UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)

Proposal for a Project Management Office at the Sir Arthur Lewis Community College

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THE REQUIREMENTS FOR THE
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This Final Graduation Project was approved by the University as
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DEDICATION

This project is dedicated to my children for their unwavering support and confidence in me. For their encouragement throughout this journey, for moral support, quiet time to complete assignments and exams, and more importantly for holding down the fort at home so I can have dedicated time to focus on completing my studies.

ACKNOWLEDGMENTS

ABSTRACT

The objective of the project is to conduct research to support the need to implement a Project Management Office (PMO) at a higher education institution. The implementation of the PMO aims to improve the project management maturity level of the Sir Arthur Lewis Community College (SALCC) to help improve its competitiveness.

The final product of the project will be an implementation plan for the project office in accordance with the Guide to the Project Management Body of Knowledge, (*PMBOK*®️ *Guide*) - Seventh Edition. To achieve this, the research process will follow an analytic-synthetic approach to gain insights into the SALCC's project implementation processes.

The results of the project indicates that there was a demand for the implementation of the PMO. The PMO would provide the structure for project implementation, standardization of project implementation across the SALCC, and improve its project management maturity level and competitiveness. It is recommended that training for project implementers be a priority and that the PMO be implemented as an independent unit reporting to the Office of the Principal.

Keywords: project management office, analytic-synthetic approach, project management methodologies.

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ABBREVIATIONS AND ACRONYMS

CDB	Caribbean Development Bank
ICDF	The International Cooperation and Development Fund (TaiwanICDF)
OPMM	Organisation project management maturity
OPM3™	The Organizational Project Management Maturity Model
P3M3®	Portfolio, Programme, and Project Management Maturity Model
PIC	Project Implementation Consultancy
PMMMSM	Project Management Maturity Model
PMBOK	Project Management Book of Knowledge
PMI	Project Management Institute
PMO	Project Management Office
PPC	Project Planning Committee
PSC	Project Steering Committee
SALCC	Sir Arthur Lewis Community College

EXECUTIVE SUMMARY

The Sir Arthur Lewis Community College (SALCC) is regarded as the premier tertiary institution in Saint Lucia. The SALCC has contributed to national development through the education of secondary school leavers and adult learners. It offers programmes at the certificate, diploma, associate and bachelor's degree levels. Over the years the SALCC has seen an increase in the number of projects that aimed at improving the programme offering in alignment with its strategic direction implemented. This was in response to the demands of its stakeholders and to improve its financial position. In the past, projects have been led by faculty who had little to no formal training in project management. There were also no formal project management methodologies and structures in place to guide the implementation of projects.

This project proposed the implementation of a Project Management Office (PMO) at the SALCC which would assist in providing the following functions: (1) greater efficiencies and sustainability in the implementation of projects, (2) training of staff in project management, (3) standardization of the processes and procedures of project implementation across projects, (4) assist in meeting its overall strategic objectives, (5) closely align the delivery of projects to meet the academic needs of the SALCC, (6) improve the resource allocation, (7) provide a comparative advantage and continuous improvement of its brand and (8) provide the competitive edge necessary for today's education environment.

The general objective of this project was to recommend a pathway for the implementation of a PMO at the SALCC to improve its efficiency in project implementation. The more specific objectives were to conduct a needs analysis to implement the PMO, to assess the SALCC's degree of maturity in organizational project management to improve the project implementation strategy, to locate the PMO in the organizational structure of the SALCC to optimize its efficiency, and to recommend an implementation plan to operationalize the PMO.

The research method used for the project was the analytic-synthetic approach which was conducted through surveys, interviews and benchmarking. This process allowed the researcher to analyze the proposal, then decompose it to analyze the different components and reconstruct the proposal through the support of the data collected. This approach provided insight and in-depth information from the perspective of the project implementers.

In conclusion, it was established that the implementation of a PMO would improve the SALCC's project management maturity level and assure consistency in project implementation across the institution. This would potentially make the SALCC more competitive. It is proposed that the PMO report to the Office of the Principal as it is the office with authority for decision making.

It was recommended that the PMO be operationalized to set up the structures needed for improvement of project implementation and training conducted for all staff implementing projects at the institution. Taking into consideration that a quasi-project office once existed and that the institution is currently engaged in project implementation, a change management plan is highly recommended to assist with the success of this project.

1   INTRODUCTION

The research is based on a higher education institution in Saint Lucia, without formal project management methodologies and project management training for the staff implementing the projects.

1.1   Background

The PMBOK® Guide, Seventh Edition, states that the (PMO) is a management structure that standardizes project-related governance processes and facilitates the sharing of resources, tools, methodologies, and techniques. PMOs have many potential roles in aligning work with strategic goals: engaging and collaborating with stakeholders, developing talent, and realizing value from investment in projects.

The PMO is an organizational unit designed to standardize how projects are managed and achieve improved efficiencies through deploying best practices gained from the delivery of successive projects (Philbin, 2016). Though project management has gained popularity in many industries, there seems to be a lack of formal, structured project management in higher education institutions. (Education, 2022). In fact, there appeared to be a lack of information available on the implementation of PMOs in higher education institutions.

The SALCC has increased the number of projects being implemented. However, there seemed to be no formal project management methodologies and structure in place to guide the project implementation. Furthermore, the faculty was reassigned to lead the project implementation with no formal training in project management. The scope of the project would cover an investigation into the SALCC's work in project management, a needs analysis for a PMO, an organizational maturity assessment, a proposal for the location of the PMO and a plan for implementing the PMO.

The research took the format of surveys and interviews of the SALCC's management and staff; benchmarking of higher education institutions that had PMOs implemented was also done to guide decisions about the type of PMO and the structure for implementation.

The higher education environment has evolved and higher education institutions have recognized the need for greater involvement in projects to be able to meet the demands of stakeholders, provide for financial shortfalls and improve infrastructure. The SALCC has moved in this direction and has therefore seen an increase in the number of projects being implemented. However, the SALCC does not have qualified project managers, the project implementation staff have limited to no formal training in project management and there are no formal/standardized project management methodologies or tools being used at the institution.

As the SALCC continues to increase the number of projects it implements, proper structures would need to be put in place to maintain or improve the success and quality of projects being implemented. Failure to do this would result in stakeholders and funding agencies questioning the ability of the institution to implement projects successfully. This could negatively impact the SALCC's ability to acquire funding for projects in the future.

The implementation of a PMO at the SALCC would assist with the training of staff in project management. It would help to standardize the processes and procedures of project implementation and most importantly assist the SALCC in meeting its overall strategic objectives. The PMO would closely align the delivery of projects with the academic needs and position the institution to gain a stronger comparative advantage in the education sector.

The research was conducted to investigate the hypothesis that a PMO in a higher education institution would improve its competitiveness. The implementation of a PMO at the SALCC would also assist in securing the funding necessary for the SALCC to improve its financial position and its programme offering.

1.2 Purpose

In recent years the number of projects the SALCC has engaged in has increased considerably. The increase in project implementation was in response to stakeholders demands to increase the programme offerings, the institution's financial status, the need to improve the infrastructure, and the level of competitiveness of the SALCC in the region. It

was evident that the project's being implemented lacked the project management standards to guide implementation. There were variation in the tools used by the different project teams and the strategy used to allocate the human resource to these projects needed to be reviewed. The researcher investigated the possibility that the establishment of a PMO at the SALCC would improve its efficiency in project implementation thereby making it more competitive.

The researcher investigated the need for a PMO, the most efficient location for the PMO in the organization's structure and the type of support needed for a PMO to efficiently implement projects at the SALCC in line with its strategic objectives. The project management maturity level as well as the level of trained staff available at the SALCC for project implementation would also be investigated. A recommendation for the model of the PMO and an implementation plan would be included as part of the project.

1.3   General objective

To implement a PMO at the SALCC in Saint Lucia to improve its efficiency in project implementation.

1.4   Specific objectives

I.   To conduct a needs analysis to implement the PMO.

II.   To assess the SALCC's degree of maturity in organizational project management to improve the project implementation strategy.

III.   To locate the PMO in the organizational structure of the institution to optimize its efficiency.

IV.   To recommend an implementation plan for the SALCC to operationalize the PMO.

2   THEORETICAL FRAMEWORK

A theoretical framework supports the theory of the research study and explains the significance and validity of the study by indicating gaps of knowledge and practice that the researcher intends to fill. The theoretical framework for the project will be elaborated in sections below.

2.1   Company/Enterprise framework

2.1.1   Company/Enterprise background

The SALCC was established through Act No. 8 of 1985 by the Government of Saint Lucia with its main campus located at Morne Fortune in Castries. It now operates from two campuses – one in the north and the other the South Campus. It also includes a farm, which serves as a training ground for the agriculture unit. The mandate of the SALCC enjoins it to be a resource to the community and to increase opportunities for tertiary education and training. The SALCC has contributed to national development through the education provided to secondary school leavers and adult learners. The SALCC was named after the Nobel Laureate Sir William Arthur Lewis who was a Saint Lucian Economist. The life and legacy of its namesake and the historical significance of its buildings lend a certain level of prestige to the institution and contribute to the SALCC brand. (personal communication, August 2022).

The SALCC aimed to provide a place of education, offering instruction in all or any of the following fields of education:
1. agriculture
2. arts
3. science
4. health sciences
5. teacher education and educational administration and
6. technical education and management studies. (Unesco.org. Retrieved November 25, 2022)

The SALCC offers programmes at the certificate, diploma, associate and bachelor's degree levels. At twenty-one-years of operation, the SALCC produced 13,085 graduates from its various programmes. The SALCC's alumni pursue further study at regional and international tertiary education institutions and, in some cases, they obtain advanced standing based on courses taken at the SALCC. The SALCC's alumni also occupy positions at varying levels, including administrative and managerial positions, in the public and private sectors globally. (personal communication, August 2022).

The efforts and achievements of SALCC alumni and the involvement of its academic and administrative staff in regional and international projects have contributed to the SALCC's position as a regionally and internationally recognised institution. The involvement of its faculty in curriculum development and research activities at the SALCC and regional levels indicates that the SALCC has a foundation for responding to its clients' requests for new programmes and courses including expanding its contribution to national development. (personal communication, August 2022).

The SALCC has had an increase in the projects being implemented which are aimed at enhancing the SALCC's offerings and increasing student intake. To this end, several staff has been involved in project implementation. (personal communication, August 2022).

The following images were retrieved from the SALCC LinkedIn page. They provide evidence of projects which have been implemented at the SALCC to improve the programme offerings.

Figure 1

French Gateways Programme

Sir Arthur Lewis Community Coll...
950 followers
9mo · Edited · 👁

The **#FrenchGateways** to Global Careers programme was officially launched today, February 3, 2022, following the signing ceremony held in November 2021.

The first cohort of students have been selected and will commence the programme this month.

The overall goal of the French Gateways to Global Careers Programme is to improve the mobility and **#economicdevelopment** of Saint Lucian students and young entrepreneurs through cooperation with French overseas territories.

The programme is fully funded by the French Embassy in Saint Lucia in collaboration with **Unite Caribbean** and **Alliance Française**.

Note: Adapted from SALCC LinkedIn, 2022

Figure 2

Carib' Excellence Project

Sir Arthur Lewis Community Coll…
949 followers
5mo · ⊙

The Sir Arthur Lewis Community College (SALCC) and CO.RE.CA; a Youth Movement from Guadeloupe have officially launched the Carib' Excellence project which is geared towards promoting **#cooperation** and **#sustainabledevelopment** in the region and an understanding of the integration movement for young people.

Stay connected to our social media pages for information on how you can be a part of this movement.

Noted: Adapted from SALCC LinkedIn, 2022

Figure 3

Skills to access the Green Economy Programme

Note: Adapted from SALCC LinkedIn, 2022

Jennes Business Incubator programme

Note: Adapted from SALCC LinkedIn, 2022

2.1.2 Mission and vision statements

Mission

The SALCC's processes are guided by its mission "To provide engaging, cutting-edge and transdisciplinary learning through forward-looking academic training, research and public engagement." (Personal communication, August 2022).

Vision

"To be the leading university college in the Caribbean that promotes sustainable development, innovation and entrepreneurship." (Personal communication, August 2022).

Being able to improve on the implementation of projects will support the

SALCC in its mission and vision and would indeed be a positive step toward sustainable development, innovation and entrepreneurship. SALCC

2.1.3 Organizational Structure

The organizational structure of the SALCC has been restructured to take into consideration its new vision and mission. The organizational structure is being revised in iteration as part of the institution's continuous improvement plan to achieve greater efficiencies. Figure 5 is the SALCC's currently approved structure.

Figure 5

SALCC Organizational Structure

SIR ARTHUR LEWIS COMMUNITY COLLEGE
Proposed Organizational Structure
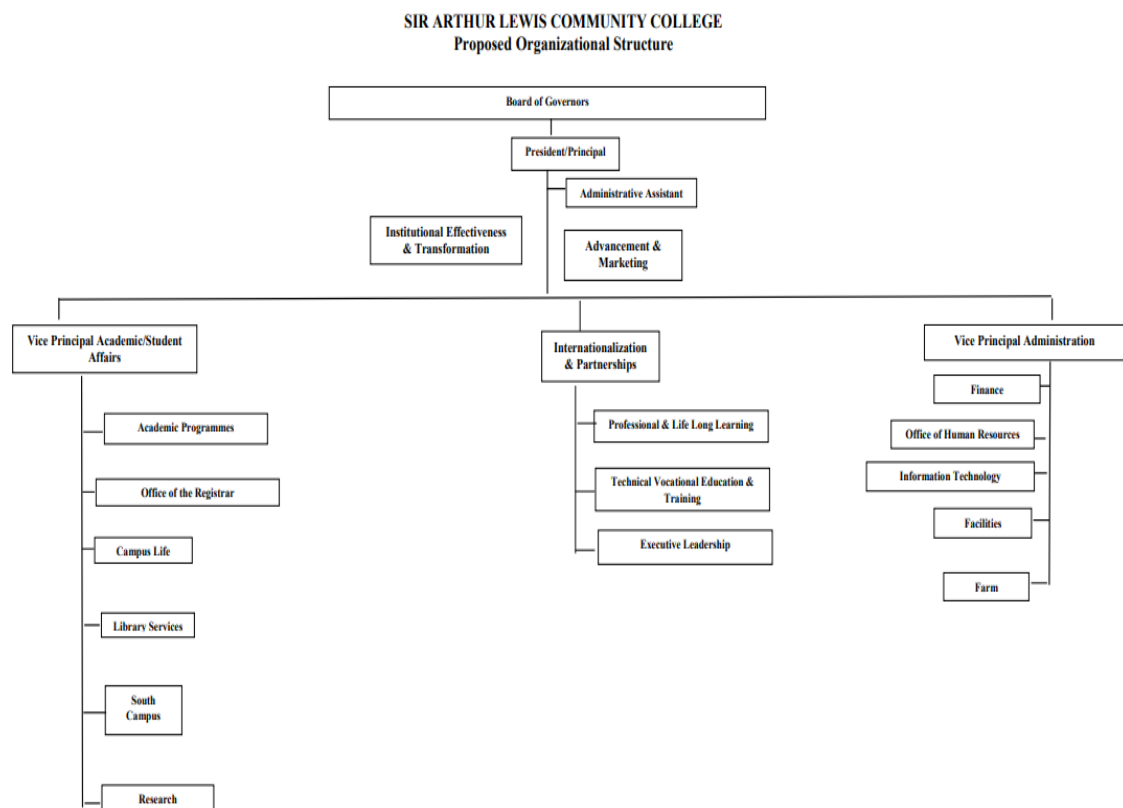
Note: Personal communication, August 2022

2.1.4 Products Offered

The SALCC offers programmes at the certificate, diploma, associate and

bachelor's degree levels. The SALCC also offers programmes through funding and projects targeted at training and upskilling to the general public. Its main clientele are secondary school graduates and mature students.

Certificate Programmes:

Certificate programmes are available at the undergraduate and graduate levels. Certificate programmes are generally geared towards adult students and students looking for short-term training leading to immediate employment. (Degrees, 2021)

Associate Degree Programmes:

Associate degrees are two-year programmes that are usually offered at community colleges, vocational and technical schools, and sometimes universities. Associate degrees are usually designed with two primary goals in mind; that the student will transfer to a bachelor's programme in the future or will learn knowledge and skills that can qualify the student for entry-level work upon graduation. Associate degrees are typically divided between the arts and sciences in the same way bachelor's programmes are, and they usually correspond to a bachelor's program. For example, an associate of arts corresponds to a bachelor of arts, and an associate of science corresponds to a bachelor of science. There are also applied associate degrees, which are programmes that are intended for immediate career entry. (Degrees, 2021)

Bachelor's Degree Programmes:

It is a 4-year program of study in one particular subject that prepares students to pursue careers or further study in that subject. (Degrees, 2021)

Funding/Project - Programmes/Courses:

The SALCC offers programmes in collaboration with The Taiwan Embassy of Saint Lucia, The International Cooperation and Development Fund (TaiwanICDF), the World Bank, Bank of Saint Lucia and the Government of Saint Lucia. The projects and funding initiatives are primarily certificate level programmes.

2.2   Project Management Concepts

2.2.1   Project

The Project Management Institute (PMI) defines a project as a pool of human and non-human resources that are temporarily brought together to achieve a specific purpose. Projects are unique in purpose, goals, location, structure, resources, activities, and other project variables to make each project different from the others.   Projects are initiated to accomplish specific objectives against the available resources. After the project's purpose has been achieved, a project will be brought to a close as projects are time bound.   The insights that have been drawn from it are documented for reference. As the project progresses through the predefined phases, monitoring and evaluation are done to ensure that the project's cause for existence and objectives are fulfilled accordingly. (Project Management 101: What is a Project?, 2021).

Project management practitioners use different strategies to implement projects. The PMBOK Guide 7th ed. has therefore provided project management practitioners with twelve (12) project management principles to help guide their behavior. These principles are as follows:

1. Be a Diligent, Respectful, and Caring Steward

2. Create a Collaborative Project Team Environment

3. Effectively Engage with Stakeholders

4. Focus on Value

5. Recognize, Evaluate, and Respond to System Interactions

6. Demonstrate Leadership Behaviors

7. Tailor Based on Context

8. Build Quality into Processes and Deliverables

9. Navigate Complexity

10. Optimize Risk Responses

11. Embrace Adaptability and Resiliency

12. Enable Change to Achieve the Envisioned Future State

(PMBOK® Guide, 7th Edition, The Standard for Project Management, p. 50)

2.2.2 Project Management

Project Management Institute (PMI), the world's largest non-profit membership association for the project management profession defines project management as "the application of knowledge, skills, tools, and techniques to a broad range of activities to meet the requirements of a particular project." (A Comprehensive Guide to Project Management – Replicon, 2022). Figure 6 hightlights the basics of Project management.

Figure 6

Project Management Basics
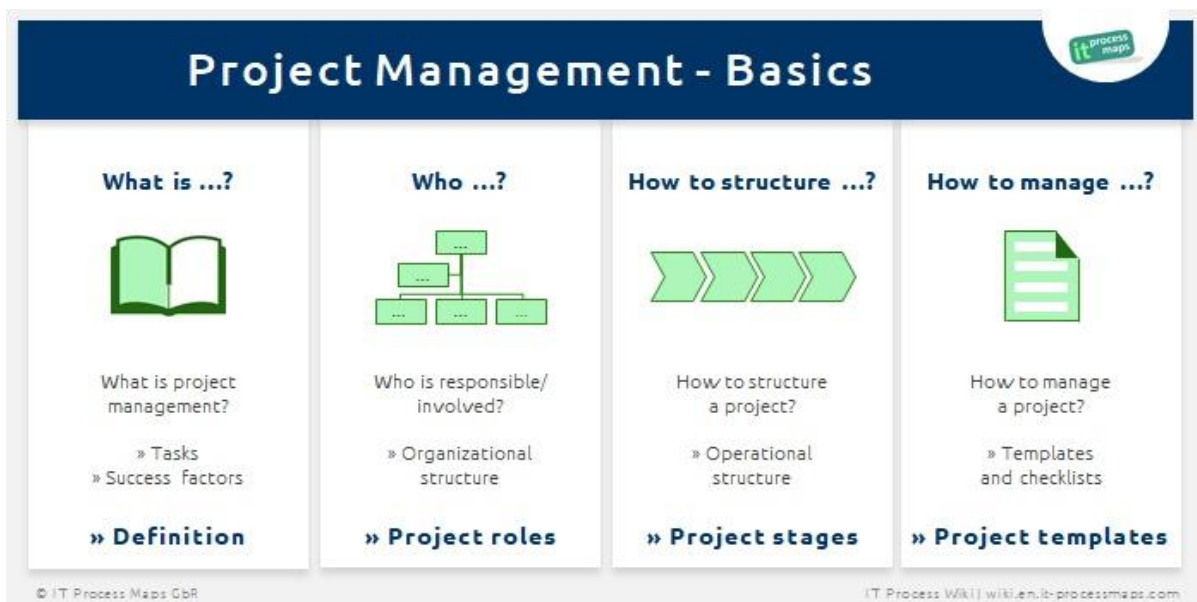
Note: Adapted from Project Management | IT Process Wiki., 2022

2.2.3 Project Life Cycle

The Project life cycle has evolved over the years as a means of improving the delivery of successful projects. It is generally sequential with relationships that may overlap depending on the cycle. The project life cycle may vary based on the type of project but would generally depend on the project management processes adopted by the organization.

The Project Management Institute, PMI®, has played a significant role in advocating the different project management life cycle methodologies. The Project Management Body of Knowledge is regularly updated. (Project Management Life Cycles - Evolution over the years, 2021). The following sections give a description of the different types of project life cycles.

2.2.3.1   Traditional

The traditional project life cycle method is the Waterfall method which is sometimes referred to as the predictive life cycle. The phases in this method may have sequential or overlapping relationships or a combination of both. The work performed in each stage is different from that of the predecessor or successor phases. This method is suitable for small projects where the final deliverable (product/service) is well understood.

Figure 7

Traditional Project Life Cycle Method
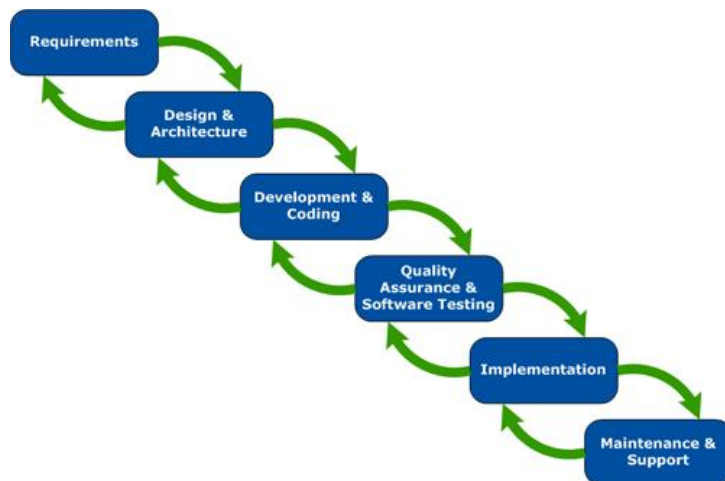
Note: Adapted from Project Management Life Cycles - Evolution over the years, 2021

2.2.3.2   Iterative

This method is more adaptive to changes and involves a series of mini waterfalls with each phase being iterated. This method, just as with the traditional method, is suitable for small projects with less complexity and in which the end product is clearly understood.

Iterative Project Life Cycle Method
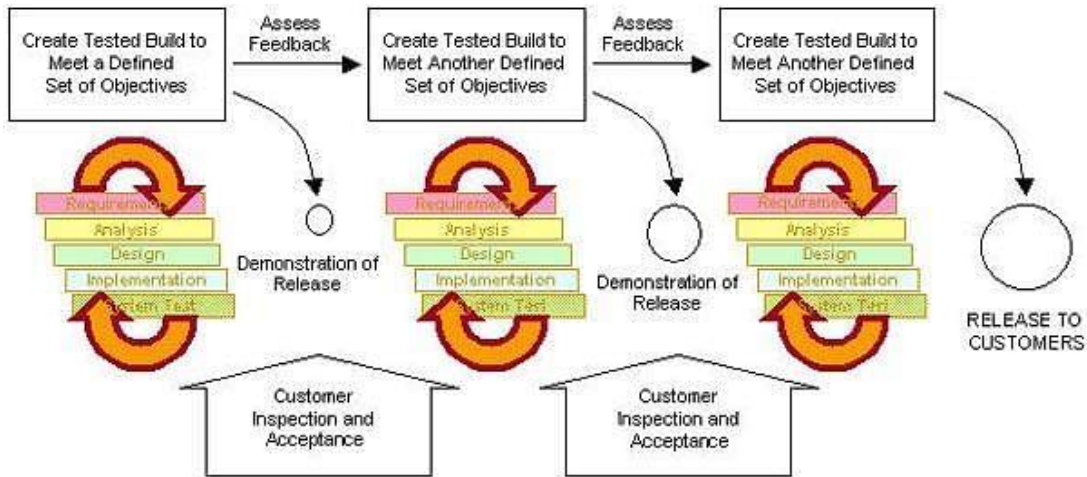
Note: Adapted from Project Management Life Cycles - Evolution over the years, 2021

2.2.3.3 Incremental

This method uses an incremental approach with each cycle resulting in an added function. This method is useful for IT projects and is high in customer involvement in the planning phase. This method is suitable for large and complex projects.

Figure 9

Incremental Project Life Cycle Method
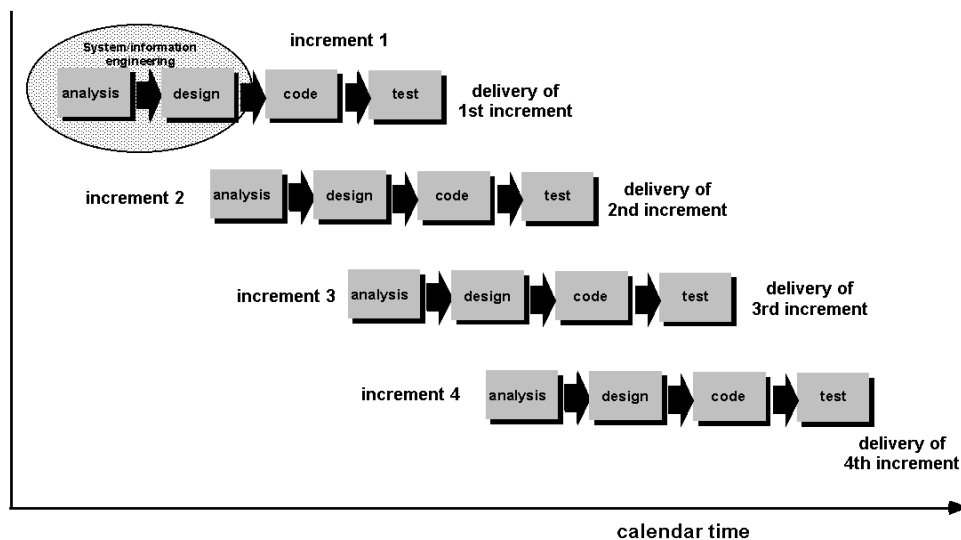
Note: Adapted from Project Management Life Cycles - Evolution over the years, 2021

2.2.3.4 Adaptive

This method, also called the agile method, uses a combination of iterative and incremental models approach. The iterations are rapid, and time bound. Customer involvement is key to project success in this method. This method is suitable for complex projects where the end product is not clearly understood while the increments are clearly understood. It is very adaptative and decisions on changes are quick since the customer and sponsor are part of the delivery team.

Figure 10

Adaptive Project Life Cycle Method
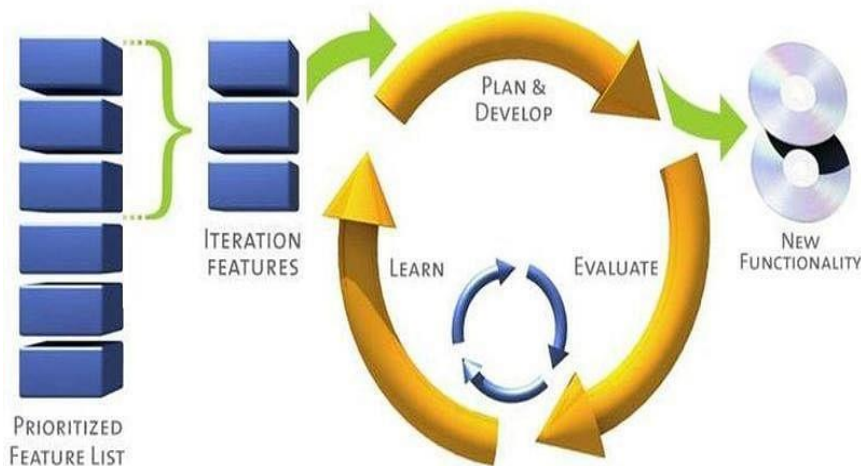
Note: Adapted from Project Management Life Cycles - Evolution over the years, 2021

2.2.4 Project Management Processes

The project management process requires a specific configuration that contains the project management documentation; project plans; project management methods; information exchange (individual interviews, project meetings, project workshops, etc.); resources for the project planning and project implementation.

Figure 11

Project Management Process

Note: Adapted from A Comprehensive Guide to Project Management - Replicon, 2022

Chart 1 - Project Management Stages (What is a project management process?, 2022)

Operational organization of project processes Project stages: objectives and tasks		
Project stage	**Objectives**	**Tasks**
Project initiation	• Project goal is identified • Feasibility is checked • Decision about execution of the project is taken	• Clarify assignments and tasks • Perform cost assessment • Carry out risk and PESTLE analysis (P=Political, E=Economic, S=Sociological, T=Technological, L=Legal, E=Environmental) • Set-up rough project planning • Build up project organization • Hold kick-off meeting
Project planning	• Work packages are defined • Foundations for successful completion of the project within the execution phase are laid	• Define, evaluate and assign work packages • Set up time schedule • Establish cost schedule • Prepare the working environment (project infrastructure)
Project execution	• Project outcomes are defined and approved	• Execute work packages • Carry out project controlling • Continuous risk and quality management • Initiate and co-ordinate project changes, as required • Carry out the technical acceptance
Project closure	• Critical project retrospective (dates, costs, project development) is done • Project organization is dissolved • Project is formally completed	• Prepare end project report • Final presentation • Hand over and assure results

2.2.5   Project Management Knowledge Areas

In the *Guide to the Project Management Body of Knowledge (PMBOK)*, PMI has grouped the project management areas into ten (10) knowledge management areas. These areas are aligned to the process groups of initiation, planning, execution, monitoring and controlling, and closing. All projects must go through these phases. The knowledge areas take place during the project management processes. Figure 12 and chart 2 illustrate these concepts.

Figure 12

Knowledge Management Areas

Note: Adapted from Thinking, C., 2022

Chart 2 - Process Group and Knowledge Area Mapping

Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	Monitoring and Controlling	Closing
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work 4.4 Manage Project Knowledge	4.5 Monitor and Control Project Work 4.6 Perform Integrated Change Control	4.7 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Schedule Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Durations 6.5 Develop Schedule		6.6 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
8. Project Quality Management		8.1 Plan Quality Management	8.2 Manage Quality	8.3 Control Quality	
9. Project Resource Management		9.1 Plan Resource Management 9.2 Estimate Activity Resources	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	9.6 Control Resources	
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Monitor Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses	11.6 Implement Risk Responses	11.7 Monitor Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Engagement	13.3 Manage Stakeholder Engagement	13.4 Monitor Stakeholder Engagement	

Developed by: DEEP FRIED BRAIN PROJECT   Source: *PMBOK® Guide*, 6th Edition

2.3.   Other Applicable Theories/Concepts Related to the Project Topic and Context

2.3.1   Project Management Office

A PMO is a group or department within a business, agency or enterprise that defines and maintains standards for project management within the organization. It can either be internal or external. The primary goal of a PMO is to achieve benefits from standardizing and following project management processes, policies and methods. For the office to be most effective, it should embody the organization's culture and strategy. PMOs provide administrative support for the project management team and standardize the project-related management processes.

2.3.1.1   Types of Project Management Office

Research conducted by Monteiro, A., Santos, V., & Varajão, J., 2016 in their article "Project management office models – a review", indicates that based on a PMOs level of control and influence, there are many types of project management offices; they indicated that there are forty-seven (47) types. Figure 9 depicts the frequency in typologies and the project management models.

PMI states that the many types of PMOs that exist can be categorized into three (3) main types - supportive, controlling and directive. They are as described below.

1. **Supportive –** Provides a supportive/consultative role and has low-level controls over projects. This is best suited for a functional or weak matrix organization. These are some of the functions:

   - Supplies templates
   - Supplies guidance on best practices
   - Provides training in project management and PM Software
   - Provides access to information
   - Is the repository of lessons learned

2. **Controlling –** Provides the same support as the supportive type; however, the controlling type PMO has a moderate level of control over projects and can

enforce compliance with the organization's practices (Project management frameworks or methodologies, conformance to good governance frameworks and use of specific tools). It is best suited for balanced matrix organization.

3. **Directive –**   This type of PMO has the authority to direct projects as the name implies. This PMO has a full degree of control or a very high degree of control over projects. Projects are assigned to project managers by this type of PMO and the project managers report directly to it. Due to the single authority and reporting structure of this PMO, organizations benefit from achieving high levels of consistency across projects. This PMO is best suited for a strong matrix or projectized organizational structure.

Figure 13

PMO Models
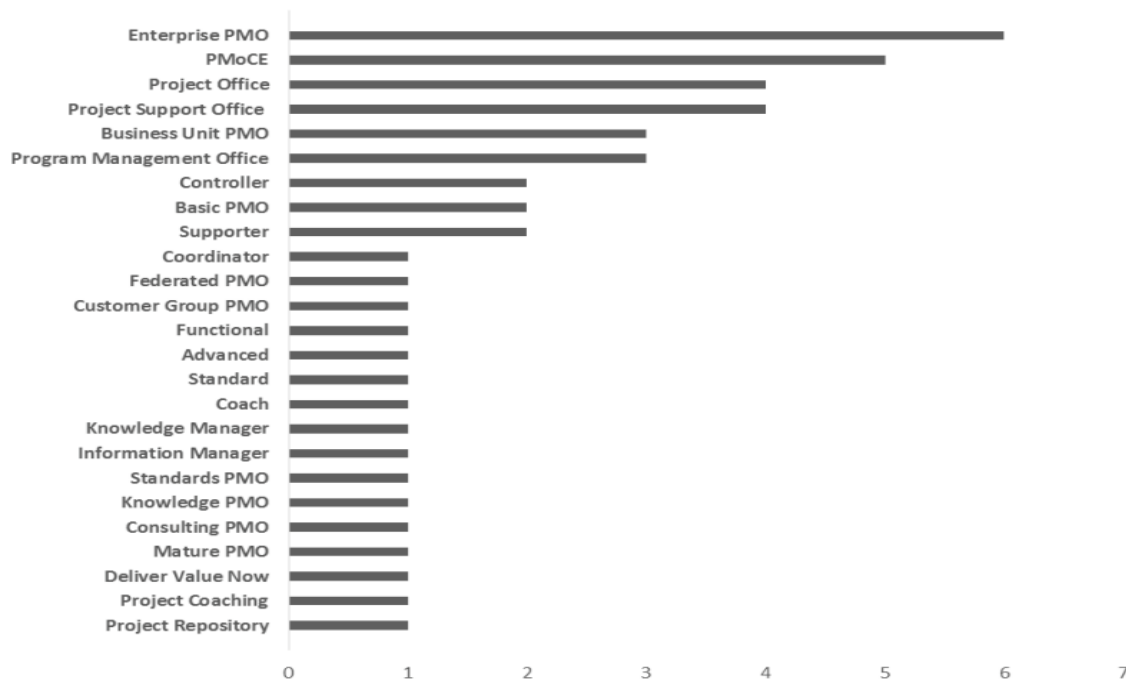
Note: Adapted from **Monteiroa, Santosa, & Varajãoc, 2016**

2.3.1.2 Functions and Benefits of the Project Management Office

There are numerous benefits that the PMO can provide to an organization. There is no one set of functions for the PMO; the functions depend on the type of PMO and its objectives. The following is a list of functions:

- Prioritizing projects concerning the organization's strategic goals
- Development of standard practices and methodologies
- Standardization of the Project Management Office
- Assisting the organization with the delivery of high-quality projects, consistently and efficiently
- Encouraging better decision-making (point of interception of experiences of top management, team management and project team)
- Managing project resources and resolving resource-related issues
- Maintaining, updating and reporting project data to stakeholders
- Maintaining the documentation for every project
- Overseeing progress on the organization's projects
- Providing a support system for the teams and managers working on the projects
- Providing staff training, mentoring and coaching in project management skills
- Developing project management tools
- Serving as a repository of projects
- Establishing methods for improving processes for greater efficiency
- Controlling project expenses through resource allocation.
- Reducing cost by improving the accuracy of results (accurate estimates of time, money and materials)
- Maintaining transparency by serving as a conduit for communication
- Serving as a knowledge hub
- Maintaining quality assurance through its unique perspective on project performance

The following figures further illustrate the functions and benefits of the PMO.

Figure 14

Functions of the PMO
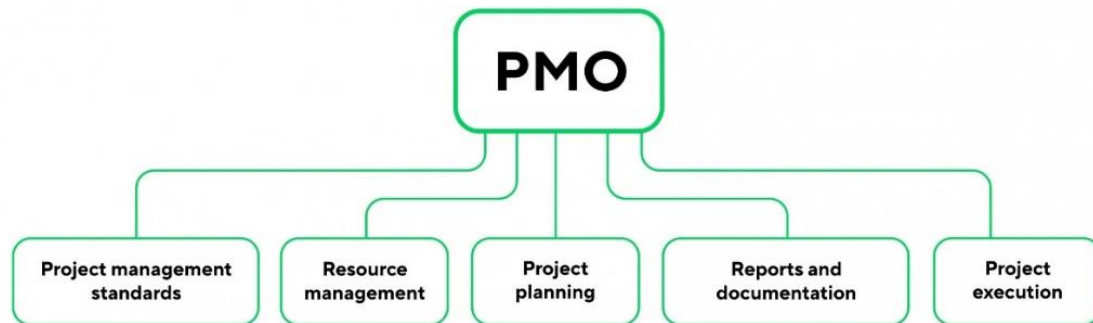
Figure 15

Benefits of the PMO

2.3.2   Organizational Maturity Models

Organizations conduct project management maturity assessments to determine their readiness or ability to implement projects successfully. The type of model used depends on factors such as the organization's culture and the project management maturity goals, in alignment with the organization's vision, mission and strategic goals. The following are types of project management maturity levels. Figure 16 shows the ranking of the different levels of maturity.

Figure 16

Project Management Levels of Maturity
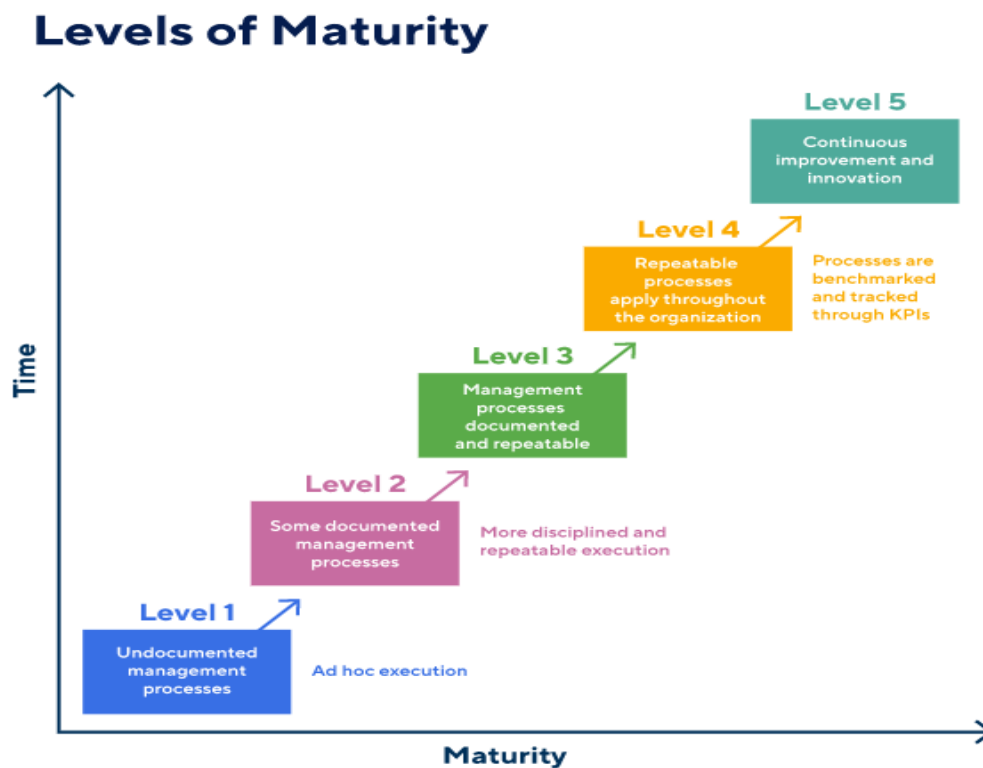
Note: Adapted from Project Management Maturity Models | Smartsheet, 2022

- **Project Management Maturity Model (PMMMSM):** PM Solutions' Project Management Maturity Model is another model that uses the PMBOK® 10 knowledge areas to create a standardized method for maturity assessment. When using this model project managers assign one of five maturity levels to each knowledge area. These levels are the following: initial process, structured process and standards,

organization standards and institutionalized process, managed process, and optimizing the process. (Project Management Maturity Models | Smartsheet, 2022)

- **Berkeley Project Management Process Maturity Model:** Applicable to any industry, the "*Berkeley project management process maturity model"* takes an incremental approach to improving a company's maturity level. When using this model, project managers assess the maturity level of key project management processes and organizational characteristics and rank them on a five-stage maturity scale: the ad-hoc, defined, managed, integrated, and sustained stages. (Project Management Maturity Models | Smartsheet, 2022)

- **Gartner Score Diagnostic Family:** Founded in 2014, the Gartner Score Diagnostic Family is a collection of online maturity assessments. Highly customizable and adaptive, this model helps managers identify priority growth areas based on their company's strategic aims. With its interactive, intuitive tools, the Gartner Score Diagnostic Family reveals which processes are undeveloped and provides a cross-functional overview of the areas that are critical to strategic planning. (Project Management Maturity Models | Smartsheet, 2022)

- **Kerzner's Project Management Maturity Model:** Kerzner's project management maturity model is another incremental method for improving a company's maturity. The Kerzner model defines each of its five maturity levels by the primary focus of that stage: common language, common process, singular methodology, benchmarking, and continuous improvement. (Project Management Maturity Models | Smartsheet, 2022).

- **Portfolio, Programme, and Project Management Maturity Model (P3M3®):** Designed by Axelos, the Portfolio, Programme, and Project Management Maturity Model (P3M3®) takes a wide-angle view of the entirety of a company's interdependent processes to make an accurate maturity assessment. This model ranks maturity on a five-stage scale and gauges maturity based on seven core processes: organizational governance, management control, benefits management, risk management, financial management, resource management, and stakeholder management. In addition to improving organizational processes, this model is also

useful for assessing and improving project portfolio management (PPM). (Project Management Maturity Models | Smartsheet, 2022).

- **The Organizational Project Management Maturity Model (OPM3™):** Published in 2003 by the Project Management Institute (PMI) to assist in the education of project management practitioners and laymen on the influential effects of applying project management principles at the organizational level (PMI, 2003). Consisting of three directories, the OPM3™ model provides nearly six hundred best practices as related to the project management field, including portfolio management. (Miller, 2004)

2.3.3 Project Management Office in Higher Education

There seems to be little research on the implementation of PMOs in higher education institutions. However, an increase in the involvement of higher education institutions in the implementation of projects has been noted, though implementation is done in an ad hoc manner. Projects are implemented in silos and not necessarily according to a strategy, which minimizes the organization's ability to collaborate and create synergies across the organization. This may happen for several reasons including but not limited to:

- decrease in government funding,
- competition with open online resources and with several institutions offering similar products and services,
- higher education institutions need to remain competitive while keeping expenses low

The implementation or lack of implementation of PMOs in higher education institutions may be due to the organizational structure, stakeholders' perception, leadership style or cost-benefit perception. There may also be the perception that project management approaches are too rigid, and that the processes take too long and will slow things down.

"A good organisation project management maturity (OPMM) assessment provides a benchmark for your future efforts. It lets you know that you are progressing in the right areas. Without it you simply don't know how well you are doing with your improvement efforts." Crystal Consulting. (2018, July 17). Higher education institutions would need to assess their readiness to implement projects effectively by conducting a project management

maturity assessment. This would allow the institutions to make informed decisions based on data derived from the OPMM assessment. As part of the research process an assessment of the SALCC will be conducted using the PM Solutions' Project Management Maturity Model.

In 2010 the SALCC, through a government mandate, established a project office to oversee the transformation of the SALCC into a university college. The data collected from this researcher's interviews indicated that project management processes were used in the implementation of the project and that the project was successfully implemented. It was noted however that the office was not sufficiently staffed and though there were several supporting committees and consultancies, the office needed a technical specialist to support its work. The project office was dissolved before completely achieving its goals as the Government of Saint Lucia changed the objective for the transformation of the SALCC.

3   METHODOLOGICAL FRAMEWORK

The methodological framework is a theoretical and practical method used to analyze the problem posed or the research topic. The framework covers the participants and the sample, instruments or equipment used, the design, procedure and data analysis. It describes how the topic is to be analyzed, what methods will be used and why. It must be written in simple language.

The methodological framework has a specific structure that takes into account several aspects, one of which is the type of research that is being conducted, whether it is qualitative or descriptive, field, experimental or not. The following are elements of the methodological framework that must be developed:

1. **Participants**

    The methodological framework gives an indication of the sample from which the data are taken and the population to which it belongs.

2. **Type of research and its design**

    To better plan projects, it is important to know the types of research and their purpose. Research is based on the category of analysis of a specific topic, and can have three levels: exploratory, descriptive and explanatory. The methodological framework will indicate what type of research is being developed. The type of research conducted can either be a feasibility project or a special project. This refers to applied research, in which the conclusions can provide solutions to certain problems.

    The research design is the strategy that the researcher adopts to tackle the problem, it is then classified as documentary, experimental or field research.

3. **Documentary design**

    Documentary design is an investigation where the objective is to search for information, analyze and interpret it. To do this, the investigation will be based on documentary sources and their comparison.

4. **Field Layout**

It is the collection of data in a certain place and space, without interceding, manipulating or controlling any variable.

5. **Experimental design**

It involves subjecting a certain group of individuals to specific conditions (independent variables) to analyze the reactions or the effects that occur (dependent variables).

Using this type of research, the researcher seeks to establish a cause-and-effect relationship between the independent and the dependent variable. The sample is a portion of the total, which will represent the behaviour of the whole.

6. **Data Collection Techniques and Instruments**

Data can be collected through direct observation, surveys (questionnaires or interviews), documentary analysis, or content. The instruments where these data are collected can be files, questionnaire formats, tape recorders, (Javed, 2022).

An outline of suggestions that may be considered for developing a methodological framework is depicted in Figure 17.

Figure 17

Suggestions for the Development of the Methodological Framework
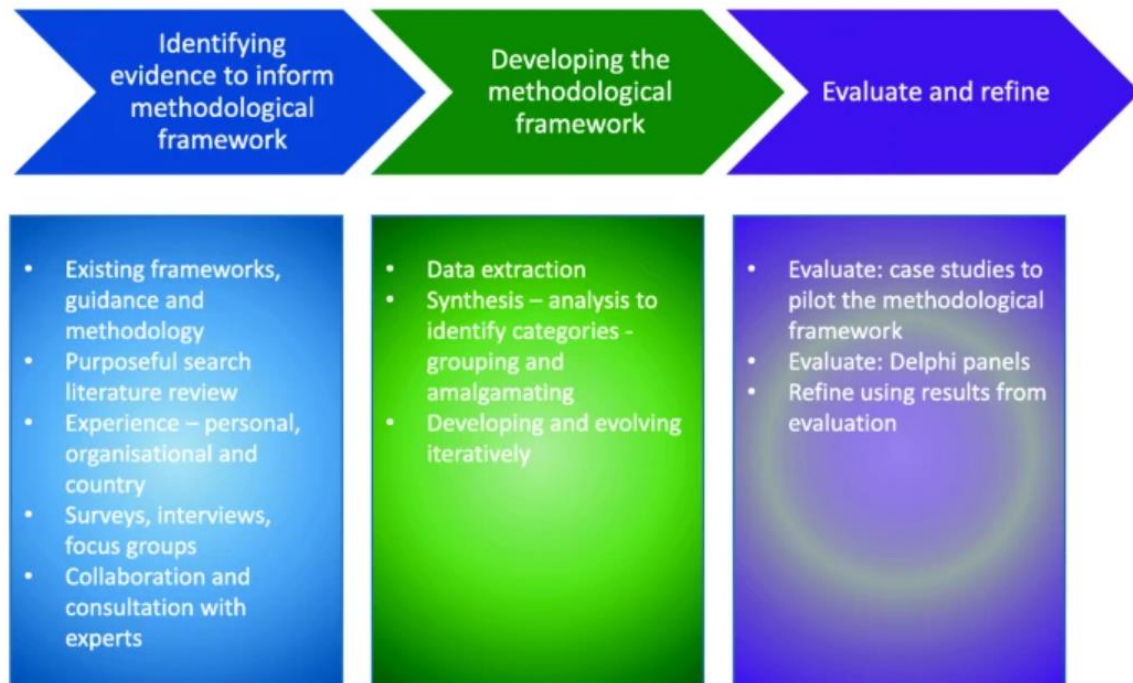
Note: Adapted from Javed, 2022

3.1 Information sources

Sources of information or evidence are often categorized as primary or secondary material. These classifications are based on the originality of the material and the proximity of the source or origin. This informs the reader as to whether the author is reporting information that is first-hand or is conveying the experiences and opinions of others, which is considered second-hand. Determining if a source is primary or secondary can sometimes be difficult.

3.1.1 Primary Sources

These sources are records of events or evidence as they happened without any interpretation. They display original thinking, report on new discoveries, or share fresh information.

Examples of primary sources are thesis, dissertations, scholarly journal articles (research-based some government reports, symposia and conference proceedings, original artwork, poems, photographs, speeches, letters, memos, personal narratives, diaries, interviews, autobiographies, and correspondence (Primary, Secondary, and Tertiary Sources, 2022).

The primary sources used for this research are surveys and interviews with stakeholders. Reports generated by the SALCC may also form part of these research methods.

3.1.2 Secondary Sources

These sources offer an analysis or restatement of primary sources. The often try to describe or explain primary sources. They tend to be works that summarize, interpret, reorganize, or otherwise provide added value to a primary source.

Examples of secondary sources are textbooks, edited works, books and articles that interpret or review research works, histories, biographies, literary criticism and interpretation, reviews of law and legislation, political analyses and commentaries. (Primary, Secondary, and Tertiary Sources, 2022).

Chart 3 describes the information sources that this researcher will use as part of the data collection process.

Chart 3 - Information Sources (Primary, Secondary and Tertiary Sources, 2022)

Objectives	Information sources	
	Primary	**Secondary**
1. To conduct a needs analysis to implement the PMO.	• Google Form Survey • Interviews	• Internet searches on setting up PMOs • Project management journals • Research papers on higher education institutions implementation of PMOs

Objectives	Information sources	
	Primary	**Secondary**
		• PMI journals
2. To assess the SALCC's degree of maturity in organizational project management to improve the project management strategy.	• PM maturity assessment was completed by a project implementer at the SALCC	• Benchmarking • PMI Journal articles • Project Management blogs • Internet searches on Project management maturity level. • Project management maturity assessment model
3. To locate PMO in the organizational structure of the SALCC to optimize its efficiency.	• Google Form Survey • Interviews with past and present project managers and managers of the SALCC	• Benchmarking • PMOs in Higher education web journals
4. To recommend an implementation plan for the SALCC to operationalize the PMO.	• Desk Review • Interviews with the management and project implementers of the SALCC	• Benchmarking • PMBOK Guide 6th edition (2016) • PMBOK Guide 7th edition (2016)

3.2   Research methods

Research methods are the strategies, processes or techniques utilized in the collection of data or evidence for analysis to uncover new information or create better understanding of a topic. (LibGuides: Research Methods: What are research methods?, 2021). Research methods are either qualitative, quantitative or mixed and require the use of data collection tools.

The research method proposed for this project was the analytical-synthetic method, which would allow the decomposition of the components of the project for a deeper analysis in response to the project hypothesis. A description of other research methods would also be given in this section.

3.2.1   Analytic-Synthetic Method

This is a combination of two forms of research methods, analytical and synthetic. Both focus on analyzing the components of a whole.

3.2.2   Analytic Method

This method combines the resolution method with the scientific method to resolve a problem. It starts by decomposing the whole into many parts to analyze the parts separately. The analysis is done from concrete to abstract.

3.2.3   Synthetic Method

With this method, the phenomenon, notion, statement or general proposal should already be known. It focuses on reconstructing the whole and goes from abstract to concrete.

3.2.4 Inductive-Deductive Method

The inductive and deductive methods are two different research methods. The inductive method focuses on developing a theory (bottom-up approach) while the deductive method focuses on testing an existing theory (top-bottom approach). Though these methods use different approaches, they are sometimes combined when conducting large studies.

3.2.5 Observation Method

Observation can be used as a qualitative research method which is used to gather data, as the name suggests, by observing people, events or physical characteristics in their natural settings. Observations can be structured or unstructured and can take the following forms: participant, direct or indirect. The observation method can also be used as a quantitative research method which can involve either counting the number of times a specific phenomenon occurs, or coding of observational data in translate it into numbers. (LibGuides: Research Methods: What are research methods?, 2021).

Chart 4 - Research Methods (LibGuides: Research Methods: What are research methods?, 2021)

Objectives	Research methods		
	Analytic-Synthetic Method	Inductive-Deductive Method	Observation Method
1.To conduct a needs analysis to implement the PMO.	Surveys, questionnaires and interviews will be carried out with the staff to make an assessment.		The data will be analyzed and translated numerically to form the basis for the conclusion of the analysis.
2.To assess the SALCC's degree of maturity in organizational project management to improve the project implementation strategy.	Conduct and analyze an organizational project management	Based on the results of the assessment, the SALCC's level of maturity and	

Objectives	Research methods		
	Analytic-Synthetic Method	**Inductive-Deductive Method**	**Observation Method**
	maturity assessment for the SALCC.	areas for improvement will be determined.	
3.To locate the PMO in the organizational structure of the SALCC to optimize its efficiency.	Review the SALCC's organizational structure and make a comparison with the data collected from the surveys, questionnaires and interviews.	Benchmark the information analyzed against the organizational structure of a higher education institution with an established PMO	Tabulate any information from the benchmarking to determine the best position for the PMO at the SALCC.
4. To recommend an implementation plan for the SALCC to operationalize the PMO.	Analyze all data collected from the research to develop a proposed implementation plan for the SALCC.	Use the data from the research to conduct a comparison with implementation plans that may exist for a higher education institution.	

3.3   Tools

Research or data collection tools are instruments or devices used to collect data. The objective behind data collection is to capture quality evidence that allows analysis to lead to the formulation of convincing and credible answers to the posed questions. (7 Data Collection Methods & Tools for Research, 2022). The research was carried out for different purposes and was therefore carried out using different methods. Examples of these tools are

– questionnaires, interviews, case studies and checklists. Chart 5 provides information on the tools which was used to achieve the objectives of the proposal.

The tools used by the researcher for data collection were:

- PM Solution Assessment Tool – completed by a manager who was instrumental in project implementation
- Survey administered via Google Form – completed by the management and staff of the SALCC who were involved in project implementation
- Interviews – conducted with project leads and managers who were key to project implementation
- Benchmarking – to collect data from higher education institutions which had PMOs implemented
- A graphic and Microsoft Excel - used to provide a road map to guide the implementation process.

Chart 5 - Tools (7 Data Collection Methods & Tools for Research, 2022)

Objectives	Tools
1. To conduct a needs analysis to implement the PMO.	- Google Form survey - Individual interviews
2.To assess the SALCC's degree of maturity in organizational project management to improve the project implementation strategy.	- PM Solution Assessment Tool - PM Solution Assessment Model (for analysis)
3.To locate the PMO in the organizational structure of the SALCC to optimize its efficiency.	- SALCC Organizational structure - Benchmarking - Google Form survey
4.To recommend an implementation plan for the SALCC to operationalize the PMO.	Impact Mapping (Implementation Plan Roadmap) Graphic and Microsoft Excel

3.4 Assumptions and Constraints

Defining assumptions and constraints is a type of analysis that is integrated into projects' plans and documents and ensures that there is consistency between them.

3.4.1 Assumptions

Assumptions are things considered to be true, real or certain, without proof or demonstration.

3.4.2 Constraints

Constraints are limiting factors that affect the execution of a project, program, portfolio or process. Chart 6 describes the assumptions and constraints identified by the researcher for the proposed objectives for the proposal.

Chart 6 - Assumptions and Constrains (Project Management Institute, 2021)

Objectives	Assumptions	Constraints
1. To conduct a needs analysis to implement the PMO.	The College staff will be willing to participate in the needs analysis.	The time allotted to conduct the survey is not enough to attract all the staff who were targeted to complete the survey.
1. To assess the SALCC's degree of maturity in organizational project management to improve the project implementation strategy.	The staff is capable of completing the maturity assessment efficiently.	The key staff involved in project implementation would no longer be employed at the institution the at time the survey will be conducted.
3. To locate the PMO in the organizational structure of the SALCC to optimize its efficiency.	The information from the College will be easily available/accessible.	The College is currently restructuring and a new organizational structure may be created during the period the research is being conducted.

Objectives	Assumptions	Constraints
4. To recommend an implementation plan for the SALCC to operationalize the PMO.	That the data collected from the SALCC will provide the necessary information to guide the development of the implementation plan.	A lack of research sources on the implementation of a PMO at a higher education institution may negatively impact the delivery date.

3.5   Deliverables

A deliverable is any unique and verifiable product, result, or capability to perform a service. It can also be the results that are required to be produced to complete a process, phase, or project.

"Deliverables reflect the stakeholder requirements, scope, and quality, along with the long-term impacts to profit, people, and the planet. The delivery approach and timing may differ depending on the type of projects and can take the form of the following options, single, multiple, periodic or continuous." (Project Management Institute, 2021). A description of the deliverables developed for each project objective can be found in chart 7.

Chart 7 - Deliverables (Project Management Institute, 2021)

Objectives	Deliverables
1.To conduct a needs analysis to implementation of a PMO.	• Needs analysis report • Proposal for the staffing requirements for the PMO • Identify the level of qualification of the project implementers at the SALCC • Identify the tools currently being used at the SALCC
2.To assess the SALCC's degree of maturity in organizational project management to improve the project implementation strategy.	• Conduct a project management maturity assessment • Propose structure for the PMO • Report on the results of the project management assessment
3.To locate the PMO in the organizational structure of the SALCC to optimize its efficiency.	• Locate the PMO in the organization's structure of the SALCC. • Propose the type of PMO to be set up
4. To recommend an implementation plan for the SALCC to operationalize the PMO.	• Proposed implementation plan • Project implementation schedule • RACI matrix • Propose a strategy for buy-in for the project. • Project documentation plan • Project cost plan

4. RESULTS

4.1. Needs Analysis to Implement the Project Management Office (PMO)

A needs analysis survey (see appendix 7) was conducted to determine the implementation of a PMO at the SALCC. The survey was disseminated to the management and staff who were involved in project management implementation at the SALCC. The survey was aimed at capturing information on:

- staff qualifications and training in project management
- the tools and methodologies used for project implementation
- the location for the PMO given the experience of the staff
- the functions and staffing needs for the proposed office

An analysis of the results of the survey is presented in chart 8 below.

Chart 8 - Analysis of Needs Assessment Survey

Percentage (%) of Respondents	Component of survey responses
62.5%	Respondents had some knowledge of project management.
12.5%	Respondents completed a course in project management (one respondent had a master's in project management).
75%	Had no project experience other than what was gained at the college.
80%	The Principal, Faculty and Administrative Assistants were the main persons involved in project management at the college.
62%	Respondents thought that the projects implemented were aligned with the strategic objective of the institution.
62.5%	Respondents had no idea what project management methodology or tools were used by the institution.

Pie Chart showing support for the establishment of the PMO
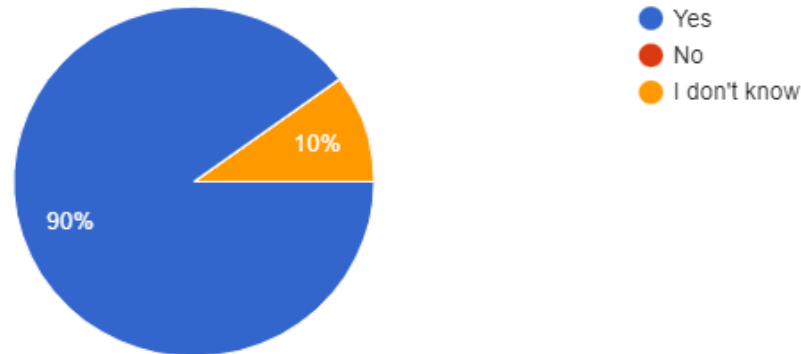
Note: Adapted from the Needs Assessment survey, 2022

The pie chart above indicates that 90% of the respondents thought that establishing a PMO would improve project implementation and would provide them with the support needed to improve project implementation.

The need for a PMO was also recognized by the government in 2010 when a quasi PMO was set up to coordinate the transformation of the SALCC into a university college. The role of the office was primarily to provide guidance and support for the project. The project officer and project administrative officer who formed part of the project staff were interviewed to determine how the office operated and what led to its closure.

Interviews were conducted with key staff and managers who presently undertake project implementation at the SALCC. Below is the list of the interviewees. A sample questions can be accessed in Appendix 7.

- Human Resource Manager
- Staff implementing projects at the SALCC
- Staff of the former project management office

Two other key contributors to project implementation at the SALCC were the Principal and Bursar. Unfortunately, due to time constraints, it was not possible to conduct interviews with them. In addition, the Principal's contract with SALCC ended at the time the researcher commenced the data collection process at the institution.

The persons who were interviewed expressed the following challenges with project implementation:

- The human resource department is brought into the project implementation process too late and therefore is not able to guide on recruiting staff for the project.
- The human resource department's role in the project implementation is restricted to contract development.
- There is a need for a dedicated finance officer assigned to project implementation. This would assist in speeding up the finance processes and getting approvals for the budget and other finance-related matters.
- There is limited human resource to support project implementation.
- There are insufficient funds to meet all the demands of stakeholders to implement projects.
- Stakeholders change the scope of the project without an increase in the budget.
- The closure of the former PMO due to the change in government.
- The change in direction for the transformation of the SALCC.

4.1.1 Staffing Needs of the Project Management Office

One of the components key to project success is the project resources. The project team is a key stakeholder without whose support the project would fail. 100% of the survey respondents and the interviewees indicated that some of the key staff for the success of project implementation at the SALCC were:

- ✓ Project Manager
- ✓ Administrative/Programme Assistant and
- ✓ Technical Specialist/subject matter experts

Figure 19 shows the responses from the survey.

Figure 19

Proposed staff for the PMO
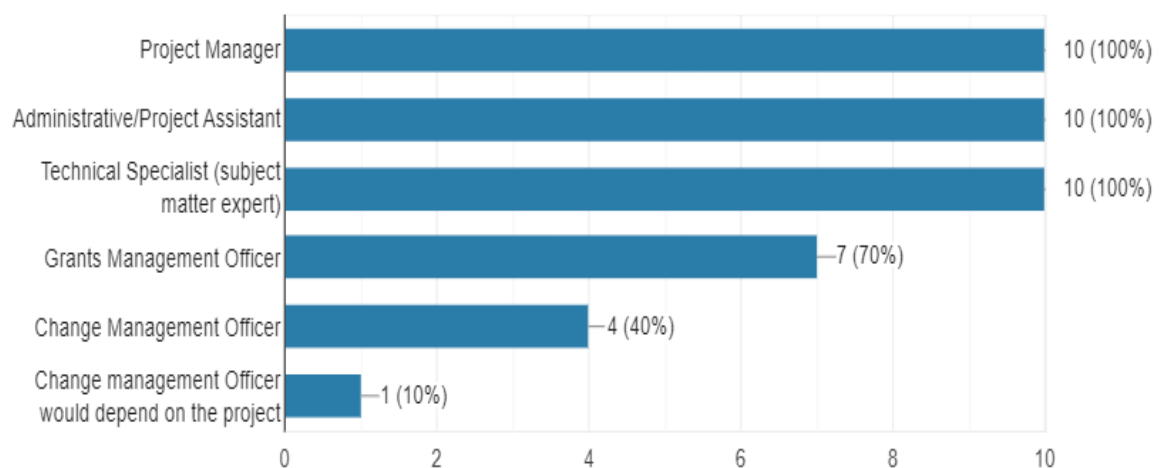
Note: Adapted from the Needs Assessment survey, 2022

4.2.   Maturity in Organizational Project Management Assessment

Organizations conduct project maturity assessments to determine their readiness or ability to implement projects successfully. An organization with a high degree of project maturity would be in a better position to achieve project success than an organization with a lower degree of project maturity.

The type of model used to conduct the assessment would depend on many factors, some of which are the organization's culture and project management maturity goals, in alignment with the organization's vision, mission and strategic goals.

The project management maturity assessment tool which was used for this evaluation was the PM Solutions' Project Management Maturity Model (see appendix 5). This model uses the PMBOK® 10 knowledge areas to create a standardized method for maturity assessment. When using this model, project managers assign one of five maturity levels to each knowledge area. These levels are:

Level 1 - Initial process

Level 2 - Structured process and standards

Level 3 - Organization standards and institutionalized process

Level 4 - Managed process

Level 5 - Optimizing process.

(Project Management Maturity Models | Smartsheet, 2022)

4.2.1   Project Management Maturity Assessment Evaluation

The results of the project management maturity assessment revealed that the SALCC had a level one (1) maturity level rate. Level one (1) indicates that the institution had undocumented management processes. This meant that the success of project implementation is unreliable, and the use of project management processes was sporadic. There was lack of formal documentation and knowledge of the project management standards with little or no training. There is little organizational support. A deeper analysis of the results is elaborated in chart 9.

The PM Solutions' Project Management Maturity Assessment was done by one of the managers involved in project implementation at the SALCC (a sample of the tool can be found in appendix 6). The model for the tool, Miller, B. (2004). The pathway to OPM3 which is based on the nine (9) PMI best practices, provides an explanation for each of the project management maturity levels (see appendix 5).   This was used to analyze the data

and a deeper analysis of the results was conducted (the analysis can be found in the following chart.

Levels of Project Management Maturity	Ranking	Description of level
Project Integration Management	Level 1	Initial process, no established practices, standards, or project office. Work performed in an ad-hoc fashion.
Project Scope Management	level 3	Organizational standards and institutionalized processes are present, full project management processes are documented and utilized by most projects. Stakeholders actively participate in scope decisions.
Project Time Management	level 2	Structured processes and standards, basic processes exist but are not used for planning and scheduling. Standard scheduling approaches are utilized for large, visible projects.
Project Cost Management	level 1	Initial process, no established practices or standards. Cost process documentation is ad hoc and individual project teams follow informal practices.
Project Quality Management	level 1	Initial process, no established project quality practices or standards Management is considering how they should define "quality".
Project Human Resource Management	level 1	Initial process, no repeatable process applied to planning and staffing projects. Project teams are ad hoc. Human resource time and cost are not measured.
Project Communications Management	level 1	Initial process, there is an ad hoc communications process in place whereby projects are expected to provide informal status reports to management.
Project Risk Management	level 1	Initial process, no established practices or standards. Documentation is minimal and results are not shared. Risk response is reactive.
Project Procurement Management	level 1	Initial process, no project procurement process in place. Methods are ad hoc. Contracts are managed at a final delivery level.

4.2.2   Structure of the PMO

The structure of the PMO depends on the maturity level of the organization. The SALCC maturity assessment indicated that the SALCC was at level one which means that there is a lack of documentation of project management processes, knowledge and training in project management.

There are three types of project management offices, supportive, controlling and directive. To improve the maturity level of the SALCC, there is a need for applying project management processes, and conducting training for the project team to improve their knowledge of project management. The analysis of a survey conducted at the SALCC indicated that 60% of the respondents thought that a PMO with responsibility for direct project management of all projects was the best structure for the SALCC. The interviewees were of similar opinions. These responses are in line with the actions needed to improve the maturity level of the SALCC. Figure 20 shows the responses of the project implementers at the SALCC.

The SALCC recently began focusing on project management as a means of achieving its strategic goals, the directive project management office is found primarily in strong matrix organization or a fully projectized organization. The SALCC's main purpose is teaching and learning, not project implementation and therefore a controlling PMO would be the best option for the type of PMO to be implemented. The controlling PMO is best suited for balanced matrix organization. This type of PMO would allow the SALCC to develop the structures needed to improve its processes and its project management maturity level while focusing on its core objective.

- A PMO providing project management support services (providing templates, access to good practices, and information on lessons learned from other projects)
- A PMO which controls project management (standardization of PM processes and compatibility of tools)
- A PMO with responsibility for direct project management of all projects
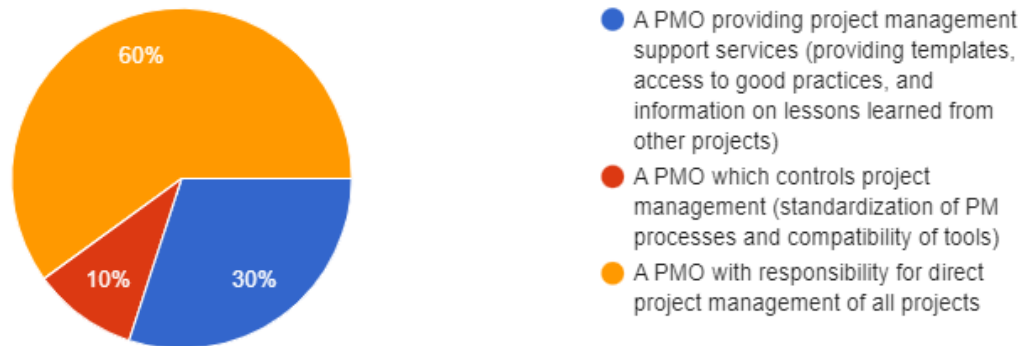
Note: Adapted from the Needs Assessment survey, 2022

4.3.   Location of the Project Management Office

The location of the PMO within an organization is different for each organization and would depend on the structure and culture of the organization.

The analysis of the needs assessment and the responses from the interviewees indicated that a majority of the participants indicated that the PMO should be a separate unit which reports to the Office of the Principal.

The rationale for the location of the PMO was based on the role of the Principal as the authority for project approval. The Principal also has responsibility for implementing the SALCC's strategic goals. This would mean that the Principal would be best placed to oversee and ensure that the projects being implemented are aligned with the SALCC's strategic goals.

Figure 21

Proposed location of the PMO

SIR ARTHUR LEWIS COMMUNITY COLLEGE
Proposed Organizational Structure
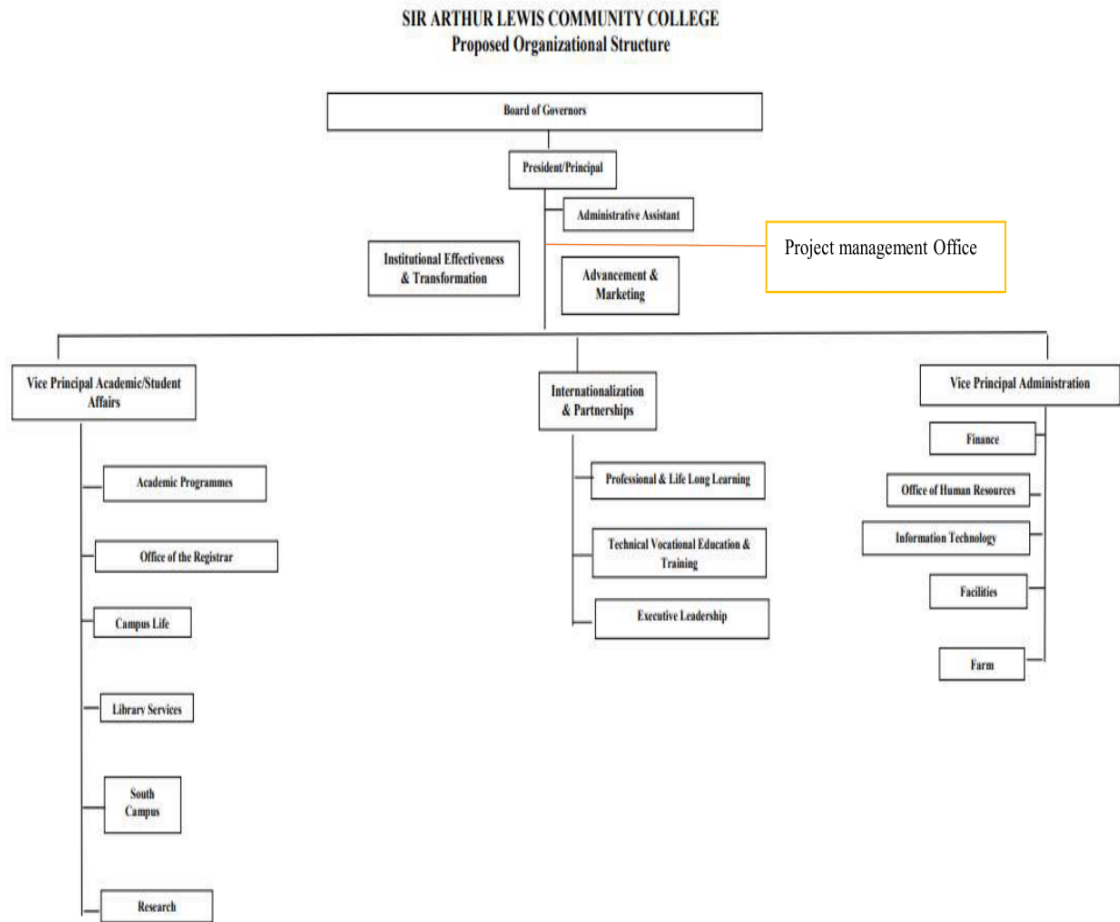
Note: Adapted from Personal communication, August 2022

4.3.1 Benchmarking Analysis

Benchmarking is done to compare the performance of a business to the standards in the industry and the other businesses in the industry who are considered to be the best or are performing well in the industry. Benchmarking provides managers with the insights needed to drive targeted strategic and transformational initiatives that have a significant impact on the company's performance. (The Four Phases of Successful Benchmarking, Starr 2017)

As part of the benchmarking process six (6) higher education institutions in the region was researched to determine whether there were PMOs or an office where projects were processed for implementation existed. The results indicated that only one institution, the University of the West Indies had a PMO. The table below shows the results of the investigation.

Chart 10 - Results of Investigation - PMO at Regional Institutions

Regional Institutions – PMO		
Name of Institution	**Country**	**PMO**
T. A. Marryshow Community College	Grenada	No
University of the West Indies	Jamaica, Barbados, Trinidad and Tobago	Yes
Antigua State College	Antigua	No
St Vincent and the Grenadines Community College	St Vincent and the Grenadines	No
Clarence Fitzroy Bryant College	St Kitts and Nevis	No
Dominica State College	Dominica	No

Given that there is only one institution in the region with a PMO, it was necessary to investigate institutions outside of the region which had a PMO implemented. Six (6) higher education institutions were reviewed three (3) from the USA and three (3) from the UK. A table with the institutions is shown in chart 11 below.

The findings of the benchmarking indicated that:

- There must be a clear process for assessing project intake (approving the projects to implement) by the institution.
- All projects implemented must be aligned with the institution's strategic goals.
- There are different types of projects based on the need of the institution.
- The PMO is positioned so that it reports to an office with the authority for decision-making.
- The PMO provides training in project management.
- The PMO standardizes project management processes across projects.
- The PMO provides guidance, tools and templates.

Chart 11 - Benchmark Institutions

Benchmark Institutions	
Name of Institution	**Country**
University of the West Indies	Housed in Jamaica
Pace University	USA
Information Technology University of Florida	USA
Davenport University	USA
University of Edinburgh	UK
Oxford Brookes University	UK
University of Sussex	UK

4.4   Proposed Implementation Plan

The project management plan was developed based on the results of the needs assessment survey, the results of the Project Management Maturity Assessment and a desk review of SALCC documents.

The results of the project management maturity level assessment revealed that the SALCC project management maturity was at level one, which indicated that projects were implemented in an ad hoc manner. The implementation of the PMO could assist with improving the maturity level of the SALCC as the office would support the standardization of the processes across projects, improve quality management and project success rate. The PMO would provide a basis for reviewing project proposals to ensure alignment with the strategic goals of the SALCC and assist in providing the necessary monitoring and evaluation of projects needed to improve the SALCC's business processes. Improving the project management maturity level of the SALCC would give the institution the competitive advantage necessary to succeed in today's education sector.

The data coming out of the assessment from the project implementers indicated that there were only two staff members who had qualifications in project management, although the majority (72.7%) had some knowledge of project management. 27.3% respondents had hands-on training in project management prior to their work at the SALCC. The data indicates that there was a need for project management training for project implementers (see Figures 22 and 23).

Figure 22

Knowledge in Project Management
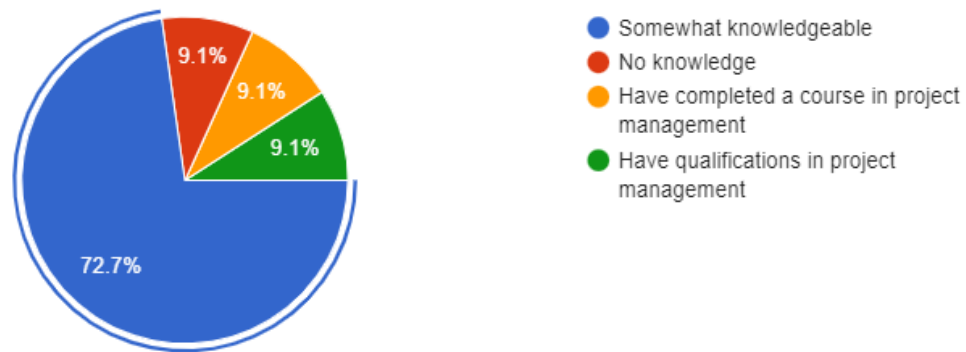
Note: Adapted from the Needs Assessment survey, 2022

Figure 23

Staff with hands-on experience in Project Management prior to SALCC
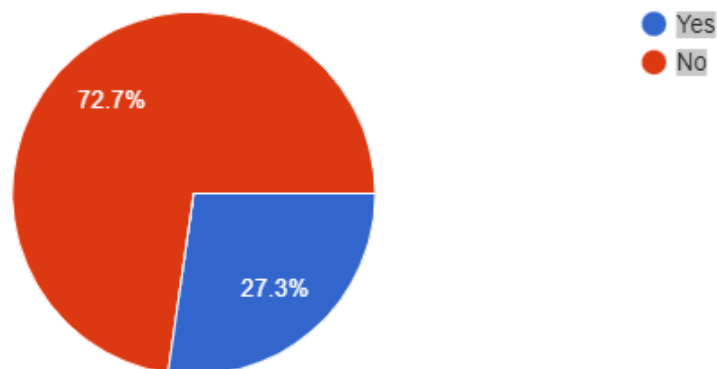
Note: Adapted from the Needs Assessment survey, 2022

It is proposed that the implementation of the PMO should be done through a consultancy given the lack of qualification in project management that exists at the SALCC. The consultant should be supported by a planning committee which can later serve as the project steering committee (PSC) to provide quality assurance to project implementation.

The following are some considerations for the membership of the planning committee.

- Board representative
- HR Manager or representative

- Bursar or representative

- Principal/VP

- Advancement Officer (Project Management)

- Project Implementer (Head of Innovation Hub[1]/or other)

- Staff with PMO experience/qualifications

- Representatives from external stakeholders (Ministry of Education/Private sector)

- Student representative

It is important that the SALCC staff the PMO with a strong project management team which would provide the required support for project implementation. Project management staff should possess soft skills in addition to project management skills.   The following skills would assist the project team to successful implement the PMO.

1. *Leadership* - to be able to improve project implementation at the SALCC the project team must possess leadership skills that would allow them to lead in their areas and

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[1] Innovation Hub – This is a Unit at the SALCC which was established through one of the institution's project initiatives and is responsible for implementing projects targeted at women and young persons in society.

create the environment to encourage unity among the team despite the differences in character.

2. *People management skills* – the team would need to be able to gain the cooperation of the internal stakeholders if the consultations are to be successful.

3. *Problem-solving skills* – to establish the PMO, critical problem-solving skills is required to put in place the action plan for project success.

4. *Communication skills* – active listening skills as well as the ability to be understood are key to project success.

5. *Integrity* - For project implementation to be successful there must be accountability for actions taken.

6. *Organizational skills* – One of the key skills of project management is the ability to be organized. This would assist the team in establishing systems that would manage the many moving parts of the project and track the multiple tasks.

7. *Conflict management* – as the team implements the project, they will inevitably encounter conflict and will need to be able to manage these situations effectively.

8. *Ability to work under pressure* – implementing a PMO at an institution where projects are already being implemented would come with a high level of expectation for the PMO staff. Being able to stay calm when faced with difficulties would be an asset.

9. *Enthusiasm* – having a positive mindset would assist the team in leading by example and taking on new challenges.

10. *Patience* – The process to implement the PMO at the SALCC may be slow, and the team would require patience to ensure that the project deliverables are implemented.

11. *Emotional intelligence* – the team would need to be resilient when facing challenges.

As an educational institution the SALCC must build capacity of its staff as well its students. Therefore, in addition to the training provided to staff in project management, one of the components of the PMO should be the involvement of students as support for the project office. This could be done through the work-study and the internship programmes which have already been established at the SALCC. This approach will give students hands on training in project management and provide additional support to the project office.

A phased approach should be used to implement the PMO. The diagram below illustrates the stages involved in the approach.

Figure 24

Implementation Stages

INITIATION
1
- Develop a budget
- Source funding
- Set up the PMO
- Develop the PMO's vision, mission, value statement and objectives

IMPLEMENTAITON PHASES

PLANNING
2
- Recruitment of PMO staff
- Identify the methodology, tools and processes for the PMO
- Develop a project intake framework
- Develop a student support selection process to support the PMO

IMPLEMENTATION
3
- Operationalize the PMO
- Develop a training plan for project implementers
- Develop a change management plan
- Develop a continuous improvement plan
- Conduct an institutional Project Management Maturity assessment

Note: Adapted from the Needs Assessment survey, 2022

4.4.1 Proposed Implementation Schedule

The proposed implementation schedule for the PMO is shown in figure 25 below (1 period = 1 week). The schedule give a general guide to some of the key activities required to implement the PMO at the SALCC. The next section is an elaboration of the schedule in the form of a Responsibility Assignment Matrix (RACI) which would provide further guidance for the PMO implementation activities. Important to note was that some activities would run concurrently.

Figure 25

Project Implementation Schedule

Project Implementation Schedule

| | | | | | | Period Highligl 1 | ■ Plan Duration | Actual Start | ■ % Complete |

ACTIVITY	PLAN START	PLAN DURATION	ACTUAL START	ACTUAL DURATION	PERCENT COMPLETE	PERIODS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Develop budget for setting up the PMO	1	1				
Source funding	4	1				
Develop ToR for a Project Implementation Consultancy (PIC)	1	1				
Advertise consultancy	2	1				
Consultant procurement process	3	3				
Planning Committee process	1	2				
Planning Committee Activation	1	1				
Develop the Project Charter	3	1				
Develop the documentation plan	6	1				
Conduct desk review	6	2				
Conduct consultations with SALCC project implementers	7	2				
Identify project management methodology	9	1				
Develop PMO's vision, mission, value statement and objectives	7	2				
Develop the PMO's framework	9	3				
Start recruitment process for PMO staff	10	6				
Develop framework for project intake	11	1				
Develop project intake process	11	1				
Develop a student support selection process for the PMO	12	2				
Operationalize PMO	13	3				
Develop a training plan for project implementers	14	1				
Conduct training	14	1				
Develop a change management plan	15	2				
Develop a Continuous Development Plan	15	1				
Conduct an institution project management maturity assessment	16	1				

Note: Own image

4.4.2 Project Management Office RACI Matrix

A RACI matrix should be developed to clearly define the team's role in the implementation of the project office. Figure 26 below clearly identifies the role of each team member who would play a significant role in the implementation of the PMO.

Key: R– responsible
A – Accountable
C – Consult
I – Inform
NA – Not Applicable

Figure 26

RACI Matrix

Activities	Principal	Consultant	HR Manager	Head of Marketing	Bursar	Institutional Effectiveness and Transformation	Project Manager	Assistant Registrar	Advancement Officer
Develop a budget for setting up the PMO	A	C	C	I	R	C	NA	NA	I
Source funding	A	C	C	NA	C	C	NA	C	R
Develop the ToR for the project implementation consultancy	AR	NA	R	I	C	C	NA	I	C
Advertise the consultancy	A	NA	R	R	C	NA	NA	NA	C
Procure consultants	AR	NA	R	I	I	NA	NA	NA	C
Start the process for establishing the Planning Committee	R	NA	A	NA	NA	NA	NA	NA	C
Activate planning committee	AR	NA	R	NA	I	I	NA	NA	C
Develop the Project Charter	A	R	NA	NA	NA	NA	C	NA	C
Review the proposed documentation plan	A	R	NA	NA	NA	NA	C	NA	C
Conduct a desk review	A	R	I	I	I	C	R	NA	C
Conduct consultations with project implementers	A	R	I	I	NA	I	A	NA	C
Identification of project management methodology	A	R	C	C	C	C	C	NA	C
Develop PMO's vision, mission, value statement and objectives	AR	R	C	C	C	C	NA	NA	C
Develop the framework for the PMO	A	R	I	NA	I	C	R	NA	C
Recruitment of PMO staff	A	C	R	NA	C	C	NA	NA	I
Develop the project intake framework	AR	R	I	NA	NA	C	C	I	C
Develop project intake process	A	R	I	NA	C	C	R	NA	C
Develop a student support selection process for the PMO	A	C	I	I	C	C	C	R	C
Operationalize the PMO	AR	C	R	C	C	C	C	I	C
Develop a training plan for project implementers	A	R	C	I	C	C	R	NA	I
Conduct training	A	C	R	NA	I	C	R	NA	C
Develop and implement a change management plan	A	R	C	C	C	C	C	C	C
Develop a continuous improvement plan	A	R	C	I	I	C	C	NA	C

Note: own image

4.4.3   Project Documentation Plan

The documentation plan is a collection of documents which is created during the project's development process. The project team is expected to follow the guidelines for these documents. It includes the project plan, schedule and budget (Verma, E. 2012).

One of the requirements to improve the project maturity level of the SALCC was the need to standardize documents. The table below gives a guide to some of the documents which could assist the SALCC in standardizing its project implementation process.   The project may decide on other documents which may be beneficial to the institution.

Chart 12 - Documentation Plan Template (own image)

Document Code	Title	Description	Assigned to	Approved by
SALCC/PMO/001	Budget Proposal	All projects must include a budget. Any additional cost must go through the institution's approval process.	Bursar/Project Manager	Principal
SALCC/PMO/002	Change and Scope Management Plan	A Change Management log must be kept to track changes and avoid scope creep.	Project Manager	Principal
SALCC/PMO/003	Continuous Development Plan	A Continuous Development Plan must be developed annually to put preventative measures in place for the improvement of the PMO and the institution. This must include a project management maturity assessment (PMMA).	Project Manager/HRM	Board of Governors
SALCC/PMO/004	Knowledge Management Plan	A knowledge management log will be kept for all knowledge products developed. This will include a project tracking matrix, lessons learned	Programme Assistant	Project Manager

Document Code	Title	Description	Assigned to	Approved by
		register, resource management matrix, etc.		
SALCC/PMO/005	Project Charter	A guide documenting the main details of the project. In this document the project's name, objectives, budget, stakeholders and other important details are included to seek approval.	Consultant	Board of Governors
SALCC/PMO/006	Project Closure Report	At the end of each project, all project activities must be wrapped up and a Project Closeout Report completed	Project Team	Principal
SALCC/PMO/007	Project Intake Form	A project intake form must be completed for every project. The project must be processed to determine the cost-benefit analysis and the alignment with the strategic goals of the organization	Project Team	Principal
SALCC/PMO/008	Quality Management Plan	A quality management plan must be developed for each project to include quality acceptance criteria.	Project Manager	Principal
SALCC/PMO/008	Risk Management Plan	A risk management plan must be developed, and a risk register updated to manage the risk coming out of the project.	Project Manager	Principal
SALCC/PMO/009	Stakeholder Management Plan	A Stakeholder management plan and a stakeholder register must be developed for each project.	Project Manager/Project Team	Principal
SALCC/PMO/010	Student Support Form	To further support the work of the PMO, students will be selected through the work-study and internship process.	Assistant Registrar	Project Manager
SALCC/PMO/011	Project Management Training Plan	A plan to train the project management team (PMT) and staff providing technical support on projects. This plan will	Programme Assistant	Project Manager/ HRM

Document Code	Title	Description	Assigned to	Approved by
		also form part of the Continuous Development Plan		
SALCC/PMO/012	Communication Plan	A plan to secure buy-in for the project office, publicize the project management work being carried out at the SALCC and the benefits to institution's strategic goals.	Communications Officer	Project Manager/ Principal
SALCC/PMO/013	Work Breakdown Structure (WBS)	A WBS must be completed for every project. This will determine the work packages and activities which must be undertaken by the project team.	Project Manager	Principal
SALCC/PMO/014	Work plan	A project workplan must be developed by the project team to guide the project implementation.	Project Manager	Principal
SALCC/PMO/015	Budget	A budget for the project activities and resources must be developed.	Bursar/Project Manager	Principal
	Issues log	The project team should keep a record of issues which are encountered during project implementation	Project team	
	Lessons learned register	Any lessons learned should be logged to assist with improving implementation of other projects	Project team	
	Risk register	All risk should be identified and logged by the project team. This would assist in developing mitigation strategies.	Project team	
	Change management log	All changes in the project (scope/budget/schedule/cost) should be documented and tracked.	Project team	Principal

4.4.4 Project Cost Plan

Lack of funding to execute projects was identified as one of the challenges at the SALCC in executing projects. It is proposed that funding be sought from various funding agencies to implement the PMO. One of the key documents to be developed as part of the grant proposal is a budget. Chart 13 is an indicative budget for the project, an integral component of the grant proposal. The Consultant with the support of the Bursar would further elaborate the budget to form a cost management plan which will incorporate other areas needed to set up the PMO. All costs are quoted in EC currency (XCD 2.70 =$1US).

Chart 13 - Proposed Project Budget (own image)

Project Budget Cost						
Description	**Proposed start Date**	**Proposed End Date**	**Rate**	**Planned Cost**	**Actual Cost**	**Variance Cost**
Phase One						
Consultant			contract period	$19,200		
Project Manager			monthly	$13,500		
Technical Specialist			monthly	$10,000		
Programme Assistant			monthly	$7,200		
Phase Two						
Technical Specialist (Monitoring and Evaluation)			monthly	$10,000		
Administrative Assistant			monthly	$5,000		
Other Cost						
Furniture & equipment			One time	$23,000		
Communication			monthly	$5,000		
Software & licences			annual	$7,000		
Office Supplies			monthly	$600		

5   CONCLUSIONS

The findings from the needs analysis provided evidentiary support that the implementation of a PMO at the SALCC would improve its efficiency in project implementation, provide support for achieving its strategic goals and increase the value of the projects being implemented.

The fact that the SALCC had previously established a project office to oversee the transformation project at the institution indicates that a precedent has been set for the implementation of a PMO. The increase in the number of projects undertaken supports the data that a PMO is needed to support project implementation.

The SALCC would need to take a deeper dive into the data collection process to support the project implementation. There were some limitations experienced by the researcher in terms of time constraints to conduct interviews with key project implementers. Also, the timelines of the project did not allow for extensive research to be conducted. Nevertheless, it is clear that the SALCC should engage in a project to establish a PMO for greater efficiencies in project implementation and to improve the SALCC's level of competitiveness. The data from this proposal should be used to locate the PMO, identify its type and functions, develop the structure and recruit the staff. It was concluded that:

1. The results from the needs analysis would provide the basis for the implementation of the PMO and allow greater efficiencies.

2. The assessment of the project management maturity of the SALCC would provide the data needed to improve the project implementation strategy of the SALCC. Standardizing project implementation across the institution would assure consistency in project success and position the institution at a maturity level that would allow it to become more competitive.

3. The proposed location of the PMO would allow reporting to the Office of the Principal which has the authority for decision-making and oversight of the

implementation of the SALCC's strategic goals. This would optimize the efficiency of the PMO.

4.   The proposed implementation plan would allow the SALCC to operationalize the PMO by putting together the structures and guidance provided in the plan.

5.   The Human Resource Unit should be involved in project planning from the initiation stage.

6.   Training is needed for the management and staff who participate in project implementation at the SALCC and could be provided by the proposed PMO if staffed properly.

7.   The PMO would better position the SALCC to access grants and improve its potential for winning project bids that it would not have won previously.

6   RECOMMENDATIONS

The recommendations to the SALCC are that the PMO be implemented over a one-year to two-year period. Recruitment for the PMO should be done in two stages. Stage one should include a project manager, technical specialist and a programme assistant and stage two a second technical specialist (Monitoring and Evaluation) and an administrative assistant.   An iterative approach to implementation should be used with activities implemented concurrently where necessary. The SALCC may decide to change the name of the office and, if necessary, over time decide on hiring additional staff to support the work of the PMO.

It is important to note that some of the activities for the project to create a PMO can occur concurrently. More specific recommendations included the following:

1.   Action the recommended implementation plan for operationalizing the PMO. This would involve setting up the structure for the PMO, developing the project management standards, methodologies, tools, processes and procedures which would guide the operations of the PMO. Operationalizing the PMO would also assist with standardizing project implementation across the SALCC, integrate project resources and avoid wastage. This would improve the institution's project management maturity level.

2.   Set up structures for the PMO so that it stands as an independent unit within the organizational structure of the SALCC, reporting to the Office of the Principal to ensure alignment of the institution's strategic goals and the projects being implemented.

3.   Set up a PPC to support the consultant. This committee would later serve as the PSC after the PMO is operationalized.

4.   Include the Human Resource Unit as a member of the PPC to ensure the unit's involvement in the project's planning process to improve the recruitment of

project staff. Depending on the level of skill set required, project staff should be recruited internally. Given the lack of training in project management that exists at the SALCC, the Project Manager should be sourced externally, and a dedicated Finance Officer should be assigned for project implementation.

5.   Capacity building for management and staff in project management should be a function of the PMO as part of the continuous improvement process of the PMO. A component of the training should cover the principles of project management and the performance domains. Training of the current management and staff participating in project implementation should occur ahead of the start date to operationalize the PMO.

6.   The PMO should be structured to collaborate with the SALCC's unit with responsibility for sourcing funding for the institution to provide support with grant funding (e.g. the Advancement Office). Funding agencies such as the Caribbean Development Bank (CDB), the World Bank and the Government of Taiwan/ TaiwanICDF could be approached to fund the PMO.

7.   Implement a communication plan to get project buy-in from key stakeholders. The communication plan should include the following strategies:
- engage the internal stakeholders to sensitive them on the contribution that projects have made to improve the SALCC programme/course offerings.
- publicize the achievement which have been accomplished through project implementation. For example the recent Jennes programme which targeted women and young entrepreneurs and other similar projects which have contributed to the strategic goal of the SALCC.
- Present the PMO implementation proposal to the Board of Governors and the management of the SALCC, highlighting the benefits of the PMO in accomplishing its goals and meeting its objectives.

7   VALIDATION OF THE FINAL GRADUATION PROJECT (FGP) IN THE FIELD OF REGENERATIVE AND SUSTAINABLE DEVELOPMENT

The research for the project proposes the implementation of a PMO at a higher education institution. The project would investigate the need for the PMO at an institution which engages in projects to improve the quality of education. Implementing a PMO in an education institution would assist the institution to improve its programme offerings and providing access to education as identified by the United Nations' Sustainable Development Goals (SDGs). Education was identified as one of the areas of sustainability by the United Nations in 2017. Seventeen (17) SDGs with 169 targets were agreed upon by world leaders. Target #4, "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" relates to sustainability in education, and more specifically targets 4.3, 4.4 and 4c would apply to this project. The following are the corresponding indicators to the targets.

Target 4.3

4.3.1 - Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

4.3.2 - Gross enrolment ratio for tertiary education by sex

4.3.3 - Participation rate in technical-vocational programmes (15- to 24-year-olds) by sex

Targe 4.4

4.4.1 - Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

4.4.2 - Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills

4.4.3 - Youth/adult educational attainment rates by age group, economic activity status, levels of education, and programme orientation

Target 4.C

4.c.1 - Proportion of teachers in: (a) pre-primary education; (b) primary education; (c) lower secondary education; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g., pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex

4.c.2 - Pupil-trained teacher ratio by education level

4.c.3 - Percentage of teachers qualified according to national standards, by education level and type of institution

4.c.4 - Pupil-qualified teacher ratio by education level

4.c.5 - Average teacher salary relative to other professions requiring a comparable level of qualification

4.c.6 - Teacher attrition rate by education level

4.c.7 - Percentage of teachers who received in-service training in the last 12 months by type of training

(Goal 4. (n.d.). Sdgs.un.org. Retrieved December 11, 2022)

Sustainability in the implementation of this project was further strengthened by the new initiative of the United Nations which had begun discussions on "The Higher Education Sustainability Initiative - integrating the SDGs into Higher Education and the transformation of higher education as a result of the COVID-19 pandemic". The implementation of a PMO would strengthen the capacity of the SALCC to better be able to participate in this new initiative.

Implementing regenerative development is a holistic approach which integrates six (6) processes:

1. Spiritual

2. Environmental

3. Social

4. Economic

5. Political

6. Cultural

Initiatives in social regeneration have a specific focus, such as health, education, community facilities, arts and culture, and family and child well-being (Oireachtas Library & Research Service, 2011).

Regenerative development in education speaks to an education that serves people and the planet as we move into a new environmental reality, with its accompanying social shifts, economic transformation and understanding of who we are as a species and an individual. (A Regenerative Education for our times, 2022). A PMO at a higher education institution would ensure that the institution would be able to sustain its ability to engage in project implementation by having the support which is provided by a PMO with capacity building in training, policies, procedures and project management methodologies.

In conducting the GPM P5 standard for Sustainability in projects, the analysis revealed that there were two areas which would mainly relate to this project. They were the Process (project management) Impacts and under the Prosperity (Economic) Impacts - the Economy Simulations. Given that SALCC is an educational institution, all six (6) processes of the regenerative development dimensions would impact this project. The projects that the SALCC would be implementing with the support of the PMO would fall under any, if not all of these processes at any one time.

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9   APPENDICES

Appendix 1: FGP Charter

CHARTER OF THE PROPOSED
FINAL GRADUATION PROJECT (FGP)

1. Student name

Marina Daniel

2. FGP name

Proposal for a Project Management Office at the Sir Arthur Lewis Community College

3. Application Area (Sector or activity)

Education

4. Student signature

5. Name of the Graduation Seminar facilitator

Róger Valverde Jiménez

6. Signature of the facilitator

7. Date of charter approval

31st July 2022

8. Project start and finish date

18th July 2022	4th September 2022

9. Research question

How will Implementing a Project Management Office in a higher education institution improve its competitiveness?

10. Research hypothesis

> Establishing a Project Management Office at the Sir Arthur Lewis Community College will improve its efficiency in project implementation thereby making it more competitive.

11. General objective

> To implement a project management office at the Sir Arthur Lewis Community College in St Lucia which will improve its efficiency in project implementation.

12. Specific objectives

> I. To conduct a needs analysis to implement the PMO.
> II. To assess the college's degree of maturity in organizational project management to improve the project implementation strategy.
> III. To locate the PMO in the organizational structure of the SALCC to optimize its efficiency.
> IV. To recommend an implementation plan for the SALCC to operationalize the PMO.

13. FGP purpose or justification

> The SALCC currently carries out projects to better serve its clients. This has led to an improvement of its program offerings and a sounder financial position for the institution. Currently the projects are being carried out by the management and staff who serve as the key planners and implementers. There is no PMO to provide support for project implementation.
>
> Given the increase in the number of projects that the SALCC is currently undertaking, implementing a PMO would assist with setting up the guidelines, the processes and standardizing the documents used across projects. It will also assist with improving the resource allocation as currently most staff are either re-assigned from their substantive role to implement projects or provide a dual role of project coordination alongside their substantive role.
>
> The establishment of the PMO would provide greater efficiencies and sustainability in the implementation of projects at the SALCC and would see the continuously improving of its brand within the education sector.

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.

Deliverables	Secondary Product/service
FGP development	
Needs analysis report	Survey and interview instrument developed to conduct the needs assessment. Recommendation document for the staffing needs developed.
Project management maturity assessment conducted. Proposed structure for the PMO. Report on the results of the project management assessment	Maturity assessment tool identified.
Locate the PMO in the organizational structure of the SALCC.	Survey conducted to determine the location of the PMO in the organization's structure. Benching marking to compare location of PMO at higher education institution
Proposed implementation plan.	An implementation plan schedule developed. Implementation plan RACI matrix developed.

1. FGP
   1.1 FGP profile
       1.1.1 Introduction
       1.1.2 Theoretical framework
       1.1.3 Methodological framework
       1.1.4 Preliminary bibliographical research
       1.1.5 Annexes (FGP schedule, FGP WBS, FGP Charter)
   1.2 FGP development
       1.2.1 Needs Analysis to Implement the PMO
       1.2.2 Staffing Needs of the PMO
       1.2.2 Assessment of the Degree of Maturity in Project Management
           1.2.2.1 Project Management Maturity Evaluation
           1.2.2.2 Structure of the PMO
       1.2.3 Location of the PMO in the organization's structure
       1.2.4 Benchmarking Analysis
       1.2.6 Implementation Plan
           1.2.4.1 Proposed Implementation Schedule
           1.2.4.2 PMO RACI Matrix
           1.2.4.3 Documentation Plan
       1.2.5 Conclusions
       1.2.6 Recommendations
       1.2.7 Reference lists
       1.2.8 Annexes
       1.2.9 Tutor approval for reading
   1.3 Reader's review
   1.4 Board of examiners evaluation

15. FGP budget

Detail the budged that you estimate is necessary to develop your FGP document (relevant costs). All currencies are quoted in EC dollars (XCD).

Budget	
Consultations for background information	$500
Travel and miscellaneous expenses	$100
Material expenses	$80
Information processing expenses ($15 x 20 hrs)	$300
Total	**$980**

16. FGP planning and development assumptions

- The professor will approve my topic and objectives for the final project.
- The College will approve the request to use its information for the final project.
- The information from the College will be easily available.
- The persons to participate in the survey and research will be willing and available.
- There will be sufficient time for me to complete the FGP.

17. FGP constraints

- Most staff at the College are on vacation at the time of conducting the FGP.
- The requirements for approval to conduct research at the College are rigid.
- The demands of my job will hinder the time available to complete the FGP.
- Key staff for the research will not be available.

18. FGP development risks

- The management and current staff implementing projects at the SALCC may change during the development of the FGP making it difficult to get a true picture of the project management situation.

- Being a past employee in the unit implementing projects puts me in a unique position to gain access to the resources necessary to complete the FGP.

- The time allotted for the completion of the FGP may not be sufficient to conduct the research necessary to obtain the information needed.

- Given that key staff at the College are on vacation, permission to conduct the project may be significantly delayed and may impact the completion of the FGP if permission is not granted and the FGP topic would have to be changed.

19. FGP main milestones

Deliverable	Finish estimated date
1.1 FGP profile	31st July 2022
1.1.1 Annexes	11th September 2022
1.2 FGP development	31st December 2022
1.2.1 Needs Assessment	20th November 2022
1.2.2 Maturity Assessment	18th September 2022
1.2.3 PMO Benchmark	27th November 2022
1.2.4 Implementation Plan	31st December 2022
1.3 Readers review	14th January 2023
1.4 Board of examiners evaluation	2nd February 2023

20. Theroretical framework

20.1 Estate of the "matter"

The SALCC offers programmes at the certificate, associate and bachelor's degree levels. Students may also complete a Postgraduate Diploma in Education.

The academic and administrative staff have been involved in project implementation and are trained in curriculum and programme development, making it possible for the College to answer to stakeholder requests for new programmes and courses.

The College has an increase in project implementation which is aimed at enhancing the College offerings and increasing the student intake. To this end, several staff have been involved in project implementation at the College.

20.2 Basic conceptual framework

> List of the basic concepts to be included in the document.
>
> Project management, project life cycle, Project knowledge management areas, PMO in higher education, Types of PMO, Functions and Benefits of PMO, Organization maturity models.

21. Methodological framework

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
1. To conduct a needs analysis to implement the PMO.	Needs assessment Report Staffing needs recommendation report PMO model Recommendation Report	**Primary:** Questionnaires Interviews	Qualitative	Google forms Interviews	The key staff to be interviewed may not be available Some managers may not see the need to have the PMO implemented, and this may lead to key staff not participating in the needs assessment
2. To assess the SALCC's degree of maturity in organizational project management to improve the project implementation strategy.	Project management maturity assessment Report	**Primary:** Survey **Secondary:** Benchmarking	Qualitative	PM Solutions Assessment Tool	The key staff to complete the assessment may not be available
3. To locate the PMO in the organizational structure of the SALCC to optimize its efficiency.	Report recommending location of the PMO in the organization's structure	**Primary:** Questionnaires Interviews **Secondary:** Benchmarking	Qualitative	Interviews Benchmarking analysis report	The SALCC is going through a restructuring phase which may result in changes to the organizational structure

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
4. To recommend an implementation plan for the SALCC to operationalize the PMO.	PMO Implementation Plan proposal	**Primary:** Document analysis	Qualitative review of document analysis	Document analysis

Benchmark analysis report | |

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

The research for the project proposes the implementation of a PMO at a higher education institution. The project will investigate the need for the PMO at an institution which engages in projects to improve the quality of education offered. Implementing a project management office in an education institution will assist the institution to improve its programme offerings and providing access to education as identified by the United Nations Sustainable Development Goals. Education has been identified as one of the areas of sustainability by the United Nation in 2017. Target #4, "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" relates to sustainability in education and more specifically targets 4.3, 4.4, 4.5, 4.6 and 4c would apply to this project.

The discussions by the United Nations on "The Higher Education Sustainability Initiative - integrating the Sustainable Development Goals into Higher Education and the transformation of higher education as a result of the COVID-19 pandemic", are further evidence of the perceived need for sustainability in education and by extension for the development of this project.
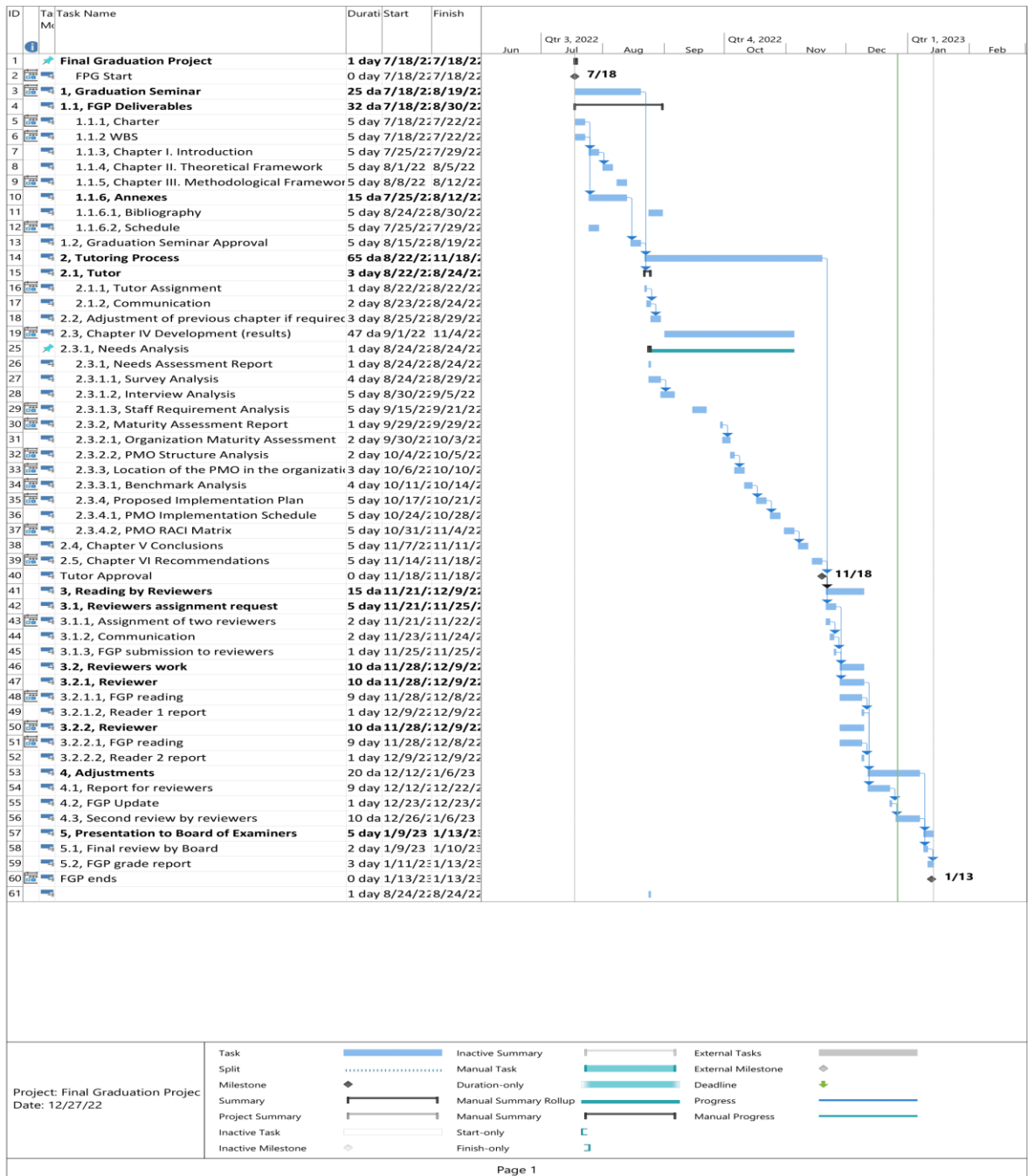
"Regenerative development in education speaks to an education that serves people and the planet as we move into a new environmental reality, with its accompanying social shifts, economic transformation and understanding of who we are as a species and an individual". (A Regenerative Education for our times, 2022). A PMO at a higher education institution would ensure that the institution would be able to sustain its ability to engage in project implementation by having the support which is provided by a PMO with capacity building in training, policies, procedures and project management methodologies.

Appendix 2: FGP WBS

Final Graduation Project

Appendix 3: FGP Schedule

ID	Task Name	Duration	Start	Finish
1	**Final Graduation Project**	1 day	7/18/22	7/18/22
2	FPG Start	0 day	7/18/22	7/18/22
3	**1, Graduation Seminar**	25 da	7/18/22	8/19/22
4	**1.1, FGP Deliverables**	32 da	7/18/22	8/30/22
5	1.1.1, Charter	5 day	7/18/22	7/22/22
6	1.1.2 WBS	5 day	7/18/22	7/22/22
7	1.1.3, Chapter I. Introduction	5 day	7/25/22	7/29/22
8	1.1.4, Chapter II. Theoretical Framework	5 day	8/1/22	8/5/22
9	1.1.5, Chapter III. Methodological Framework	5 day	8/8/22	8/12/22
10	**1.1.6, Annexes**	15 da	7/25/22	8/12/22
11	1.1.6.1, Bibliography	5 day	8/24/22	8/30/22
12	1.1.6.2, Schedule	5 day	7/25/22	7/29/22
13	1.2, Graduation Seminar Approval	5 day	8/15/22	8/19/22
14	**2, Tutoring Process**	65 da	8/22/22	11/18/22
15	**2.1, Tutor**	3 day	8/22/22	8/24/22
16	2.1.1, Tutor Assignment	1 day	8/22/22	8/22/22
17	2.1.2, Communication	2 day	8/23/22	8/24/22
18	2.2, Adjustment of previous chapter if required	3 day	8/25/22	8/29/22
19	2.3, Chapter IV Development (results)	47 da	9/1/22	11/4/22
25	2.3.1, Needs Analysis	1 day	8/24/22	8/24/22
26	2.3.1, Needs Assessment Report	1 day	8/24/22	8/24/22
27	2.3.1.1, Survey Analysis	4 day	8/24/22	8/29/22
28	2.3.1.2, Interview Analysis	5 day	8/30/22	9/5/22
29	2.3.1.3, Staff Requirement Analysis	5 day	9/15/22	9/21/22
30	2.3.2, Maturity Assessment Report	1 day	9/29/22	9/29/22
31	2.3.2.1, Organization Maturity Assessment	2 day	9/30/22	10/3/22
32	2.3.2.2, PMO Structure Analysis	2 day	10/4/22	10/5/22
33	2.3.3, Location of the PMO in the organization	3 day	10/6/22	10/10/22
34	2.3.3.1, Benchmark Analysis	4 day	10/11/22	10/14/22
35	2.3.4, Proposed Implementation Plan	5 day	10/17/22	10/21/22
36	2.3.4.1, PMO Implementation Schedule	5 day	10/24/22	10/28/22
37	2.3.4.2, PMO RACI Matrix	5 day	10/31/22	11/4/22
38	2.4, Chapter V Conclusions	5 day	11/7/22	11/11/22
39	2.5, Chapter VI Recommendations	5 day	11/14/22	11/18/22
40	Tutor Approval	0 day	11/18/22	11/18/22
41	**3, Reading by Reviewers**	15 da	11/21/22	12/9/22
42	**3.1, Reviewers assignment request**	5 day	11/21/22	11/25/22
43	3.1.1, Assignment of two reviewers	2 day	11/21/22	11/22/22
44	3.1.2, Communication	2 day	11/23/22	11/24/22
45	3.1.3, FGP submission to reviewers	1 day	11/25/22	11/25/22
46	**3.2, Reviewers work**	10 da	11/28/22	12/9/22
47	**3.2.1, Reviewer**	10 da	11/28/22	12/9/22
48	3.2.1.1, FGP reading	9 day	11/28/22	12/8/22
49	3.2.1.2, Reader 1 report	1 day	12/9/22	12/9/22
50	**3.2.2, Reviewer**	10 da	11/28/22	12/9/22
51	3.2.2.1, FGP reading	9 day	11/28/22	12/8/22
52	3.2.2.2, Reader 2 report	1 day	12/9/22	12/9/22
53	**4, Adjustments**	20 da	12/12/22	1/6/23
54	4.1, Report for reviewers	9 day	12/12/22	12/22/22
55	4.2, FGP Update	1 day	12/23/22	12/23/22
56	4.3, Second review by reviewers	10 day	12/26/22	1/6/23
57	**5, Presentation to Board of Examiners**	5 day	1/9/23	1/13/23
58	5.1, Final review by Board	2 day	1/9/23	1/10/23
59	5.2, FGP grade report	3 day	1/11/23	1/13/23
60	FGP ends	0 day	1/13/23	1/13/23
61		1 day	8/24/22	8/24/22

Project: Final Graduation Project
Date: 12/27/22

Task	Inactive Summary	External Tasks	
Split	Manual Task	External Milestone	
Milestone	Duration-only	Deadline	
Summary	Manual Summary Rollup	Progress	
Project Summary	Manual Summary	Manual Progress	
Inactive Task	Start-only		
Inactive Milestone	Finish-only		

Appendix 4: Preliminary bibliographical research

The references below represent the information which will guide the development of the final project. Given that the project is the implementation of a PMO at a higher education institution it would be important to research on the types of PMO and the alignment to business models and more importantly, how it applies to higher education. Knowing the purpose of the PMO and benchmarking it to other higher education institutions which have implemented a PMO is equally important. The benefits of implementing a PMO are also key to this project as are the roles and responsibilities.

There is also a reference to the website of the local education institution which will be used as the basis for the project. The webpage referenced includes information about a project which the institution is currently undertaking. This is to provide an evidence for the need of a PMO given the institution's involvement in project implementation activities.

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Appendix 5: Sample of PM Solutions' Project Management Maturity Model

Levels of Project Management Maturity	Level 1 Initial Process	Level 2 Structured Process and Standards	Level 3 Organizational Standards and Institutionalized Process	Level 4 Managed Process	Level 5 Optimized Process
Project Integration Management	No established practices, standards, or Project Office. Work performed in ad hoc fashion.	Basic, documented processes for project planning and reporting. Management only involved on high-visibility projects.	Project integration efforts institutionalized with procedures and standards. Project Office beginning to integrate project data.	Processes/standards utilized by all projects and integrated with other corporate processes/systems. Decisions based on performance metrics.	Project integration improvement procedures utilized. Lessons learned regularly examined and used to improve documented processes.
Project Scope Management	General statement of business requirements. Little/no scope management or documentation. Management aware of key milestones only.	Basic scope management process in place. Scope management techniques regularly applied on larger, more visible projects.	Full project management process documented and utilized by most projects. Stakeholders actively participating in scope decisions.	Project management processes used on all projects. Projects managed and evaluated in light of other projects.	Effectiveness and efficiency metrics drive project scope decisions by appropriate levels of management. Focus on high utilization of value.
Project Time Management	No established planning or scheduling standards. Lack of documentation makes it difficult to achieve repeatable project success.	Basic processes exist but not required for planning and scheduling. Standard scheduling approaches utilized for large, visible projects.	Time management processes documented and utilized by most projects. Organization wide integration includes inter-project dependencies.	Time management utilizes historical data to forecast future performance. Management decisions based on efficiency and effectiveness metrics.	Improvement procedures utilized for time management processes. Lessons learned are examined and used to improve documented processes.
Project Cost Management	No established practices or standards. Cost process documentation is ad hoc and individual project teams follow informal practices.	Processes exist for cost estimating, reporting, and performance measurement. Cost management processes are used for large, visible projects.	Cost processes are organizational standard and utilized by most projects. Costs are fully integrated into project office resource library.	Cost planning and tracking integrated with Project Office, financial, and human resources systems. Standards tied to corporate processes.	Lessons learned improve documented processes. Management actively uses efficiency and effectiveness metrics for decision-making.
Project Quality Management	No established project quality practices or standards. Management is considering how they should define "quality."	Basic organizational project quality policy has been adopted. Management encourages quality policy application on large, visible projects.	Quality process is well documented and an organizational standard. Management involved in quality oversight for most projects.	All projects required to use quality planning standard processes. The Project Office coordinates quality standards and assurance.	The quality process includes guidelines for feeding improvements back into the process. Metrics are key to product quality decisions.
Project Human Resource Management	No repeatable process applied to planning and staffing projects. Project teams are ad hoc. Human resource time and cost is not measured.	Repeatable process in place that defines how to plan and manage the human resources. Resource tracking for highly visible projects only.	Most projects follow established resource management process. Professional development program establishes project management career path.	Resource forecasts used for project planning and prioritization. Project team performance measured and integrated with career development.	Process engages teams to document project lessons learned. Improvements are incorporated into human resources management process.
Project Communications Management	There is an ad hoc communications process in place whereby projects are expected to provide informal status to management.	Basic process is established. Large, highly visible projects follow the process and provide progress reporting for triple constraints.	Active involvement by management for project performance reviews. Most projects are executing a formal project communications plan.	Communications management plan is required for all projects. Communications plans are integrated into corporate communications structure.	An improvement process is in place to continuously improve project communications management. Lessons learned are captured and incorporated.
Project Risk Management	No established practices or standards in place. Documentation is minimal and results are not shared. Risk response is reactive.	Processes are documented and utilized for large projects. Management consistently involved with risks on large, visible projects.	Risk management processes are utilized for most projects. Metrics are used to support risk decisions at the project and the program levels.	Management is actively engaged in organization-wide risk management. Risk systems are fully integrated with time, cost, and resource systems.	Improvement processes are utilized to ensure projects are continually measured and managed against value-based performance metrics.
Project Procurement/ Vendor Management	No project procurement process in place. Methods are ad hoc. Contracts managed at a final delivery level.	Basic process documented for procurement of goods and services. Procurement process mostly utilized by large or highly visible projects.	Process an organizational standard and used by most projects. Project team and purchasing department integrated in the procurement process.	Make/buy decisions are made with an organizational perspective. Vendor is integrated into the organization's project management mechanisms.	Procurement process reviewed periodically. On-going process improvements focus on procurement efficiency and effective metrics.

Miller, B. (2004)

Appendix 6: Sample of PM Solutions PMM Assessment Survey

Project Management Maturity Assessment Survey

Project Management Maturity Levels

	1	2	3	4	5
Project Integration Management					
Deliverables Identification	☐	☐	☐	☐	☐
Scope Definition	☐	☐	☐	☐	☐
Project Management Plan Development	☐	☐	☐	☐	☐
Project Management Plan Execution	☐	☐	☐	☐	☐
Change Control	☐	☐	☐	☐	☐
Project Closure	☐	☐	☐	☐	☐
Project Information System	☐	☐	☐	☐	☐
Project Office	☐	☐	☐	☐	☐
Project Scope Management					
Scope Planning and Management	☐	☐	☐	☐	☐
Requirements Definition (Business)	☐	☐	☐	☐	☐
Requirements Definition (Technical)	☐	☐	☐	☐	☐
Work Breakdown Structure	☐	☐	☐	☐	☐
Scope Change Control	☐	☐	☐	☐	☐
Project Time Management					
Activity and Resource Definition	☐	☐	☐	☐	☐
Activity Sequencing	☐	☐	☐	☐	☐
Schedule Development	☐	☐	☐	☐	☐
Schedule Control	☐	☐	☐	☐	☐
Schedule Integration	☐	☐	☐	☐	☐

Project Cost Management

Cost Estimating ☐ ☐ ☐ ☐ ☐

Cost Budgeting ☐ ☐ ☐ ☐ ☐

Performance Management ☐ ☐ ☐ ☐ ☐

Cost Control ☐ ☐ ☐ ☐ ☐

☐ ☐ ☐ ☐ ☐

Project Quality Management

Quality Planning ☐ ☐ ☐ ☐ ☐

Quality Assurance ☐ ☐ ☐ ☐ ☐

Quality Control ☐ ☐ ☐ ☐ ☐

Management Oversight ☐ ☐ ☐ ☐ ☐

Project Human Resource Management

Human Resource Planning ☐ ☐ ☐ ☐ ☐

Staff Acquisition ☐ ☐ ☐ ☐ ☐

Develop and Manage Project Team ☐ ☐ ☐ ☐ ☐

Professional Development ☐ ☐ ☐ ☐ ☐

Project Communications Management

Communication Planning ☐ ☐ ☐ ☐ ☐

Information Distribution ☐ ☐ ☐ ☐ ☐

Performance Reporting ☐ ☐ ☐ ☐ ☐

Issues Tracking and Management ☐ ☐ ☐ ☐ ☐

Project Risk Management

Risk Identification ☐ ☐ ☐ ☐ ☐

Risk Qualification ☐ ☐ ☐ ☐ ☐

Risk Response Development ☐ ☐ ☐ ☐ ☐

Risk Control ☐ ☐ ☐ ☐ ☐

Risk Documentation ☐ ☐ ☐ ☐ ☐

Project Procurement Management

Procurement Planning ☐ ☐ ☐ ☐ ☐

Requisition ☐ ☐ ☐ ☐ ☐

Solicitation/Source Control ☐ ☐ ☐ ☐ ☐

Contract Management/Closure ☐ ☐ ☐ ☐ ☐

Appendix 7:   Sample of Survey and Interview Questions

Sample Interview Questions:

1. What are some of the challenges experienced in project implementation?
2. What is your suggestion to resolve those challenges?
3. Do you think there was sufficient support to implement the project?
4. What staff do you think is needed for the PMO to function efficiently?
5. Where do you think that the PMO could be best placed in the organizational structure and why?
6. What functions do you think would be best for the PMO at the SALCC?
7. Do you think that there is a need for a PMO at the SALCC and why?
8. Do you use any project management tools? Give examples if yes.
9. What type of project management office model/structure do you think would best suit the college and why?
   - A PMO providing project management support services
   - A PMO responsible for direct project management
   - Any other suggestions

Link to needs assessment survey:

https://docs.google.com/forms/d/1vk1zUnnuT1CLwmDy0_Zo5tcDeNKk-WkN3UXpseOIIi8/prefill

Project Management Needs Assessment Survey

The purpose of the questionnaire is to collect data to establish the need for a project management office in higher education institutions.

You are required to answer all questions.

* Required

1. Please select your level of knowledge in project management *

   Mark only one oval.

   ( ) Somewhat knowledgeable

   ( ) No knowledge

   ( ) Have completed a course in project management

   ( ) Have qualifications in project management

2. If you selected that you have qualifications in project management, please state the level of certification

   _____

3. Is your institution involved in project management? Please select the appropriate *
   answer.

   Mark only one oval.

   ( ) Yes

   ( ) No

   ( ) I don't know

4. If you answered yes, who are the persons involved in the process? Please select all that apply.

Check all that apply.

☐ Principal
☐ Vice Principal
☐ Managers
☐ Faculty
☐ Administrative Staff

☐ Other: _____

5. Have you participated in any project management initiatives? Please select the appropriate answer.   *

Mark only one oval.

◯ Yes
◯ No

6. If yes, what type of projects have you implemented?

_____

_____

_____

_____

_____

7. How many project implementation initiatives have you participated in? *

_____

8. Were the projects implemented inline with the strategic objectives of the institution? *

   Mark only one oval.

   ( ) Yes

   ( ) No

   ( ) I don't know

9. How many of the projects you participated in were successful? *

   _____

10. What criteria were used (on the projects that you participated in) to measure   *
    project success? Please explain.

    _____

    _____

    _____

    _____

    _____

11. Do you have any hands-on training in project management (*other than what you*   *
    have done at your current institution)? Please select the appropriate answer.

    Mark only one oval.

    ( ) Yes

    ( ) No

12. Does your **institution** use project management methodology for project   *
management implementation? Please select all that apply.

Check all that apply.

☐ Agile
☐ Scrum
☐ Kanban
☐ Scrumban
☐ Project management institute's PMBOK® Guide
☐ None
☐ I don't Know
☐ Other: _____

13. What project management methodology was used in implementing the projects   *
you participated in? Please state (you may state I don't know if you are not
aware).

_____

_____

_____

_____

_____

14. Does your **institution** use project management tools for project implementation?   *
If yes, please select from the list below. (Select all that apply)

Check all that apply.

☐ Software
☐ Template
☐ Other: _____

15. Give examples of the project management tools identified above. *

_____

16. Please state the project management tools that were used in implementing the   *
    projects you participated in. (state all the tools that were used, give examples)

    _____

    _____

    _____

    _____

    _____

17. Does your institution have a project management office? Please select the   *
    appropriate answer

    Mark only one oval.

    ( ) Yes

    ( ) No

18. Do you think that implementing a project management office would improve   *
    project implementation at the institution?

    Mark only one oval.

    ( ) Yes

    ( ) No

    ( ) I don't know

19. Please explain your answer above *

    _____

    _____

    _____

    _____

    _____

20. Have any of the projects you implemented contributed to the institution's   *
competitiveness? Explain

_____

_____

_____

_____

_____

21. Should your institution implement a project management office, what do you think *
the strategic objective should be?

_____

22. What are the key staff/positions that you see as necessary for the success of the *
project management office? Select from the list below, and select all that apply.

Check all that apply.

☐ Project Manager
☐ Administrative/Project Assistant
☐ Technical Specialist (subject matter expert)
☐ Grants Management Officer
☐ Change Management Officer
☐ Other: _____

23. Select the type of project management office (PMO) model/structure which would *
be helpful to your institution.

Mark only one oval.

◯ A PMO providing project management support services (providing templates,
access to good practices, and information on lessons learned from other projects)

◯ A PMO which controls project management (standardization of PM processes and
compatibility of tools)

◯ A PMO with responsibility for direct project management of all projects

Project Management Needs Assessment Survey

24. Select from the list below **all** the functions for the project management office that *
would be best for your institution.

Check all that apply.

☐ Proposal development
☐ Standardization of projects across the institution
☐ An advisory role
☐ Grant management (fund sourcing, new projects, proposal writing, counselling)
☐ Provide administrative support for projects
☐ Training/coaching in project management e.g. use of PM tools and methodologies
☐ Sharing best practices across projects
☐ Linking projects to the strategic objectives of the organization
☐ Linking senior management decisions to project management
☐ Repository of projects and lessons learned
☐ Monitor and control project performance
☐ Project risk management
☐ Advice and guidance
☐ Other: _____

25. Where in the organizational structure would the project management office be *
most effective and why?

_____

_____

_____

_____

_____

26. Please provide any other information that you think would assist in guiding the   *
     implementation of a project management office.

     _____

     _____

     _____

     _____

     _____

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Appendix 8: Lessons Learned Log

Situation	Lessons Learned	Impact
The guidance on the format to prepare the project proposal kept changing. Partly due to the restructuring of the course by the university and differences of opinions by the various professors, tutors and readers.	Resilience in the face of inconsistency	Having to constantly change the format of the document caused a significant amount of rework, resulting in delays in completing the project proposal as scheduled.
Risk Management	Identifying risk is not enough, an action plan must be put in place to prevent the risk from occurring.	A greater effort should have been made to set up the interview with the Principal, before he demitted office as he was a major key stakeholder to project implementation at the SALCC.
Insufficient time to conduct research	More time should be allocated to conduct in-depth research.	The additional time would have resulted in a deeper analysis of the situation and may have reduced the number of consultations needed with the internal stakeholders.

Appendix 9: Philologist Approval Report

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To whom it may concern

12th December, 2022

Starting in 1972 until my retirement in 2011 I worked in various institutions in Saint Lucia as a teacher of English language and literature and as a librarian. Since retiring I have worked as an editor and have written, alone or with colleagues, several articles that have appeared in different publications.

I have made a thorough review of Ms. Marina Daniels' paper: "Proposal for a Project Management Office at the Sir Arthur Lewis Community College". I made some suggestions and corrections which have been accepted. Ms. Daniels paper demonstrates an acceptable standard of English language for an academic project at this level.

Deirdre Williams
BA (Hons.) QUB; MS (LIS) UIUC.