme emerged regarding the decentralized nature of project management, with projects often being handled ad hoc rather than following formalized systems or frameworks. While directors hold positions of responsibility within the IA, indicating a top-down approach to project oversight, there is a notable absence of formal project management training among staff members. This lack of training is identified as a key challenge, along with some communication issues and limited human resources. The Technicians are responsible for project assistance, which highlights the transition to a collaborative project management approach, suggesting a shift towards more inclusive decision-making processes. However, this transition is accompanied by challenges such as understaffing and the need for better technical skills among team members. Similarly, the support staff emphasizes the collaborative nature of project planning within the research division but identifies communication issues as a significant obstacle. Overall, while the collaborative approach allows for flexibility, there is a clear need for standardized project management processes and training initiatives to address the identified challenges and improve efficiency and effectiveness across the IA. Establishing a centralized Project Management Office (PMO) could offer a solution by streamlining project management practices and providing clearer roles and responsibilities for staff members. Additionally, recommendations for improving communication, capacity building, and resource allocation should be explored to enhance project management capabilities within the IA.

4.2. Objective 2

To conduct an analysis of current project management practices and identify gaps in the Institute of Archaeology within NICH.

To integrate cultural, environmental, and historical preservation requirements into the framework of the proposed Project Management Office (PMO) at the IA, we will draw on best practices and lessons learned from various PMO types to enhance project management effectiveness (Jones, 2018).

The PMO framework outlined by Philbin (2016) provides a comprehensive structure for organizing and managing projects. In designing the PMO, consideration will be given to the organizational structure and processes that will support the integration of these requirements. For instance, the proposed PMO can establish specialized teams or committees dedicated to overseeing cultural, environmental, and historical aspects of projects. These teams will develop policies, procedures, and best practices tailored to address the unique challenges and opportunities associated with these requirements.

A similar initiative to integrate cultural, environmental, and historical preservation requirements into the PMO framework is essential (Desmond, 2015).

- I. Supportive PMO Type: This type of PMO will provide consultative support for projects and serve as a knowledge repository (Philbin, 2016). It will also offer templates, best practices, and knowledge sharing to assist project teams in achieving their objectives.
- II. Controlling PMO: Emphasizing compliance with project management standards and templates, this PMO will establish specific guidelines and protocols mandating adherence to relevant regulations and best practices. Project managers will be tasked with incorporating these requirements into their project plans and deliverables, with the PMO providing oversight and ensuring compliance throughout the project lifecycle. Comprehensive training and access to resources will equip project teams with the necessary knowledge and tools to effectively address these requirements.
- III. Directive PMO: This PMO will exercise direct control over projects, proactively integrating cultural, environmental, and historical preservation considerations into project management processes and decision-making. By setting clear expectations and requirements from the project outset, the PMO ensures that project managers execute projects in alignment with these standards.

By including expertise in cultural, environmental, and historical preservation within the PMO team, projects can benefit from guidance on how to navigate and address these

specific requirements. The PMO will provide ongoing guidance, support, and oversight to ensure project adherence to these requirements, intervening as needed to address any issues or deviations that may arise.

Embedding these considerations into the core functions of the PMO, the Institute of Archaeology can enhance project management effectiveness while also fulfilling its cultural, environmental, and historical preservation obligations. During the implementation phase, the PMO will ensure that team members are trained and equipped with the necessary knowledge and resources to effectively incorporate these preservation considerations into their project plans and activities. By adopting a proactive approach to integrating these requirements into the PMO framework, the Institute can demonstrate a commitment to responsible and sustainable project management practices while enhancing project outcomes.

Table 1:

Consideration	Application at IA
Comprehensive Planning	Adopt a comprehensive planning approach
	within the PMO framework to systematically
	integrate cultural and environmental
	considerations into project management
	processes (Zhang, 2022).
Establishment of project teams	Establish dedicated project teams with expertise
	in cultural heritage preservation, environmental
	conservation, and historical research. These
	teams can ensure that projects adhere to relevant
	regulations, guidelines, and ethical
	considerations (Brown et al., 2020).

Table identifying considerations to integrate requirements into the PMO framework.

Consideration	Application at IA
Policy Integration	Integrate cultural and environmental preservation
	policies into overarching project management
	policies and procedures within the PMO.
Develop monitoring and evaluation	Implement robust monitoring and evaluation
systems	mechanisms to track project progress and assess
	its impact on cultural and environmental assets.
	Regular audits and assessments can help identify
	potential risks and ensure compliance with
	preservation requirements throughout the project
	lifecycle (Gupta & Patel, 2021).
Increase Stakeholder Engagement	Incorporate stakeholder engagement strategies
	into project planning and execution. By
	involving local communities, indigenous groups,
	and other relevant stakeholders, the PMO can
	promote inclusive decision-making processes
	and foster a sense of ownership and stewardship
	over cultural and environmental resources
	(White & Brown, 2019).
Utilizing technology and data driven	Leverage technology and data-driven approaches
approaches	to enhance project management effectiveness.
	Geographic Information Systems (GIS) mapping,
	remote sensing technologies, and digital archival
	systems can provide valuable insights into
	cultural heritage sites and environmental
	features, facilitating informed decision-making
~	and resource allocation (Chen et al., 2020).
Capacity building initiatives	Implement capacity-building initiatives and
	training programs to empower project staff with
	the necessary skills and knowledge to effectively
	implement preservation requirements and
	mitigate potential risks (Turner & Williams,
	2018).

Note: From author, self-produced.

Figure 11

Conceptual research framework for the IA



Note: Sourced From Zhang, 2022.

The figure outlines the importance of integrating historic preservation practices into comprehensive planning. It also recommends ways to improve this integration and discusses how to ensure that the recommendations are implemented effectively within the planning process. Lastly, it underscores the need for a holistic approach that addresses both the content of the comprehensive plan and its implementation to achieve meaningful results in historic preservation within development initiatives.

By integrating specific cultural, environmental, and historical preservation requirements into the PMO framework, the Institute of Archaeology can ensure the sustainable management of its projects while safeguarding the nation's rich cultural heritage and natural resources for future generations.

As per the PMI (2021) standards, each project should have a project management plan (PMP). In the development of this PMO proposal, there is no specific project management plan. However, below is a proposed project management plan structure, which the PMO

can use once fully established. Note that adjustments should be made based on updated standards and the needs of the Institute of Archaeology:

- I. **Executive Summary** a concise overview of the project, including its objectives, scope, and anticipated outcomes.
- II. General and Specific Goals an outline of both overarching project goals and specific, measurable objectives to be achieved.
- III. Project Scope and Deliverables detailed description of the project scope, outlining the specific deliverables to be produced.
- IV. Project Schedule a comprehensive timeline detailing key milestones, tasks, and deadlines throughout the project lifecycle.
- V. **Project Resources** identification and allocation of human, financial, and material resources required for project execution.
- VI. **Risk Management Plan** strategies for identifying, assessing, mitigating, and managing project risks to minimize their impact.
- VII. Procurement Plan overview of procurement activities, including sourcing, contracting, and management of external resources.
- VIII. **Communication Management Plan** strategies for effective communication among project stakeholders, including channels, frequency, protocols.
- IX. **Stakeholder Engagement Plan** approaches for engaging stakeholders throughout the project, fostering collaboration, managing expectations.

By following this structured approach, the proposed PMO will enhance project management capabilities within the Institute of Archaeology, ensuring that projects are executed efficiently and in alignment with preservation goals.

The PMO will be responsible in establishing methods and standards, project tracking, and project support. Therefore, it is recommended that the basic project management processes be kept such as:

Project charters: A project charter is a formal document that authorizes the project and provides a clear outline of the project objectives, scope, participants, and roles and responsibilities. It serves as an initial agreement and a reference point throughout the project lifecycle.

Workplans: Workplans are detailed documents that outline the tasks, timelines, and resources required to complete a project. They provide a roadmap for project execution, ensuring that all team members understand their responsibilities and the sequence of activities.

Governance Plans: Governance plans define the framework for decision-making, accountability, and control within the project. They outline roles, responsibilities, and procedures for managing and overseeing the project, ensuring that it aligns with organizational policies and objectives.

Work Breakdown Structure: A Work Breakdown Structure is a hierarchical decomposition of the total scope of work to be carried out by the project team. It breaks down the project into smaller, more manageable components or deliverables, which helps in organizing and defining the work required.

Communication Plan: A communication plan outlines the communication strategy for the project, including how information will be shared among stakeholders. It details the methods, frequency, and content of communications to ensure that all stakeholders are kept informed and engaged throughout the project lifecycle.

Risk Analysis: Risk analysis involves identifying, assessing, and prioritizing risks that could impact the project. It includes developing strategies to mitigate or manage these risks, ensuring that potential issues are proactively addressed to minimize their impact on the project's success.

Undeniably, the IA requires a Centralized PMO. As a result, resources are not maximized to the benefit of the IA. The common objectives the centralized PMO would need to satisfy are:

- 1. To standardize terminologies.
- 2. Provide common support tools.
- 3. Project monitoring.
- 4. Establish project methodologies.
- 5. Effective repeatable project management processes.
- 6. Improve level of project success.

Once the common objectives are satisfied by the PMO, it should serve as a baseline point of implementation within IA.

Functions of a Centralized PMO for the Institute of Archaeology:

1. Standardization of Project Management Practices:

- Develop standardized methodologies, processes, and templates for project initiation, execution, monitoring, and closure.
- Ensure consistent application of project management practices across all projects within the Institute.
- 2. Governance and Oversight:
 - Establish governance structures and procedures for project oversight, decisionmaking, and escalation of issues.
 - Define roles and responsibilities for project stakeholders, including project sponsors, steering committees, and project managers.
- 3. Resource Management:
 - Centralize resource allocation and management to optimize resource utilization across projects.
 - Develop resource forecasting and tracking mechanisms to ensure adequate resources are available for project execution.
- 4. Risk Management:
 - Implement risk management processes to identify, assess, prioritize, and mitigate project risks.
 - Facilitate the development and execution of risk response strategies to minimize project disruptions.
- 5. Quality Assurance and Control:
 - Establish quality standards and metrics for project deliverables and outcomes.

- Conduct regular quality reviews and audits to ensure adherence to quality standards and continuous improvement.
- 6. Knowledge Management:
 - Serve as a repository for project documentation, lessons learned, and best practices.
 - Facilitate knowledge sharing and transfer among project teams to promote organizational learning and improvement.
- 7. Stakeholder Engagement:
 - Develop stakeholder engagement strategies to foster collaboration, communication, and alignment with project objectives.
 - Facilitate regular communication and feedback mechanisms to keep stakeholders informed and engaged throughout the project lifecycle.
- 8. Training and Development:
 - Provide training and development opportunities for project managers and team members to enhance their project management skills and competencies.
 - Offer coaching, mentoring, and certification programs to support professional growth and development.
- 9. Performance Monitoring and Reporting:
 - Establish performance metrics and key performance indicators (KPIs) to monitor project progress and performance.
 - Generate regular reports and dashboards to provide stakeholders with visibility into project status, issues, and achievements.

10. Continuous Improvement:

- Implement processes for post-project reviews and lessons learned sessions to identify areas for improvement.
- Drive continuous improvement initiatives based on feedback, insights, and recommendations from project evaluations.

The centralized PMO will play a pivotal role in enhancing project management capabilities, promoting consistency and efficiency in project delivery, and supporting the achievement of the Institute of Archaeology's goals and objectives.

4.3. Objective 3

To assess the current project management needs and capabilities within the Institute of Archaeology to inform the design of a tailored PMO structure.

The project management maturity level (2) provides enough justification for the need of a Centralized PMO within the organization. The IA has varying scores across different knowledge areas, indicating inconsistencies in project management practices. A PMO can establish standardized processes and methodologies to ensure consistency across all projects. With moderate scores in several areas, there is an opportunity for the IA to leverage a PMO as a hub for knowledge sharing and dissemination of best practices. The PMO can facilitate training sessions, provide resources, and promote continuous improvement initiatives. Lower scores in areas like Schedule and Risk Management highlight potential challenges in managing project risks effectively. A PMO can develop robust risk management frameworks, implement mitigation strategies, and ensure timely resolution of issues to minimize project disruptions. Improved Resource Management is essential for efficient project execution. A PMO can implement resource allocation strategies, monitor resource utilization, and optimize resource allocation across projects to maximize productivity and minimize bottlenecks. The PMO can establish performance measurement metrics and reporting mechanisms to track project progress, identify areas for improvement, and provide stakeholders with transparent and timely project updates.

Figure 12

The proposed PMO structure within the IA



Note: from author, self-produced.

Establishing a PMO can provide the structure, support, and guidance needed to enhance project management practices, address areas for improvement, and ultimately improve project outcomes for the IA. The PMO has been strategically placed to support all departments in implementing Department policies, processes, and systems.

Figure 13

Proposed PMO structure for the IA



Note: from author, self-produced.

Based on analysis of the feedback obtained from staff and management, the PMO was strategically placed on the hierarchy of the management structure. The places the proposed PMO strategically within the IA's organizational structure, where it has access and can provide guidance and support to the head of departments in implementing policies, initiatives, and projects. To this end, it ensures that sustainability and improvements in project management standards.

The PMO plays a vital role in providing structure, oversight, and support to project management activities. According to PMI (2017), the functions of a PMO typically encompass several key areas. Firstly, the PMO establishes standardized project

management processes and methodologies to ensure consistency and efficiency across projects (PMI, 2017). This involves developing project management frameworks, templates, and guidelines that align with industry best practices and organizational goals. Additionally, the PMO serves as a centre of excellence for project management expertise, offering guidance, training, and mentorship to project managers and teams (PMI, 2017). The emphasis on knowledge transfer and skill development helps enhance project delivery capabilities and culminates a culture of continuous improvement within the organization. Furthermore, the PMO plays a crucial role in project governance by providing oversight and monitoring project performance, risks, and compliance with organizational policies and standards (PMI, 2017). Through regular reporting and analysis, the PMO will facilitate informed decision-making by stakeholders and senior management. Thereby ensuring projects remain aligned with strategic objectives. Lastly, the PMO functions as a strategic partner to the organization, driving project success and delivering value through effective project management practices (PMI, 2017).

The PMO staff acquisition can be sourced externally or internally, as the IA determines feasible. Where internal staff express interest and have the requisite experience and knowledge, they can be considered once a transparent and accountable process is followed. The associate directors or department managers in accordance with the organizational structure must approve all human resources. The PMO staff is the responsibility of the Project Manager, who will provide training in the field of Project management, team-building initiatives, and change management based on a developed implementation plan.

From a financial standpoint, in discussion with the Director the establishment of the PMO is economically feasible. Based on financial projections, the IA can allocate funds to implement a phased approach in establishing the PMO. It would, however, require the approval of the board of directors. Nonetheless, based on the financial resources made available annually the implementation of the PMO structure within the organizational structure would indeed support the programmatic work of the IA.

Following the establishment of the PMO, periodic reviews will be required from time-to-time to re-evaluate the PMO to document lessons learnt, challenges, and opportunities for improvement. The results will help to determine the PMO's progress, assist with decision-making, and its relevance to the IA.

The roles and responsibilities of the PMO at the IA are presented in table 2 below:

Table 2:

Thematic Area	Responsibility	Role	Creator	Approval
Establishing Project Methodologies	 Create Project Charter: Document outlining project objectives, scope, and participants. Create Work Plan: Detailed task schedule and resource allocation plan. Develop Governance Plans: Framework for decision-making, accountability, and control within the project. Develop Work Breakdown Structure (WBS): Hierarchical decomposition of project tasks. Create Communication Plan: Strategy for effective 	Project Manager & Project Assistant	Project Manager	Director

Roles and responsibilities of the PMO.

Thematic Area	Responsibility	Role	Creator	Approval
	communication among project stakeholders. - Create Forms & Templates: Documents and templates for project documentation and management. - Prepare Risk Analysis Plan: Identification, assessment, and mitigation strategies for project risks.			
Project Tracking	 Collect project status information: Gathering data on project progress and performance. Consolidate & Analyze Data: Organizing and interpreting collected project data. Implementation of Corrective Action: Taking necessary actions to address project issues and deviations from the plan. 	Project Manager & Project Assistant	Project Manager	Director
Project Support	 Provide centralized location for project data: Establishing a repository for project-related information to facilitate sharing and analysis. Develop competent project managers: Offering training and mentoring programs to enhance project management skills and capabilities. 	Project Assistant and Finance Officer	Project Manager	Project Manager

Note: from author, self-produced.

Based on the recommended PMO structure, the table below presents guidelines for

the requisite skills suggested for the PMO personnel.

Table 3:

PMO staff and rea	uirement structure
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PMO Staff	Requirements	Justification
Project Manager	- Strong project management skills	Establishing the role of a
	- Experience in coordinating and	Project Manager within the
	leading project teams	PMO is critical to ensure the
	- Proficiency in project planning and	successful execution and
	scheduling	delivery of projects. The
	- Risk management and problem-	Project Manager acts as the
	solving abilities	central point of coordination,
	- Bachelor's or Master's degree	responsible for overseeing
	(Preffered) in relevant field	project planning, execution,
		monitoring, and closure.
		Their expertise in managing
		project timelines, resources,
		and stakeholder expectations
		ensures that projects are
		completed on time, within
		budget, and to the required
		quality standards. By
		providing leadership and
		direction to project teams,
		the Project Manager ensures
		alignment with the Institute
		of Archaeology's strategic
		goals and enhances the
		overall efficiency and
		effectiveness of project
		management practices.
Project Assistant	- Detail-oriented with strong	The inclusion of a Project
	organizational skills	Assistant in the PMO is
	- Ability to assist in project planning	essential for supporting the
	and execution	Project Manager and
	- Coordination of project activities	ensuring the smooth
	and resources	execution of project tasks.
	- Documentation and reporting skills	The Project Assistant plays a
	- Bachelor's degree in relevant field	vital role in managing
	Č	administrative tasks,
		maintaining project
		documentation, and
		facilitating communication
		among project stakeholders.

		Their organizational skills
		and attention to detail help
		keep the project on track by
		ensuring that all necessary
		documentation is accurate
		and up-to-date, and that
		project activities are well
		coordinated. This support
		allows the Project Manager
		to focus on higher-level
		strategic tasks, thereby
		improving overall project
		efficiency and effectiveness.
Finance Officer	- Financial management and	A Finance Officer is
	budgeting expertise	indispensable within the
	- Understanding of project financials	PMO to manage the
	and cost control	financial aspects of project
	- Proficiency in financial reporting	management. This role
	and analysis	ensures that all projects are
	- Compliance with financial	financially viable and that
	regulations and policies	resources are allocated
	- Bachelor's or Master's degree in	efficiently. The Finance
	finance or related field	Officer's expertise in
		budgeting, financial
		reporting, and cost control is
		crucial for maintaining
		financial discipline and
		accountability. They provide
		accurate financial analyses
		and reports, enabling
		informed decision-making
		and ensuring compliance
		with financial regulations
		and policies. By overseeing
		project finances, the Finance
		Officer helps mitigate
		financial risks and ensures
		that projects are delivered
		within their allocated
		budgets, thereby
		contributing to the overall
		financial health and

						sustainability of the Institute
						of Archaeology's initiatives.
37.	г	A1	10	1	1	

Note: From Author, self-produced.

The table outlines the requisite skills and educational qualifications for various roles within the PMO structure. It provides a comprehensive guide for acquiring personnel with the necessary expertise to effectively manage projects and support organizational objectives.

4.4. Objective 4

To design an implementation plan for the establishment of a PMO within the Institute of Archaeology.

This plan ensures a structured and timely implementation of the PMO within a 12month period, allowing for careful analysis, stakeholder engagement, development of policies and procedures, training, infrastructure setup, pilot testing, rollout, and ongoing evaluation (The Project Group. 2020).

Table 4:

PMO implementation plan.

Phase	Item #	Strategy	Task Description	Result	Schedule
1	1.0	Project Planning and I	nitiation		
	1.1	Finalize vision	Define the vision for the PMO in alignment with the Institute's goals.	Clear vision statement.	Week 1
	1.2	Finalize scope	Define the scope of the PMO, including key responsibilities and boundaries.	Documented scope.	Week 1
	1.3	Finalize project plan	Develop a detailed project plan outlining tasks, timelines, and resources.	Comprehensive project plan.	Week 2
	1.4	4 Socialize and obtain consensus Present the PMO structure to stakeholders and obtain consensus on vision and mission.		Stakeholder consensus.	Week 2
2	2.0	Assess Current Environment			
	2.1	Conduct resource assessment	Assess human, financial, and physical resources available for the PMO.	SWOT Analysis, Readiness Report.	Week 3-4
	2.2	Identify use of project Evaluate current project management tools and their usage within the Institute.		Inventory of current tools.	Week 3-4
	2.3 Conduct readiness assessment		Conduct an organizational readiness assessment to determine the cultural factors affecting PMO adoption.	Readiness Report.	Week 3-4
3	3.0	PMO Governance			
	3.1	Define organizational structure	Define the organizational structure and staffing requirements for the PMO.	Documented organizational structure.	Week 5-6

Phase	Item #	Strategy	Task Description	Result	Schedule
	3.2	Establish prioritization processes	Establish processes for prioritizing projects within the PMO.	Prioritization process document.	Week 5-6
	3.3	Determine change management	Define change management processes to handle project changes effectively.	Change management plan.	Week 5-6
4	4.0	Establishing Methods	& Standards		
	4.1	Standard project deliverables	Determine standard deliverables for all projects managed by the PMO.	List of standard deliverables.	Week 7-8
	4.2	Project initiation processes	Develop standard processes for initiating projects.	Documented initiation processes.	Week 7-8
	4.3	Estimating processes	Develop processes for estimating project timelines and resources.	Estimation process document.	Week 7-8
	4.4	Project plan templates	Create templates for project plans to ensure consistency.	Project plan templates.	Week 7-8
	4.5	Project milestone standards	Define standards for setting and tracking project milestones.	Milestone standards document.	Week 7-8
	4.6	Scope management processes	Develop processes for managing project scope.	Scope management plan.	Week 7-8
	4.7 Change management processes		Establish processes for managing changes to projects.	Change management plan.	Week 7-8
5	5.0	Resource Management	t		
	5.1	Determine recording system	Identify and implement a system for recording project data.	Resource recording system.	Week 9
	5.2	Resource forecasting system	Develop a system for forecasting resource needs.	Resource forecasting system.	Week 9

Phase	Item #	Strategy	Task Description	Result	Schedule
	5.3	Define resource management process	Establish processes for managing resources across projects.	Resource management plan.	Week 9
6	6.0	Training & Mentoring			
	6.1	Train key staff	Train key staff in the use of PMO tools and processes.	Trained staff.	Week 10
	6.2	Conduct training sessions	Conduct training sessions for staff on project- level tools, templates, and processes.	Training modules, trained personnel.	Week 10- 11
7	7.0	Deployment			
	7.1	Pilot PMO	Pilot the PMO with selected projects to test the framework.	Feedback from pilot projects.	Week 12- 13
	7.2	Implement tools and processes	Implement enterprise tools and processes across the PMO.	Operational PMO tools and processes.	Week 14- 15
	7.3	Test tools and processes	Test project-level tools, templates, and processes for effectiveness.	PMO review and adjustments based on testing results.	Week 16- 17

Note: from author, self-produced.

It will be important to evaluate and assess the effectiveness of the plan. This is done through evaluation of KPIs, to determine its effectiveness, whether action are institutionalized or requires change, and ensure its sustainability. The recommended KPIs are presented in table 5 below but take note that this is not an exhaustive list. Lastly, PMI also recommends that a high-level 30-day plan be implemented after the development of a PMO to assess its effectiveness (Merla, 2005).

A structured recruitment process to acquire personnel with the necessary skills and expertise for effective project management and cultural preservation should be followed. Therefore, the recruitment process should include:

- I. Job Analysis and Role Definition: Clearly define the roles and responsibilities for each PMO position. This includes the Project Manager, Project Assistant, and Finance Officer.
- II. **Qualification Criteria:** Establish the required qualifications and experience for each role. This ensures that candidates have the requisite skills and knowledge.
- III. Job Posting and Outreach: Advertise the positions through various channels, including professional networks, academic institutions, and industry forums, to attract a diverse pool of candidates.
- IV. Selection Process: Implement a rigorous selection process involving initial screenings, competency-based interviews, and practical assessments to evaluate the candidates' abilities and fit for the roles.
- V. **On boarding and Induction:** Develop a comprehensive on boarding program to familiarize new hires with the PMO's objectives, policies, procedures, and the cultural and historical preservation goals of the IA.

Figure 14

High-Level 30-day plan for the IA

High Level 30 Day Plan				
PMO Install	Timing			
1.0 Project Management				
1.1 Finalize Vision	Week 1			
1.2 Finalize scope	Week 1			
1.3 Finalize project plan	Week 1			
2.0 Portfolio Governance				
2.1 Governance committee process	Week 2			
2.2 Prioritization processes	Week 2			
2.3 Change management process	Week 2			
2.4 Project Dashboard (Red/Yellow/Green) reporting	Week 3			
2.5 Project review process	Week 3			
2.6 Other reports	Week 3			
2.7 Governance Committee in place	Week 4			
3.0 Methods and Standards				
3.1 Status reporting	Week 2			
3.2 Standard project deliverables	Week 2			
3.3 Project initiation processes	Week 3			
3.4 Estimating processes	Week 3			
3.5 Project plan templates	Week 3			
3.6 Project milestone standards	Week 3			
3.7 Scope management processes	Week 3			
3.8 Change management processes	Week 3			
3.9 Project acceptance process	Week 3			
4.0 Resource Management				
4.1 Time recording system	Week 3			
4.2 Resource forecasting system	Week 3			
4.3 Resource management process	Week 4			
5.0 Training and Mentoring				
5.1 Enterprise tools and processes	Week 4			
5.2 Project level tools, templates, and processes	Week 4			
5.3 Time capture and resource forecasting	Week 4			
6.0 Rollout				
6.1 Enterprise tools and processes	Week 4			
6.2 Project level tools, templates, and processes	Week 4			

Note: sourced from Merla (2005).

Figure 14 presents a high-level implementation plan after the PMO has been established. This is recommended to ensure that the IA keeps to international PMO framework standards, which also has a focused approach and provides immediate results.

Table 5:

Key Performance Indicators for the PMO

			Measurement
Category	KPI	Detail	Timeframe
		Percentage of	
		projects completed	
		within budget, on	
Project	Project Success	time, and meeting	
Management	Rate	quality standards.	Quarterly
		Percentage of	
		projects adhering to	
	Schedule Adherence	scheduled timelines.	Monthly
		Average variance	
		between budgeted	
		and actual project	
	Budget Variance	costs.	Monthly
		Average satisfaction	
		rating of	
		stakeholders with	
	Stakeholder	project management	
	Satisfaction	processes.	Quarterly
		Percentage of	
		allocated resources	
		(staff, equipment,	
Resource		etc.) effectively	
Management	Resource Utilization	utilized on projects.	Monthly
		Percentage of	
		projects adequately	
		staffed and	
	Resource Allocation	resourced according	
	Effectiveness	to requirements.	Quarterly
		Average time taken	
		to allocate resources	
	Resource Allocation	to new projects or	
	Timeliness	project phases.	Monthly
		Percentage of	
		identified risks	
	Dist. Midia	successfully	
D'IM	KISK Mittigation	mitigated or	
KISK Management	Effectiveness	avoided.	Quarterly

			Measurement
Category	KPI	Detail	Timeframe
		Number of new	
		risks identified per	
	Risk Identification	project over a	
	Rate	defined period.	Monthly
		Average time taken	
		to respond to	
		identified risks and	
		implement	
	Risk Response	mitigation	
	Timeliness	measures.	Monthly
		Number of defects	
		or errors identified	
		during project	
Quality		execution per	
Management	Defect Rate	deliverable.	Monthly
		Percentage	
		compliance with	
		established quality	
	Quality Assurance	assurance processes	
	Compliance	and standards.	Quarterly
		Average satisfaction	
		rating of project	
	Customer	deliverables by end-	
	Satisfaction	users or clients.	Quarterly
		Percentage of key	
		stakeholders	
		actively engaged	
		and informed	
Stakeholder	Stakeholder	throughout project	
Management	Engagement	lifecycle.	Monthly
		Frequency and	
		clarity of	
		communication	
		between project	
	Communication	team and	
	Effectiveness	stakeholders.	Monthly

Note: from author, self-produced

These KPIs will help assess the performance and effectiveness of the PMO in various aspects of project management, resource utilization, risk management, quality assurance, and stakeholder engagement after its establishment.

The main issue faced by the IA comes from a history of ad hoc decision-making processes, lacking structured mechanisms for tracking project progress, mitigating risks, and facilitating reporting. To address this challenge, implementing a comprehensive Monitoring and Evaluation (M&E) policy is imperative. By establishing clear guidelines and procedures for monitoring and evaluating projects, such policy would not only enhance the IA's ability to track project performance but also enable the assessment of broader program effectiveness. This systematic approach to M&E would provide invaluable insights for informed decision-making and strategic planning.

This M&E policy should be designed to guide the IA to track the implementation of projects and its programmatic work. There will be an ongoing process to monitor and evaluate projects, learn how to improve documentation of results and impact, and inform stakeholders and the public about relevance, effectiveness, and efficiency of the IA.

Subsequently, this policy provides guidance required for monitoring, reporting, and evaluation of projects funded by the IA. It will also provide guidance for the IA to develop and implement monitoring systems, track progress, and to produce relevant reports.

The IA views M&E as a participatory process which enables capacity building, understanding, and applies lessons learned from project experiences. All while ensuring that there is technical soundness and financial accountability. For monitoring to lead towards desired results, it should be consistent and timely. It requires planning and coordination by all project participants. In conclusion, monitoring and evaluation is expected to help projects measure the progress made towards targets and intended goals, achieve sustainability, allow for replicability, and provide opportunities to communicate lessons learned.

The table below presents the M&E reporting mechanism that the IA should use to be transparent and accountable in its processes.

Table 6:

Documentation	Purpose	Frequency	Person Responsible
Inception Reports	Initial project overview	Start of each project	Project Manager
Monthly Technical & Financial Reports	Progress tracking	Monthly	Project Assistant and Finance Officer
Quarterly Reports	Performance Assessment	Quarterly	Project Manager
Mid-term Reports	Progress Evaluation	Biennial	Project Assistant
Annual Reports	Yearly project summary	Annually	Project Manager and Project Assistant
Final Impact Reports	Project outcomes	Upon Project completion	Project Manager and Project Assistant
Audit Reports	Compliance Assessment	Periodically	Project Manager and Finance Officer

M&E reporting structure

Note: From author, self-sourced.

The table provides a structured overview of various documentation types within the project management process, their purposes, frequencies, and the personnel responsible for their creation and maintenance.

To effectively align the Project Management Office (PMO) with the strategic needs of the IA, it is imperative to emphasize the integration of sustainable practices in project management for cultural and historical preservation initiatives. As IA endeavours to uphold its mandate of conserving Belize's rich cultural heritage, the PMO plays a pivotal role in driving project success and organizational advancement. In light of this, the following recommendations are tailored to enhance the PMO's strategic alignment with IA's overarching goals, thereby maximizing its value and impact on cultural preservation efforts.

- I. Develop a PMO Strategic Plan: The PMO should have a strategic plan with an M&E Framework that aligns with IA's vision, mission, and strategic goals, ensuring synergy between project activities and organizational objectives (Giffen, 2019). This plan should outline clear long-term and short-term objectives, identify necessary resources, establish communication channels, prioritize PMO goals, and define performance indicators for monitoring and evaluation (Alexander, 2018).
- II. Provide Executive Support: Executive buy-in and support are essential for facilitating strategic alignment and institutionalizing change within IA (PMI, 2014). Executive leadership should endorse the PMO's functions and advocate for the adoption of new processes to drive organizational success (PMI, 2014).
- III. Invest in Talent: Cultivating a high-performing PMO team is crucial for achieving project management excellence (PMI, 2014). IA should invest in skilled staff members with expertise in leadership, decision-making, cost control, risk management, and project procurement (PMI, 2014). These talented individuals will

drive the implementation of the strategic plan and ensure the organization's goals are being met.

IV. Continuously Measure Value: Metrics play a vital role in assessing the effectiveness of the PMO and its contribution to organizational objectives (Singh, 2017). IA should establish metrics to measure the value generated by the PMO, including project performance, stakeholder satisfaction, and alignment with strategic goals (Singh, 2017). Regularly analysing these metrics will enable IA to identify strengths, weaknesses, opportunities, and threats, allowing for informed decision-making and continuous improvement.

By implementing these recommendations, IA will be able to enhance the effectiveness of its PMO and ensure that project management practices align with the organization's strategic needs, ultimately contributing to the sustainable preservation of Belize's cultural and historical heritage.

CONCLUSION

Based on the assessment, interviews conducted and analysing all information and data, it is indicative that there is a need for a **Centralized Project Management Office** (PMO) at the IA within NICH. The literature has presented valid cases where a PMO substantially increased project management maturity levels. The PMO is the focal point to have consistent application of processes and systems for successful project management.

Overall, the analysis utilizing the project management maturity self-assessment tool highlights areas where the organization excels, such as scope and communication management, as well as areas where there is room for improvement, such as cost, integration, schedule, and risk management. Addressing these areas can lead to more robust project management practices and improved project outcomes.

Establishing a Centralized PMO at the IA seems like a logical next step for the organization based on the identified knowledge areas for improvement and the potential benefits highlighted in the literature. Prior to establishing the PMO, the IA needs to consider the following:

- I. **Resource Optimization:** Implementing a PMO can facilitate better resource allocation and utilization, ensuring that the IA's limited resources are effectively allocated to projects according to priority and need.
- II. Standardization and Consistency: With a PMO in place, standard project management processes and methodologies can be established and consistently applied across all projects. This can enhance efficiency, reduce errors, and improve overall project performance.

- III. Risk Mitigation and Compliance: The PMO can play a crucial role in enhancing risk management practices, ensuring that potential risks are identified early, mitigated effectively, and that the IA remains compliant with relevant regulations and standards.
- IV. Enhanced Stakeholder Engagement: A PMO can serve as a central hub for communication and collaboration, facilitating more effective engagement with stakeholders throughout the project lifecycle. This can lead to greater stakeholder satisfaction and support for project initiatives.
- V. Continuous Improvement: Establishing a PMO provides a framework for ongoing monitoring, evaluation, and continuous improvement of project management practices. By regularly reviewing performance metrics and lessons learned, the IA can identify areas for further enhancement and ensure that it remains adaptive to changing needs and circumstances.

In conclusion, the implementation of a PMO at the IA holds the potential to significantly enhance project management capabilities, improve project outcomes, and ultimately contribute to the IA's mission and objectives.

RECOMMENDATIONS

Throughout the processes of establishing the PMO, it is recommended that management should ensure thorough alignment of the PMO's objectives with the overall strategic goals of the organization. They should also prioritize clear communication channels, foster stakeholder engagement, and establish robust governance structures to support the PMO's functions effectively. Additionally, it's crucial to allocate sufficient resources and provide adequate support to enable the PMO to fulfil its intended role in driving project success and organizational excellence. The staff may show some hesitance in setting up the PMO, as such change and communication management will be essential to showcase the advantages of the PMO to gain acceptance.

At the institutional level, development of a monitoring and evaluation framework would help facilitate monitoring of project status. The Monitoring and Evaluation (M&E) Framework should be designed to guide the IA to track the implementation of its programs and projects. As for the program, the M&E Framework should be guided by high-level metrics to assess the relevance, effectiveness and efficiency of ongoing programs. There will be an ongoing process to monitor and evaluate projects, learn how to improve documentation of results and impact, and inform stakeholders and the public about relevance, effectiveness, and efficiency of the IA. Note that the projects are what feed into the program level metrics.

Without formal processes in place, the risk of successful project implementation is high. The development of an operations manual would help mitigate several ad hoc processes and instil a system to guide not only project management processes but also improve institutional effectiveness.

The IA can increase its portfolio of projects through partnerships and collaboration with international entities such as the Green Climate Fund and Adaptation Fund. The development of a strategic plan for the next five (5) years would help to enhance the organizational capacity, institutional effectiveness, governance, asset management, risk management, administration and optimize its impact of conservation efforts and promote sustainable development.

It is also recommended to seek capacity building initiatives, especially in proposal writing, and project management to enhance the organization's capabilities. However, a capacity needs assessment would be beneficial to determine a more thorough institutional level scope and evaluate the areas of strengths, weakness, and opportunities. The assessment would identify specific areas where additional capacity building is needed and tailor initiatives, to ensure a more targeted approach.

The assessment of the IA's project maturity is key to determine how advanced the organization is in project management. Therefore, another self-assessment should be scheduled within two (2) years of the baseline assessment to compare results. This will also help to assess capabilities and improvement opportunities, which are key to achieving the strategic goals of the IA.

The optimal structure for a Project Management Office (PMO) within the IA should align with its organizational goals, culture, and project management maturity level. As such, the recommended structure that can be tailored to fit the IA's specific needs is a

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Centralized PMO. A centralized PMO is located within a single department or division of the IA. This structure promotes consistency and standardization across projects by providing centralized oversight, governance, and support. The PMO serves as a support function, providing guidance, training, and best practices to project managers within each department. It maintains a centralized core team responsible for establishing standardized project management practices, while also supporting decentralized project management functions within functional departments. Inherently, with standard processes set in place, the PMO can function remotely, leveraging technology to support project management activities across the IA.

In conclusion, the optimal PMO structure, which is a Centralized PMO, is based on the organizational size, complexity, culture, and strategic objectives. It was essential to consider assessing these factors when selecting a structure that best aligned with the IA's goals to enable effective project management practices.

VALIDATION OF THE FGP IN THE FIELD OF REGENERATIVE AND SUSTAINABLE DEVELOPMENT

The proposed FGP (Final Graduate Project) aligns with the principles of regenerative and sustainable development through several key strategies and initiatives. This includes the impact analysis P5 pillars: People, Prosperity, Planet, Peace, and Partnerships (The GPM P5 Standard for Sustainability in Project Management, 2023).

Firstly, the establishment of a Project Management Office (PMO) at the National Institute of Culture and History (NICH) Belize is aimed at enhancing project management practices, which in turn contributes to the efficient provision of resources, reduction of waste, and optimization of project outcomes. By implementing robust project management methodologies, the FGP seeks to promote accountability, transparency, and effective decision-making, which are essential elements of sustainable development (UNESCO, 2017).

The FGP prioritizes social inclusion and community engagement by involving local stakeholders in project decision-making processes, thereby promoting the well-being of communities. By preserving cultural heritage sites and traditions, such as archaeological sites, the project enhances cultural identity and fosters social cohesion within communities. Additionally, the optimization of project management practices through the PMO enhances resource allocation and efficiency, contributing to economic prosperity and growth. The preservation of cultural heritage sites also attracts tourism, generating revenue and economic opportunities for local communities.

Furthermore, the FGP aims to integrate specific cultural, environmental, and historical preservation requirements into the project management framework. This integration ensures

that projects undertaken by the IA not only meet their immediate objectives but also safeguard cultural heritage, protect the environment, and promote sustainable practices, for example, by incorporating environmental impact assessments (EIAs) as a standard practice within project management processes can help identify and mitigate potential environmental risks, thus promoting sustainable development.

To measure the impact of the FGP on regenerative and sustainable development, several indicators can be considered: Environmental footprint reduction, Cultural heritage preservation, Long-term sustainability of project outcomes, Alignment with Sustainable Development Goals (SDGs), and by regularly monitoring these indicators and assessing progress against predefined targets (United Nations, 2015). The FGP can demonstrate its contribution to both regenerative and sustainable development objectives, thereby ensuring the long-term success and positive impact of the IA's projects. The establishment of the PMO facilitates collaboration and partnerships among various stakeholders, including government agencies, NGOs, and local communities. By promoting multi-stakeholder engagement, the FGP strengthens partnerships for sustainable development and ensures the effective implementation of projects.

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Appendix 1: FGP Charter

CHARTER OF THE PROPOSED FINAL GRADUATION PROJECT (FGP)

1. Student name

Edson Mendez

2. FGP name

Project Management Office (PMO) proposal for the Institute of Archaeology within the National Institute of Culture and History (NICH) of Belize

3. Application Area (Sector or activity)

Archaeology

4. Student signature



5. Name of the Graduation Seminar facilitator

Professor Róger Valverde Jiménez

6. Signature of the facilitator



7. Date of charter approval

13 January 2024

8. Project start and finish date

January 2024	June 2024
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9. Research question

What key elements and strategies are essential in establishing a Project Management Office (PMO) at the Institute of Archaeology within the National Institute of Culture and History (NICH) of Belize to enhance project management practices and contribute to the effective execution of cultural and historical preservation initiatives?

10. Research hypothesis

A tailored PMO at the Institute of Archaeology within NICH, integrating cultural, environmental, and historical preservation, will improve project management practices and promote sustainability.

11. General objective

To develop a proposal for the establishment of a Project Management Office at the Institute of Archaeology within the National Institute of Culture and History (NICH) of Belize, that allows the consistent and efficient delivery of high-quality projects in cultural, environmental, and historical preservation.

12. Specific objectives

- 1. To conduct a maturity assessment of the Institute of Archaeology within NICH.
- 2. To conduct an analysis of current project management practices and identify gaps in the Institute of Archaeology within NICH.
- 3. To assess the current project management needs and capabilities within the Institute of Archaeology to inform the design of a tailored PMO structure.
- 4. To design an implementation plan for the establishment of a PMO within the Institute of Archaeology.

13. FGP purpose or justification

The Institute of Archaeology PMO proposal holds paramount significance as it strategically addresses critical needs within the organization. The primary objective is to establish a Project Management Office (PMO) to elevate project management maturity, streamline processes, and align project activities with organizational objectives. The current decentralized approach to project management at the Institute of Archaeology introduces potential inefficiencies and challenges in project delivery, highlighting the urgent need for a structured PMO framework. This proposal aims to fill this gap by introducing a structured PMO framework that will serve as a guiding force for project initiation, execution, and monitoring.

The significance of this project is underscored by the absence of similar project management guidelines within Belize and the broader context of Latin/Central America. The proposed PMO will set a precedent for best practices in project management tailored to the specific needs of the IA. Moreover, the organization's annual investment in various initiatives, which amounts to \$3.5 million USD, necessitates optimization for improved cost-effectiveness and resource utilization.

The quantitative aspect of this justification lies in the potential impact on project success rates, operational efficiency, and overall return on investment. By implementing the PMO, the IA should aim to elevate its project management capabilities, leading to a projected increase in the successful completion of projects, cost savings, and enhanced organizational effectiveness.

14. Work Breakdown Structure (WBS). In table form, describing the main deliverable as well as secondary, products or services to be created by the FGP.

1. P	Project Management Office (PMO) proposal for the Institute of
A	Archaeology within the National Institute of Culture and History (NICH)
0	f Belize
1	.1 Final Graduation Project Deliverables
	1.1.1 Introduction.
	1.1.2 Theoretical Framework.
	1.1.3 Methodological Framework.
	1.1.4 Annexes (Preliminary bibliographical research, FGP schedule,
	FGP WBS, FGP Charter).
1	.2 FGP Development
	1.2.1 Development of an implementation plan for implementing a
	PMO in the IA.
	1.2.1.1 Determining the feasibility of implementing a PMO in the
	IA.
	1.2.1.2 Determining the value proposition of a PMO for the IA.
	1.2.1.3 Performance of maturity analysis of the IA.
	1.2.1.4 Determining the number of key personnel needed to form
	the PMO.
	1.2.1.5 Performance of risk assessment.
	1.2.2 Conclusion.
	1.2.3 Recommendations
	1.2.4 Validation of the FGP in the field of regenerative and sustainable
	development.
	1.2.5 Reference lists.
	1.2.6 Annexes.
1	1.2. / Tutor approval for reading.
	.3 Keader's review.
	.4 Adjustments.
	.5 Board of examiners evaluation.

15. FGP budget

ITEM	ESTIMATED COST (USD)
Transportation	\$200.00
Tools and Equipment (ex: recorder)	\$300.00
Subscription to relevant journals	\$100.00
TOTAL	\$600.00

16. FGP planning and development assumptions.

I. That the IA maintains organized and accessible project management data for analysis.
II. That key stakeholders within the IA will actively participate and collaborate during interviews.
III. That the IA will consider implementing the recommended PMO establishment, acknowledging the potential benefits outlined in the research.
IV. The researcher will allocate a minimum of 20 hours per week to the FGP development process.

17. FGP constraints

- I. The FGP is constrained by the availability of limited project management professionals within the IA organization, potentially impacting the depth of project insights.
- II. The scope of the FGP is restricted to the existing organizational structure of the IA, excluding the consideration of any proposed structural changes during the research period.
- III. The FGP is subject to time constraints, with a maximum allowable duration of 14 weeks, limiting the extent of in-depth analysis and implementation strategies.
- IV. The FGP is constrained by the accessibility of historical project data within the IA, potentially limiting the depth of retrospective analysis and recommendations.

18. FGP development risks

- 1. Delays in obtaining required documents and interviews may impact the project schedule and deliverable quality.
- 2. Lack of support from the IA's Belize Director could affect the researcher's ability to carry out the project, impacting the scope.
- 3. Unexpected purchases for project execution may disrupt item acquisition, affecting the project budget.
- 4. Delays in receiving feedback during the tutoring process.

19. FGP main milestones

Milestones are related to deliverables on the second level (deliverables) and third level (control accounts) of the WBS of section 14 of this Charter. At the same time the deliverables are related to the specific objectives (in the case of the FGP please include the times for the tutorship reviews as well as for the readership).

Deliverable	Finish estimated date		
1.1 FGP Deliverables	18 February 2024		
1.1 Introduction	18 February 2024		
1.1.2 Theoretical Framework	4 February 2024		
1.1.3 Methodological Framework	11 February 2024		
1.1.4 Annexes	18 February 2024		
1.2 FGP Development	24 May 2024		
1.2.1 Development of an implementation plan for implementing a	24 May 2024		
PMO in the IA			
1.2.2 Conclusions	24 May 2024		
1.2.3 Recommendations	24 May 2024		
1.2.4 Validation of the FGP in the Field of Regenerative and	18 February 2024		
Sustainable Development			
1.2.5 Reference Lists	24 May 2024		
1.2.6 Annexes	24 May 2024		
1.2.7 Tutor approval for reading	24 May 2024		
1.3 Readers review	14 June 2024		
1.4 Adjustments	21 June 2024		
1.5 Board of examiners evaluation	28 June 2024		

- 20. Theoretical framework
 - 20.1 Estate of the "matter"

In the realm of the Institute of Archaeology, the current predicament revolves around the absence of a centralized approach to project management. NICH, housing various institutes including the Institute of Archaeology, Institute of Creative Arts, Institute for Social and Cultural Research, and the Museum of Belize & Houses of Culture, operate without a dedicated Project Management Office (PMO). This deficiency in a structured PMO framework gives rise to potential inefficiencies and challenges in project delivery, echoing the need for a more systematic and coordinated approach.

Presently, the IA conducts project implementation based on ad-hoc decisions, lacking a systematic project management approach. This decentralized method may result in varying project success rates, disparities in resource utilization, and overall divergent project outcomes. The absence of a standardized approach also poses challenges in monitoring and evaluating project activities, potentially impeding the achievement of organizational objectives.

Previous attempts to address this issue within the IA may have been limited, given the ad-hoc nature of project management practices. The existing literature reveals a significant gap in research concerning the implementation of a PMO tailored specifically to the cultural and heritage sector. This emphasizes the unique challenges and opportunities inherent in this domain. While broader project management principles exist, a specialized focus on cultural heritage projects within the Belizean context appears conspicuously absent.

To comprehend the current state methodically, delving into the experiences of similar cultural institutions globally is crucial. An exploration of existing research on the establishment of PMOs in analogous contexts becomes imperative. References such as the work of Schlichter and Duncan (1999) on the organizational PM maturity model and Alsadeq, Akel, and Hamamo (2011) on establishing a PMO using the agile approach provide valuable insights and frameworks that can inform the development of a tailored PMO for the IA.

The types of PMOs and their influence on projects, as outlined in the PMBOK® Guide 7th Edition, offer a framework for tailoring the PMO to the organization's needs. The primary value proposition of a PMO lies in enhancing project management practices concerning schedule, cost, quality, and risk (Project Management Institute, 2021). Establishing a PMO involves following a roadmap, starting with a maturity analysis to evaluate the current project management capabilities of the organization. Various model templates, such as Kerzner, Capability Maturity Integration (CMMI), Organisational Project Management Maturity Model (OPM3), and Portfolio, Programme, and Project Maturity Model (P3M3), enable objective assessments against key knowledge areas in PMBOK® Guide. As the proposed PMO for the IA takes shape, these insights will be integral, aligning the PMO's structure with the unique cultural and heritage context of the IA.

20.2 Basic conceptual framework

Project Management Plan Project Management Office Maturity Model Organizational Project Management Project Manager PMO Leader

21. Methodological framework

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
1. To conduct a maturity assessment of the Institute of Archaeology within NICH.	A complete Project Management Maturity Model (PMMM) report to determine the organization's maturity level used for project management.	Secondary: thesis, reports Primary: field interviews, articles.	Qualitative. Written information analysis.	Structured interviews Document analysis	Few books on the subject. Difficult to define the population and thus the sample. Limited time of the personnel.
2. To conduct an analysis of current project management practices and identify gaps in the Institute of Archaeology within NICH.	A framework encompassing all benefits for the proposed PMO, incorporating best practices, and lessons learned from other PMO types.	Secondary: thesis, reports Primary: field interviews, articles.	Qualitative. Written information analysis.	Structured interviews Document analysis	Availability of resources, including funding expertise and time to research, sign and implement requirements into the proposed PM framework.
3. To assess the current project management needs and capabilities within the Institute of Archaeology to inform the design of a tailored PMO structure.	A revised organizational chart that reflects the optimal structure of the PMO.	Secondary: thesis, reports Primary: field interviews, articles.	Qualitative. Written information analysis.	Structured interviews Document analysis On-site observations	Limited financial resources which may impact the ability to fully implement the optimal structure of the PMO to function effectively.

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
4. To design an implementation plan for the establishment of a PMO within the Institute of Archaeology.	A PMO implementation plan outlining the main steps and procedures for establishment of the PMO.	Secondary: thesis, reports Primary: field interviews, articles.	Qualitative. Written information analysis.	Structured interviews Document analysis	Time limitation due to tight deadline for implementing the PMO and associated plans, leading to rushed decision-making.

22. Validation of the work in the field of regenerative and sustainable development.

The proposed Final Graduate Project (FGP) aligns with principles of regenerative and sustainable development by establishing a Project Management Office (PMO) at the Institute of Archaeology within NICH. This initiative aims to enhance project management practices, leading to efficient resource provision, waste reduction, and optimized outcomes. By prioritizing social inclusion and community engagement, the FGP fosters cultural identity, social cohesion, and economic prosperity within local communities. Integration of cultural, environmental, and historical preservation requirements ensures projects meet immediate objectives while safeguarding heritage and promoting sustainability. Indicators such as environmental footprint reduction, cultural heritage preservation, and alignment with Sustainable Development Goals (SDGs) are proposed to measure the project's impact on regenerative and sustainable development. The establishment of the PMO facilitates collaboration among stakeholders, strengthening partnerships for effective project implementation.

Appendix 2: FGP WBS



generative and Sustainable

Final Graduation Project

Appendix 3: FGP Schedule



Appendix 4: Preliminary bibliographical research

 Alsadeq, I., Akel, M., & Hamamo, N. (2011). Establishing a project management office (PMO) using the agile approach. Paper presented at PMI® Global Congress 2011—EMEA, Dublin, Leinster, Ireland. Newtown Square, PA: Project Management Institute.

The Agile approach presented aligns with the PMO proposal by emphasizing flexibility, adaptability, and quick wins in the establishment of the PMO. Both approaches advocate for client involvement, iterative development, and continuous evaluation to ensure the PMO meets evolving organizational needs. The concept of "Footstone" in the Agile methodology resonates with the IA thesis's call for a non-fixed approach.

 Crawford, J. K. (2009). Mastering resource management: the PMO's role. Paper presented at PMI® Global Congress 2009—North America, Orlando, FL. Newtown Square, PA: Project Management Institute.

The paper highlights resource management challenges as the predominant issues in contemporary project management, a theme that resonates with the core objectives of the Institute of Archaeology thesis focused on PMO development. The thesis, aiming to establish a Project Management Office at the Institute of Archaeology within NICH, aligns with the paper's emphasis on assessing and enhancing resource management practices. By identifying essential skills and roles integral to successful project management, the thesis positions the PMO to actively contribute to overcoming resource management challenges across the IA, thereby fostering organizational efficiency and improved project outcomes.

 Crawford, L. (2006). Developing organizational project management capability: theory and practice. Paper presented at PMI® Research Conference: New Directions in Project Management, Montréal, Québec, Canada. Newtown Square, PA: Project Management Institute. The paper underscores the dynamic interplay between practitioners and academics in constructing the field of project management, emphasizing the importance of discourse analysis in understanding the evolution of project management theory and practice. This aligns seamlessly with the objectives of the Institute of Archaeology thesis, which seeks to establish a Project Management Office (PMO) by comprehensively analysing the discourse surrounding project management practices within the cultural and historical preservation context. By adopting discourse analysis principles, the thesis aims to bridge the gap between espoused theories, as represented in project management literature, and the practical experiences of IA practitioners.

 Dinsmore, P. C. (2001). Implementing project office cultural change. PM Network, 15(8), 22–23.

The paper underscores the challenges and benefits associated with implementing a Project Office (PO) concept, providing valuable insights into overcoming resistance and operational obstacles. The emphasis on breaking old habits, creating new working relationships, and establishing a project-aware culture aligns with the objectives of the Institute of Archaeology thesis in instituting a Project Management Office (PMO). The Work Breakdown Structure (WBS) outlined in the reference further contributes a structured approach for cultural change, including areas such as validation, training, onthe-job support, systems, infrastructure support, mapping professional competencies, and tracking progress.

 Kwak, Y.-H. & Dai, C. X. (2000). Assessing the value of project management offices (PMO) Paper presented at PMI® Research Conference 2000: Project Management Research at the Turn of the Millennium, Paris, France. Newtown Square, PA: Project Management Institute.

The paper reinforces the justification for establishing a Project Management Office (PMO) at the Institute of Archaeology within NICH, aligning with the central objectives of the thesis. The assertion that the use of a PMO is valuable from an organizational perspective resonates with the thesis's goal to enhance overall project management at the IA. The emphasis on PMO providing managerial, administrative, training, consulting, and technical services aligns with the thesis's aim to strategically integrate the PMO for improved project management practices.

 Lahbar, G. M., Hassan, N., & Sahito, A. A. (2023). Financial Implementation and Human Resource (HR) Practices of Project Management Office: Its Competencies in the Ecommerce Industry; A Case Study of Daraz. Global Social Sciences Review, VIII (I), 513-523. https://doi.org/10.31703/gssr.2023(VIII-I).48

The report highlights the efficiency of PMO in identifying and mitigating risks, specifically in Financial Implementation and Human Resource (HR) practices. It suggests the introduction of a controlling PMO to enhance project management, improve financial implementation and HR practices, and address the growing number of projects. The call for constant work on change reflects the PMO's role in improving the overall user experience by revising functions to align with increasing project demands.

 Mari, D. A., Raza, A., & Lahbar, G. M. (2023). The Role of a Project Management Office (PMO) In Ensuring Human Resource (HR) Sustainable Operations. Global Economics Review, VIII (II), 162-171. https://doi.org/10.31703/ger.2023(VIII-II).12

The report underscores the significance of a Project Management Office (PMO) in complex projects, especially in addressing challenges like scope creep. It emphasizes the PMO's role in incorporating sustainability principles within its framework to ensure project requirements are met with minimal rework and adherence to environmentally and socially responsible practices. This aligns with the PMO proposal's focus on effective project management, sustainability integration, and the prevention of project failures by addressing challenges such as scope management. Mascarenhas, Renate Lian; Verma, Shagun; and Rana, Shrishti, "The Journey to Project Management: Navigating the Transition from a Non-Project Environment" (2024). School of Professional Studies. 18.

https://commons.clarku.edu/graduate_school_professional_studies/18

Establishing a Project Management Office (PMO) is proposed as a crucial step for Non-Profit Organizations (NPOs) dedicated to their missions but operating with limited resources. The PMO, working closely with senior executives, aims to facilitate a smooth transition from a non-project management environment to a project management environment. The strategic plan developed by the PMO outlines clear objectives, milestones, timelines, and department-specific roles, addressing challenges and emphasizing effective change management. The active involvement of departmental representatives, equipped with essential skills, ensures a successful transition through ongoing support, guidance, and continuous improvement. This aligns with the PMO proposal, emphasizing tailored strategies for specific organizational needs and effective change management.

 Olin, H. (2023). Defining Project Management Maturity Level when Establishing Project Management Office.

The research focuses on studying project management maturity models to identify the most suitable model for measuring the maturity level in a case company with a recently established project management office (PMO). The study recognizes the importance of measuring maturity to reveal strengths, weaknesses, and areas for improvement in project management. The research uses a self-assessment which identified areas for improvement, such as project risk management, project quality management, instructions, or training, and utilizing lessons learned. This supports the alignment with the PMO proposal, emphasizing the need for continuous evaluation and improvement based on identified maturity levels and specific organizational needs. Project Management Institute. (2018). The Standard for Organisational Project Management (OPM). Pennsylvania: Project Management Institute.

Organizational project management aims to align project, program, and portfolio management with an organization's strategic goals. In the face of evolving landscapes and emerging challenges, organizations must adapt to changes, often necessitating the execution of projects. Examining established standards, such as the PMO proposal, becomes crucial as organizations seek effective responses to changing environments and strive to align projects with operational objectives.

 Project Management Institute. (2015). Capturing the Value of Project Management Through Organizational Agility.

The report provides content emphasizes the importance of organizational agility, citing characteristics such as flexibility, adaptability, open communication, empowered team members, experiential learning, rapid decision-making, and strong customer focus. The elements of a supportive culture, strategic flexibility, collective leadership, capable people, and adaptive processes form a core framework for achieving organizational agility. The correlation between highly developed cultures of organizational agility and project success rates aligns with the PMO proposal's emphasis on adaptability and responsiveness to change in the cultural and organizational context.

 Project Management Institute. (2021). A Guide to the Project Management Body of Knowledge PMBOK Guide Seventh Edition and the Standard for Project Management. Pennsylvania: Project Management Institute.

The inclusion of the Project Management Institute's (PMI) "A Guide to the Project Management Body of Knowledge (PMBOK) Guide Seventh Edition" in the Institute of Archaeology thesis serves as a crucial reference point, aligning with the commitment to industry standards and best practices. This authoritative guide provides a comprehensive framework for project management, offering a theoretical foundation that corresponds with the academic rigor of the Institute of Archaeology thesis. By referencing PMI's standards, the thesis ensures a robust theoretical grounding while also incorporating practical insights and methodologies endorsed by a globally recognized authority. This alignment enhances the overall credibility and applicability of the Institute of Archaeology thesis, fostering a balanced approach that integrates theoretical principles with industry-established project management practices.

 Project Management Institute. (2023). Five Ways Future PMOs Will Support Organizations. Project Management Institute.

The inclusion of the Project Management Institute's (PMI) report on "Five Ways Future PMOs Will Support Organizations" in the Institute of Archaeology thesis reinforces the forward-thinking approach of the research. This reference provides insights into emerging trends and strategies that PMOs can adopt to support organizational objectives. By incorporating contemporary perspectives from PMI, the Institute of Archaeology thesis ensures relevance and adaptability to the evolving landscape of project management practices, thereby enhancing its contribution to the effective execution of cultural and historical preservation initiatives at Institute of Archaeology.

 Schlichter, J. & Duncan, W. R. (1999). An organizational PM maturity model. PM Network, 13(2), 18.

The incorporation of the article discussing the development of the Organizational Project Management Maturity Model (OPMMM) provides insights into the evolution of project management standards. This reference underscores the PMI's commitment to enhancing not only single projects but the overall management of all projects within an organization. The article introduces the concept of organizational project management maturity, aligning with the Institute of Archaeology thesis's goal of establishing a Project Management Office (PMO) to elevate project management practices. 15. Woerner, B. & Aziz, L. (2007). PMO leadership—a catalyst for accelerating growth within the information technology project management office. Paper presented at PMI® Global Congress 2007—North America, Atlanta, GA. Newtown Square, PA: Project Management Institute.

Incorporating leadership into PMO's enhances and provides a nuanced understanding of the skills essential for PMO leaders. This reference highlights the significance of PMO leaders in catalysing PMO maturation and emphasizes their role in guiding the PMO's development. The paper stresses the pivotal nature of skilled PMO leadership for the PMO's identity and value within the parent organization. Aligning with the Institute of Archaeology thesis's objective of establishing a PMO, this reference contributes practical insights and experiences to help shape effective PMO leadership strategies at Institute of Archaeology.

Appendix 5: 3PM Project Management Maturity self-assessment questionnaire

		1	1
No.	QUESTION	Current State	Future State
1	Does your organisation have a clear, appropriate and documented organizational strategy?	2	2
2	Does your organisation ensure that all approved projects contribute to achieving strategic goals?	2	2
2	Does your organisation have a tailored or customized project management methodologie goals :	2	2
4	Does your organisation describe how reliance, or eatermized, project management all the notantial project that each deno?	2	4
12	Does your organisation describe how projects are selected norm anongst an the potential projects that courd be done?	3	2
5	Does your organisation describe now projects are justimed using infancial and/or non-infancial metrics?	4	2
6	Does your organisation describe the process that determines now projects are prioritized?	3	4
1	Does your organisation describe how governance is provided and the composition of the project steering group or committee?	2	3
8	Does your organisation require project managers to have a tertiary level credential or professional credential?	2	3
9	Does your organisation require project managers to carry out ongoing professional development?	2	3
10	Does your organisation have internally developed and owned project management training materials?	2	3
11	Does your organisation have a defined project management career path?	2	3
12	Does your organisation have a PMO, or similar function, responsible for reporting on portfolio, program and project progress?	2	3
13	Does your organisation have a PMO or similar function, or similar function, that carries out audits of projects?	2	3
14	Does your organisation have a PMO or similar function that provides project management training?	2	ă
15	Does your organisation describe the roles and locale of delayated authority for design making on the project?	2	4
10	Dees your organisation describe the roles and revers of delegated autointy for design making on the project?	3	4
10	Does your organisation describe now the project charter is prepared and authorized?	2	3
17	Does your organisation describe any software you will use to help track, estimate, report or document any part of the project?	2	3
18	Does your organisation describe the overall process for how requested changes will be documented and assessed?	2	3
19	Does your organisation describe how project status will be reported?	3	4
20	Does your organisation describe how project requirements will be gathered and documented?	3	4
21	Does your organisation describe how the work breakdown structure is prepared and the format it is documented in?	3	4
22	Does your organisation describe how the project and product scope will be defined and documented?	3	4
23	Does your organisation describe the processes tools and techniques used to develop a project schedule?	2	3
24	Does your organisation describe how the project schedule will be checked, monitored and how changes to it will be assessed?	2	2
24	Dees your organisation describe now the project scheduling a seftwarrou	2	3
25	Does your organisation describe and require the use of scheduling software?	2	3
26	Does your organisation describe the processes, tools and techniques used to estimate costs on the project?	2	3
27	Does your organisation describe the processes, tools and techniques used to prepare and document a project budget?	3	4
28	Does your organisation require the use of earned value management techniques for monitoring cost and/or time?	2	3
29	Does your organisation describe and require the use of cost and budgeting software?	3	4
30	Does your organisation describe the processes for implementing quality control and assurance in the project?	3	4
31	Does your organisation describe how the quality management processes will be checked, monitored and how changes to them will be assessed?	2	3
32	Does your organisation describe and require the use of quality management software?	2	3
22	Does your organisation describe how the numbers and even an experience of people required to complete the work will be estimated?	2	3
24	Dees your organisation describe how the numbers and experience of people required to complete the work will be estimated:	2	4
34	Does your organisation describe how the project team inembers will be recluined, developed and managed?	3	4
35	Does your organisation describe now project leadership skills will be developed and assessed?	2	3
36	Does your organisation describe how project communications will be defined and documented?	3	4
37	Does your organisation describe the processes, methods, tools and techniques for distributing project communications?	3	4
38	Does your organisation describe the use of communications management software?	3	4
39	Does your organisation describe how risks will be identified, documented and assessed?	2	3
40	Does your organisation describe how identified risks will be monitored and how changes to the risk register will be assessed?	2	3
41	Does your organisation describe how project issues will be documented and monitored?	2	3
42	Does your organisation describe the use of risk management software?	2	3
13	Does your organisation describe the processes tools and techniques for preparing assessing penotiating and implementing project contracts?	2	3
44	Does your organisation describe have unpliced to the project will be managed?	2	4
44	Does your organisation describe now suppliers to the project will be managed?	3	4
45	Does your organisation describe the processes by which contractual claims are assessed and are resolved?	2	3
46	Does your organisation describe now project stakeholders will be identified and their needs and expectations documented?	3	4
47	Does your organisation describe the processes and strategies for managing and influencing project stakeholder expectations?	2	3
48	Does your organisation describe how the stakeholder register will be monitored and changes to it assessed?	2	3
49	Does your organisation describe the processes for determining and documenting health and safety requirements on the project?	2	3
50	Does your organisation describe how health and safety software will be used?	2	3
51	Does your organisation describe the processes for determining environmental requirements for the project?	2	3
52	Does your organisation describe how environmental requirements will be monitored and how changes will be assessed?	2	3
53	Does your organisation describe how the project deliverable/s will be formally accepted?	3	4
54	Does your organisation describe the process for bandover of the deliverables to operations?	3	4
55	Dees your organization describe the processes of hardeding trained or phase desure?	2	7
55	Does your organisation describe the processes to demining project of priase closure?	2	7
50	Does your organisation describe now lessons learned on impeganered, documented and archived?	5	4
57	Does your organisation describe now lessons learned are implemented in tuture projects?	3	4
58	Does your organisation describe the processes for conducting a post implementation review of the project?	2	3
59	Does your organisation describe how project benefits will be estimated and forecast?	3	4
60	Does your organisation describe how delivery of benefits will be tracked during project delivery?	3	4
61	Does your organisation describe how expected benefits will be measured and the results reported back?	2	3
62	Does your organisation describe a defined approach to identifying and managing any changes in behaviour or performance required by the project?	2	3
63	Does your organisation describe an approach to managing and embedding changes?	3	4
64	Does your organisation describe a way to ensure that any required changes are fully embedded and reported back?	3	4
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Appendix 6: Philologist Revision Certificate

1 Valencia Street City of Belmopan Cayo District Belize

20th May, 2024

Academic Advisor Master's Degree in Project Management Universidad para la Cooperacion Internacional (UCI)

Dear Academic Advisor,

Re: Philosophical Review of Final Graduation submitted by Edson Edgar Mendez in partial fulfillment of the requirements for the Master's in Project Management Degree.

I hereby confirm that Edson Edgar Mendez has made all required corrections and improvements suggested to the project entitled "Project Management Office (PMO) Proposal for the Institute of Archaeology within the National Institute of Culture and History (NICH) of Belize" document as I have recommended. In my judgement, the document meets the literary and linguistic standards required of a student studying for a degree at the Master's level.

Yours sincerely. (epilo, amires,

Miss Cecile Ramirez M. Ed.

