

MASTER IN PROJECT MANAGEMENT

**UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)**

**The Design of a Project Management Office (PMO) Proposal For
Centre Hospitalier Saint-Camille (CHSC) in Haiti**

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DEDICATION

This research project is dedicated to my lovely daughter, Estherdith ST HILAIRE, for giving me one more reason to be an eternal learner and continuing to strive for excellence. To my supportive parents, Marie Ange JOACHIM and Serge ST HILAIRE (Deceased). My godmother, Roxanne D. Galeota, for having encouraged me along the journey. And finally to my best friend and fiancée, Stazie Lencie Barthelemy.

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ABBREVIATIONS AND ACRONYMS

- CI: Continuous Improvement
- CHSC: Centre Hospitalier St Camille
- FGP: Final Graduation Project
- P3M3: Portfolio, Programme and Project Management Maturity Model
- PM: Project Manager
- PMI: Project Management Institute
- PMBOK: Project Management Book of Knowledge
- PMO: Project Management Office
- WBS: Work Breakdown Structure.

EXECUTIVE SUMMARY (ABSTRACT)

The pressure and the demands on the healthcare sector is increasing around the world. It is vital for organizations and companies that are providing services, and products in the health industry to define, design, implement, and maintain effective strategies to achieve high quality standards of the business processes, generally related to project management. The company in study, Centre Hospitalier Saint Camille (CHSC), is a hospital that has been serving the underprivileged community- in the City of Croix-Des-Bouquets, Haiti for over 13 years.

For many years CHSChas been assisting children and young adults in need of medical treatment and has provided life-saving surgeries in Haiti. As the organization has been serving a community in need with a very low purchasing power foreign partners, from Italy and a few donors, fund projects that help to decrease the price of the basic health care services for the patients. The CHSC has designed and implemented different on-going projects that, sometimes, have run simultaneously in order to satisfy its patients, customers, and remain competitive in the area.

Currently, the organization has a weakness in the standardization of the business process and excellent delivery of projects. In order to improve the ability of the staff to plan projects with accuracy and methodology, manage the staff to meet the cost, schedule, and quality goals, the organization is in need of a project delivery office, a project support office or a central project office. Which will align every single project with the strategic intention and direction of the organization, through standardization and an integrated management system.

The general objective of the final graduation project was to develop a PMO proposal for Centre Hospitalier St-Camille, to optimize and standardize the project results implemented by CHSC. The specific objectives were to: assess the organization maturity, in order to; evaluate the project management skills, needs of quality, and compliance requirements, analyzing and comparing, different types of

PMOs, in order to determine the most appropriate one based on the context of the organisation, and to determine the location of the PMO in the organizational hierarchy, its mission, roles, and responsibilities within CHSC.

The methodology for this final graduation project was descriptive. To gather data, interview with key stakeholders, two questionnaires, a LEAN six Sigma and a P3M3, were used to assess the maturity of the organization, its environment. The methodological solution was performed to identify strategies, tactics and business process for project deliveries; and to develop an effective PMO that allows efficient project deliveries.

The maturity assessment results showed that the studied organization, CHSC, has both weaknesses and strengths in areas related to project management. These are: leadership alignment, very limited training for employees, and poor experience regarding LEAN approach. As the three basic types of PMO were analysed with the stakeholders, it was concluded that an hybrid PMO approach (Controlling and Directive) should streamline project value creation, foster best project practice management, and contribute to sustainable project outcomes.

The conclusion of the main main objective of this thesis is that CHSC is in need of a PMO that should be well implemented to support portfolio management, programme, and projects. And based on the results of this research, it was recommended that:

Frequent maturity model assessment to evaluate the weaknesses, strengths of the project and business practices of CHSC. Based on the maturity assessment results, corrective or preventive measures should be taken to allow the organization or the PMO to rethink itself.

It was also recommended that the corporate decision makers, the senior managers should get key stakeholders involved in the whole process of decision making-as to when and how the PMO should prioritize a project over another and to encourage creativity with respect to strategic business direction of the CSHC.

1. INTRODUCTION

Countless organizations, public institutions, and those in the private sectors are striving to find a good way to develop effective and efficient tools. Striving to find well-thought strategies to develop, implement, and streamline their project execution. Projects, as complex activities, tend to become extensively challenging and require good and excellent management practices; such practices require highly qualified skills, and very talented project staff. Over the past few years, many projects have failed to deliver good results because of very poor management skills of the project team. With lack of technical skills, project quality performance can be undermined, which may have an adverse impact on the project objectives. In an attempt to consider a potential solution to the problem of failed projects, many organizations design and establish a PMO.

According to Singh et al. (2009); Peter Taylor, Ray Mead (2016) the PMO helps both project managers and the organization in which it is set up to understand and apply professional and standardized practices in their project management journey. The PMO helps an organization to exert greater control over different projects, that are implemented and run simultaneously within the organization or company. When different on-going projects run at the same time within an organization, the creation of a PMO can greatly contribute to their successful implementation and excellent project outcomes.

For many years **Centre Hospitalier Saint-Camille(CHSC)**, located in Croix-Des-Bouquets, Haiti has been simultaneously executing different projects. A cholera treatment center project, free cleft surgery project, economic empowerment of HIV patients, schools construction, public awareness campaign, and free general surgeries project. As the CHSC implements simultaneously different projects, the design and the setup of a PMO within the hospital can greatly contribute to better project outcomes. The aim is to create an effective PMO, which will help in project

definition and planning; cost/benefit analysis of Projects; risk management; monitoring and control; supply of experience and knowledge to name a few..

1.1. Background

CHSC is a health center that provides medical treatment at a low cost in the city of Croix-Des-Bouquets, Haiti. Patients from impoverished areas get treated in the hospital. CHSC also receive funded for HIV project, cholera treatment project, construction of schools, free cleft surgery, economic empowerment of HIV patients, public awareness campaign, and free general-surgery projects. As their funding is very limited they have faced challenges in terms of lack of structured project methodologies and standards. By implementing a PMO in CHSC, the project planning; management reporting, and portfolio management will greatly and successfully increase project outcomes.

For many years, **CHSC**, has been simultaneously executing different projects. As the CHSC simultaneously implements different projects, the design and the setup of a PMO within the hospital can greatly contribute to better project outcomes. The aim is to create an effective PMO, which will help in project definition and planning; cost/benefit analysis of Projects; risk management; monitoring and control; supply of experience and knowledge to name a few

1.2. Statement of the Problem

At CHSC there are core values and management guidelines for the implementation of the project , especially management tools, used to deliver the health services. As the project management approach in use, within the organization, is not sufficiently successful in delivering a good product for every simultaneously on-going project that is implemented by the organization, the creation of a PMO can be of great value. Due to the number of projects that is implemented by CHSC, it is of great importance to set up a PMO within the organization. The creation of the PMO will help to manage stakeholders, scope, quality, communication, time, cost, project integration, human resources, procurement process, and risks. The tools

and techniques will be used by the organization to justify the management decision.

1.3. Purpose

The aim of this study is to analyze the organizational structure, culture, and project management maturity of CHSC. As the intention is to design a PMO proposal which takes into consideration the specific contexts of CHSC, the aim of the research is also to investigate how great an influence the PMO could exert on strategic options of CHSC , especially those related to the project plan of the organizations.

As PMO directly acting on project management practices, it provides organizations with help to innovate and grow in the long run. Finally, the study aims to go over the possible roles of the PMO- through literature review, in promoting, and maintaining the successful achievement of CHSC' strategic objectives and directions.

The findings of the study could be used to greatly contribute to more effective project management, and to achieve strategic goals of nonprofit organizations in the health industry, whom are working on similar projects.

1.4. General Objective

To develop a PMO proposal for, **Centre Hospitalier Saint-Camille (CHSC)**, for optimizing and standardizing the project results implemented by CHSC

1.5. Specific Objectives

- Assessing the organization maturity in order to evaluate the project-management needs in terms of skills, quality, and compliance requirements.
- Analyzing and comparing different type of PMOs in order to determine the most appropriate one based on the context and culture of the organization.
- Determining the location of the PMO in the organizational hierarchy- its mission, its roles and its responsibilities in CHSC.

2. THEORETICAL FRAMEWORK

2.1. Company/Enterprise Framework

The PMO setup proposal will be carried out with the idea of equipping the CHSC project manager and the project staff with technical skills, tools, and techniques for better project outcomes within the organization.

The General Director, Deaudier Robert,- who also assists in the research process- will sponsor the study as it is aligned with the strategic direction of the hospital.

2.1.1. Company/Enterprise Background

CHSC is non-profit hospital that is located in the city of Croix-Des-Bouquets, Haiti. The hospital is committed to community health, maternal health, child health and nutrition, and capacity building. The hospital has successfully implemented many projects since it was established in the community. In places in need, it has completed construction project of primary school; cleft care, general surgery and HIV-care projects. As many on-going projects take place simultaneously, a more integrated process and strategy for project execution is required for better project outcomes. The General Director agrees on designing a PMO to better coordinate projects along their life-cycle.

2.1.2. Mission and Vision Statements

The mission of the organization is to provide quality care, life-changing surgeries to patients, regardless of their religion or social class. Located in impoverished area, the hospital provides urgent care to patients whose financial capabilities do not allow them to go to a more expensive place.

CHSC was established with the vision to: provide quality and safe care to the population in Croix-Des-Bouquets and nearby areas. As there is a huge need in the country, patients come from different regions of Haiti- Central Plateau, Northbound, South, and Western- for treatment.

2.1.3. Organizational Structure

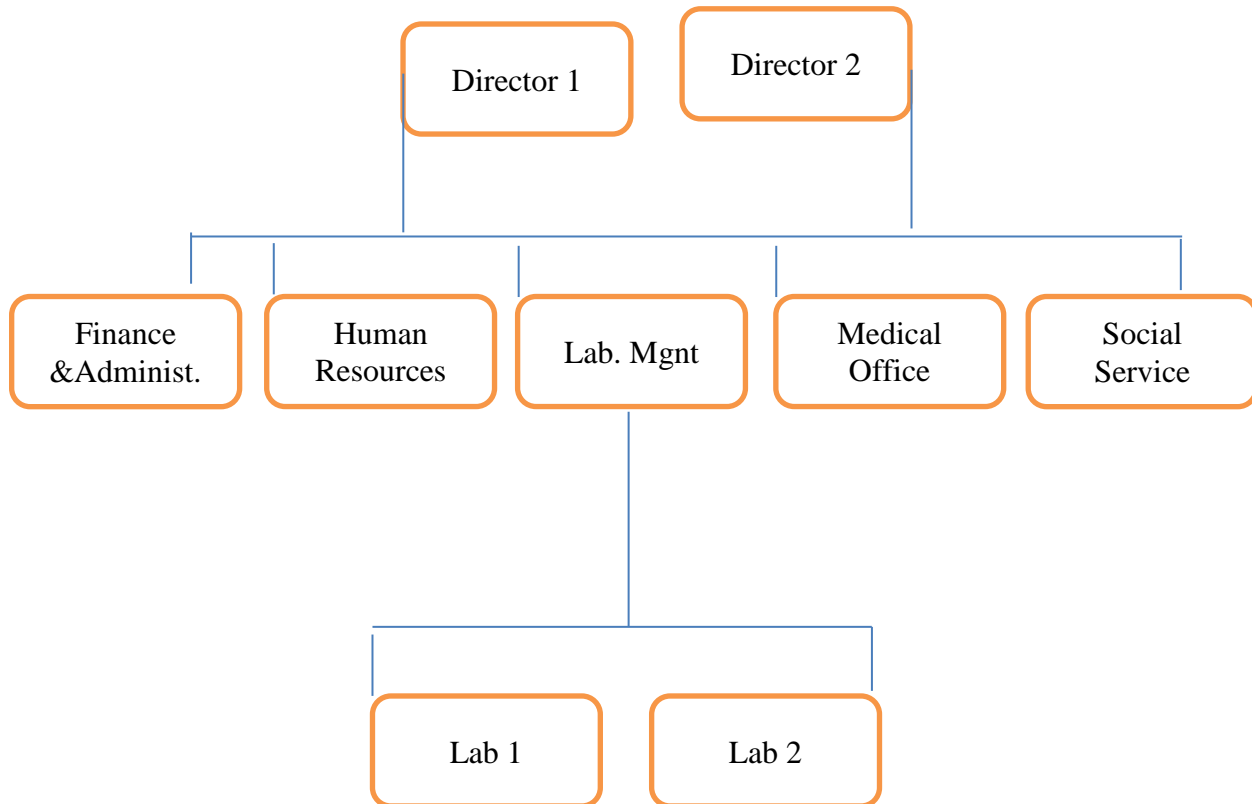


Figure 1 Organizational structure (Source: CHSC)

2.1.4. Products Offered

CHSC has a patient-centered care policy, which is a framework and guideline that the whole staff of the hospital has to comply with. The hospital offers different services in the community such as: rehabilitation, corrective surgery, vaccinations, family planning, pharmacy, medical laboratory, orthopedic care, pediatric surgeries, urology care, obstetrics and gynecology, sexual transmitted disease support, and community health. Located in a community in need, the hospital offers the services at the lowest cost in the area.

Quality, integrity, compassion, commitment, and safety are core values that the whole staff; nurses, surgeons, and anesthesiologists have shared along their professional activities within the hospital. The main objective of this research is to assess the maturity level and to propose a PMO design to CHSC. This PMO setup will take into consideration: the culture, the context, and the environment of the organization. Through project management skills, tools, and techniques an integrated way of executing project within the organization will be applied along all the on-going projects that the organization will implement simultaneously.

2.2. Project Management Concepts

2.2.1. Project

A project is *“a temporary endeavor undertaken to create a unique product, service or result”* (PMI, 2017a, p. 5). Project has five main processes: initiation, planning, execution, controlling and monitoring, evaluation, and closing. A project is initiated to create: a service, a product, or a result that serves the strategic direction of an organization.

2.2.2. Project Management

“Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements” (Project Management Institute, 2016, p. 8). The development of the Final Graduation Project (FGP) will consist of the creation of PMO for CHSC.

2.2.3. Project Life Cycle

A project lifecycle is a “*series of phases that a project passes through from its initiation to its closure*” (Project Management Institute, 2017, p. 9). That being said, a project delivers benefits by executing a set of phases that constitute a project lifecycle, Irene (2017).

2.2.4. Project Management Processes

According to PMI, the project management processes is a series of project management activities known as project management processes (PMBOK 6th Edition, p.22). Each process group is based on industry best practices and are designed to the specific requirements of each project. Process Groups are independent of project phases. PMI notes that there are five projects management process groups:

1. *Initiation Process Group*: the listed process are performed to define the project, to obtain authorization to start the project or phase
2. *Planning Process Group*: these processes are required to; establish the scope of the project, refine the objectives, and define the course of actions to attain the objectives that the project was undertaken to achieve.
3. *Executing Process Group*: these processes are performed to complete the work defined in the project management plan.
4. *Monitoring and controlling Process Group*: These processes are required to track, review, regulate, the progress and performance of the project.
5. *Closing Process Group*: Those processes, according to PMI, are performed to formally complete or close the project, phase or contract. (PMBOK 6th Edition, p.23)

2.2.5. Project Management Knowledge Areas

Project Management Knowledge Areas: A knowledge area is a complete set of concepts, terms, and activities that make up a professional field or area of

specialization. The attempt to propose a PMO will require the application of some of the project management knowledge areas to assist in the evaluation the maturity of CHSC.

2.2.6. Project Scope Management

Countless researchers indicate that the scope management is the single most important knowledge area, which indicates failure or success of the project, (De Eric Verzuh, 2015). It may happen that changes occur in the scope of a project-when stakeholders are fully engaged in the whole process that increases the chance to successfully manage the change in the scope. Lieberman, (2001 cited by De Eric Verzuh, 2015) argues that all projects must face changing requirements and that only with effective scope management those changes can be successfully added to the scope.

It is beyond dispute that project manager plays a pivotal role in scope management. And Brewer (2005) argues that the knowledge of the project manager, the scope management, is one of the key competencies to successfully completed projects. Therefore understanding the scope management should prove beneficial to parties engaged in project management activities.

Raz and Globerson (1998) and Taylor, P., & Mead, Ray. (2016) identify work breakdown structure (WBS) as playing a pivotal role in project as presenting the total scope of the project. (Raz & Globerson, 1998) further argue that only WBS is considered as scope. The Project Management Institute (PMI) (2004, p. 375), a provider of detailed project methodology, defines scope as "*The sum of the products, services and results to be provided as a project*". Lieberman and Taylor, P., & Mead, Ray (2016) see project scope as an outcome of identifying the needs why project has been established and prioritizing those needs (Lieberman, 2001; Taylor, P., & Mead, Ray. (2016).

As a synthesis “ *Project scope is the sum of needs for a project’s initiation, services or products to be produced, and constraints of schedule and cost* ”. This definition considers what could be done- services or products-, why it should be done -needs to be solved- and how it could be done-(time and cost-. Project Scope Management is defined, by PMI as, the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully (PMBOK, 2017; p.129).

PMI indicates that the Project Scope Management contains the six (6) following processes:

- . Plan Scope Management
- . Collect Requirements
- . Define Scope
- . Create WBS (Work Breakdown Structure)
- . Validate Scope
- . Control Scope

Through Figure 2: The Processes of Project Scope Management Are Outlined.

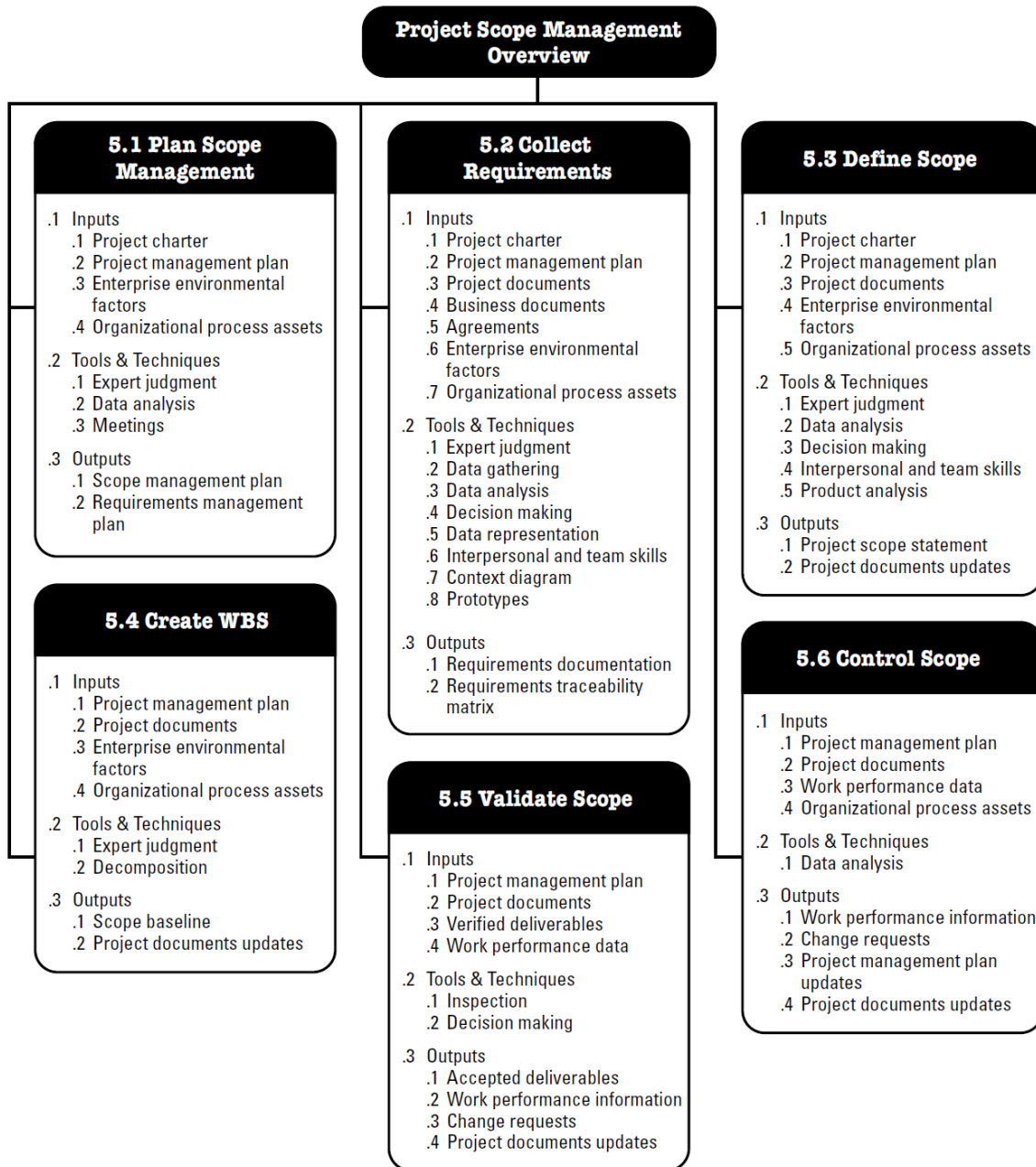


Figure 2. Project Scope Management Process Flow Diagram.

Source: PMI

2.2.7. Project Schedule Management

Project Schedule Management includes the processes required to complete the project in a timely manner. This knowledge area uses the schedule model as inputs to many processes. During project implementation, when the project manager and staff make good and effective use of the time it is a key factor to keep activities on budget.

PMI defines Project Schedule Management as the processes required to manage the timely completion of the project (PMBOK, 2017; p. 173). It contains the six (6) following processes:

- . Plan Schedule Management
- . Define Activities
- . Sequence Activities
- . Estimate Activity Durations
- . Develop Schedule
- . Control Schedule

The Figure 3 outlines: The Processes of Project Schedule Management.

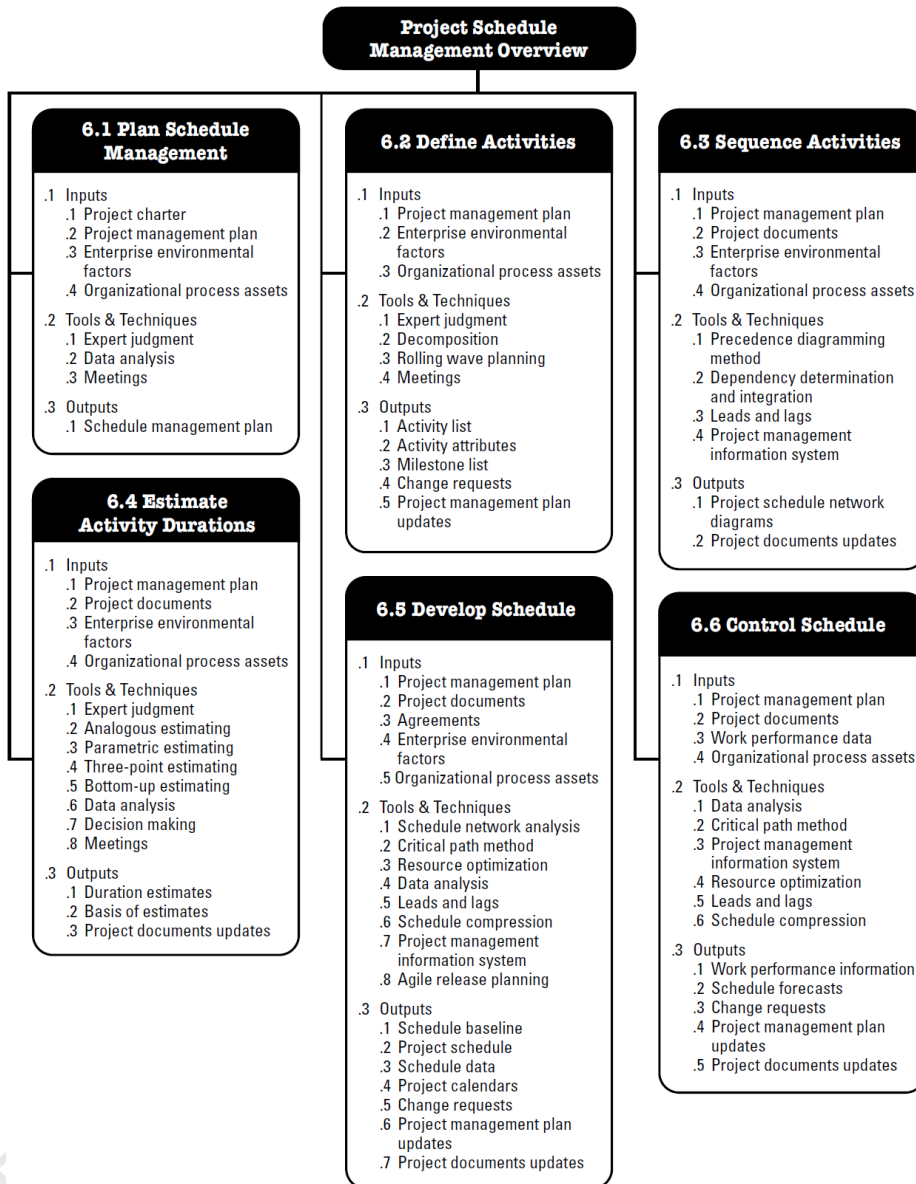


Figure 3. Project Schedule Management Process Flow Diagram

Source: PMI-Google images

2.2.8. Project Cost Management

Project Cost Management: Project cost Management is defined as the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so that the project can be completed within the approved budget (PMBOK, 2017; p.231). It contains, according to PMI, four (4) processes, which are as follow:

- . Plan Cost Management
- . Estimate Costs
- . Determine Budget
- . Control Costs.

Through figure 4 outlined: The processes of Project Cost Management

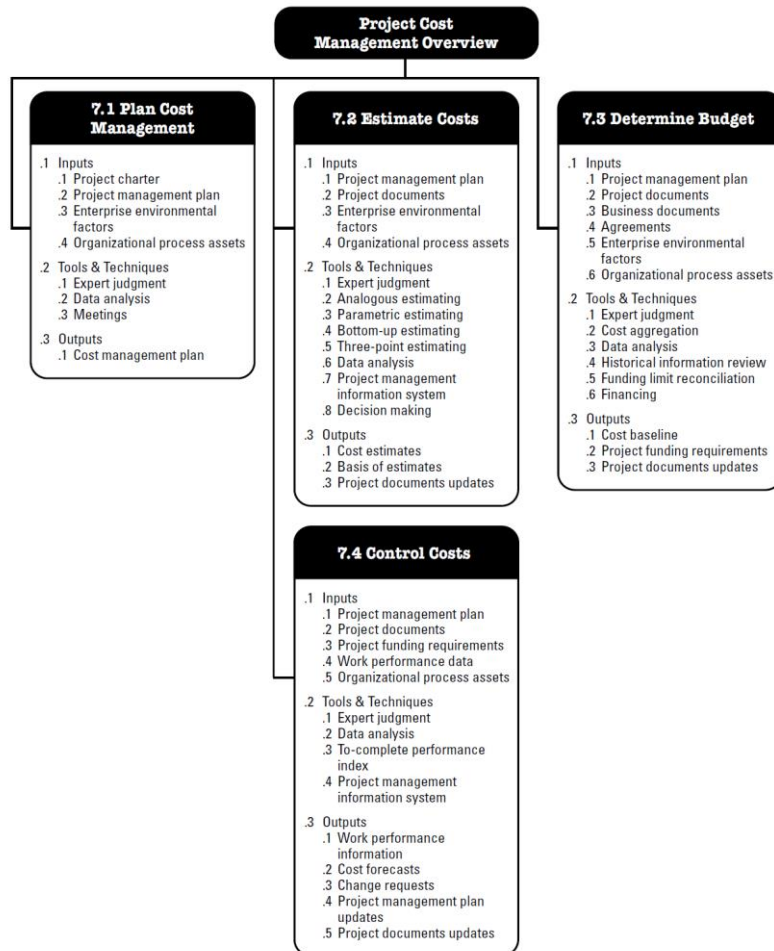


Figure 4. Project Cost Management Process Flow Diagram.

Source: PMI-Google images

2.2.9. Project Communications Management

As PMI defines it, the project communication management is the necessary process to ensure that the information needs of the project and, its stakeholders, are met through development of artifacts and implementation of activities designed to achieve effective information exchange (PMBOK, 2007; p. 359).

According to PMI, manage quality is the process of translating the quality management plan into executable quality activities that incorporate the quality policies of the organization into the project (PMBOK, 2017; p. 599).

PMI indicates that at the project communication management level, there are three processes. They are as follow:

- . Plan Communications Management
- . Manage Communications
- . Monitor communications.

As a poor or inadequate communication with key stakeholders may adversely impact project performance, the project manager should develop clear, concise, and effective communication practices to engage the project team, and to deliver project results.

Through figure 5 outlined: The Processes of Project Communication Management

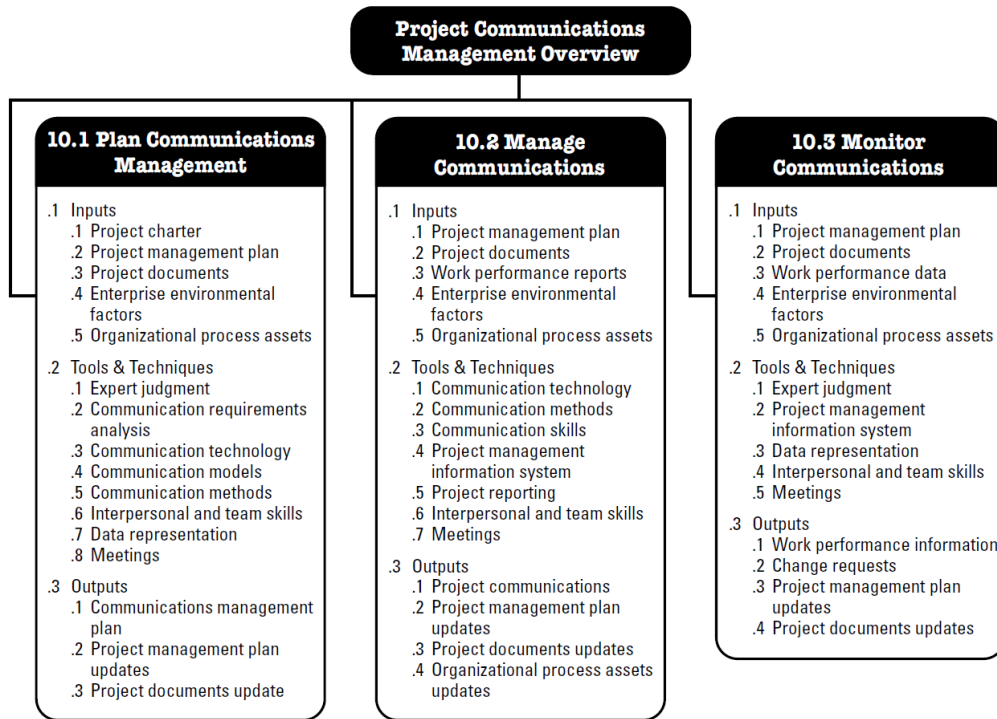


Figure 5. Project Communication Management Process Flow Diagram.

Source: PMI-Google images

2.2.10. Project Quality Management

Basu, R. (2013) indicates that organization should put in place, before the project execution and implementation phase of the project, effective quality management procedures for the project team. Basu, R. (2013) further argues that through this established formalized system, effective training on quality requirements should be provided to both the suppliers and the project team to ensure project excellence.

As the quality system would require some obligation to fulfil, some researchers highlight- along project execution the crucial role of quality audit, which implies and ensures the conformance and compliance to the key requirements, the structured and the established standards.

Project Management Institute in its official definition of project quality management, defines it as: the required process for incorporating the quality policy of the organization regarding; planning, managing, and controlling project and product quality requirements in order to meet objectives of stakeholders (PMBOK, 2017; p.271).

PMI highlights that at the project quality management level, there are three processes. These are:

- . Plan Quality Management
- . Manage quality
- . Control Quality

As some researchers indicate- project quality management fosters, creates, and greatly supports continuous process improvement activities in order to deliver compliant and sustainable project results.

Through figure 6 outlined: The processes of Project Quality Management

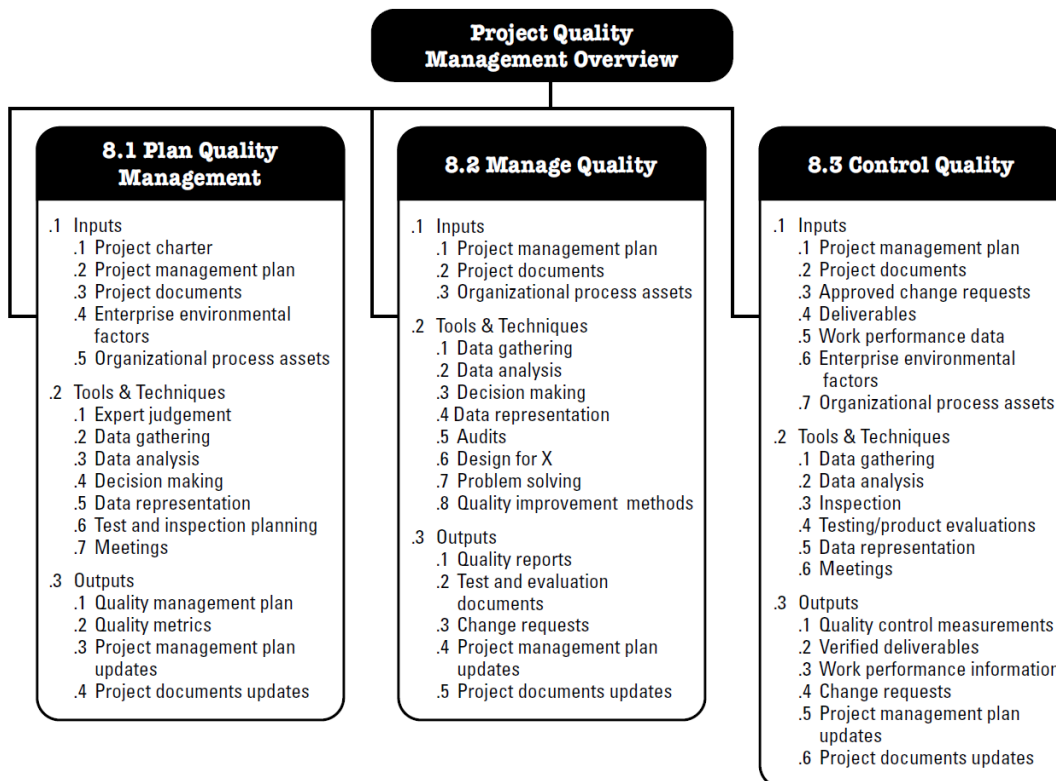


Figure 6. Project Quality Management Process Flow Diagram.

Source: *PMI-Google images*

2.2.11. Project Risk Management:

“Projects have many sources of uncertainties, which could cause risky events to flourish,” (Henderson RM, 1990). *“These sources arise for many reasons, which may be inaccurate scope definition, flaws in establishing appropriate project activity parameters, ineffective stakeholder management and external unforeseen events”* (Modarres, 2006).

It is impossible to conceive a project without risks; and *“a well-managed project with institutionalized risk management methodology and practices will provide a consistent pathway for performing project risk management activities”* (Ward and Chapman, 2003). In fact, *“preparing for risks is the best defense against project tragedies”* (Shenhar and Dvir, 2010). *“Project risk management as a process of identifying, analyzing, responding risk factors throughout the life cycle of a project plays a vital part in project success”* (Bakker et al., 2012). Its strategic goal and strategic benefits may greatly improve the prospect that the objectives of the project will be accomplished as designed and planned.

Professional organizations and scholars are recognizing that risks in projects could be beneficial when its impact is positive. In fact, ISO defines risk as the effect of uncertainty on objectives (ISO, 2009a, 2009b) *“Therefore, this is a proactive process which implies influencing possible future events, so that threats and opportunities are optimized”*.

In his investigative research, Terje Aven (2016) argues that professional risk practices has two fundamental tasks, (1) to use risk assessments, identification, and risk management to study and (2) treat the risk of specific activities that may adversely affect sustainable project outcomes or project results. When the project manager and his team analyze and categorize the risks, they specifically address

the risks that are more relevant in terms of damage, loss, and implications on quality of the results (Tang, 2006).

“The early identification, mitigation or acceptance of project risks is very crucial for managing successful project results” (Thomas. A & Donald.D, 2008). As Roland (2013) argues, *“ projects fail on risks”* and if in the risk analysis the most relevant risks failed to be discovered, the project may be executed over budget with delayed project results- and with very poor quality. For, *“risk analysis and risk management represent a vital part of the early stages of a project, and, in particular, the mandatory project-definition phase in which the identification and analysis of the risks are performed”* (Terry M. 1994).

2.2.12. Effective Response To Project Risks

Many scholars, project professionals, and researchers, like Ward and Chapman (2003) argue that “the entire project risk management should focus on administering uncertainties as risk is profoundly associated with threats or opportunities of uncertain or undesirable events to the projects. In a nutshell, as argued Modarres (2006) *“by evaluating plans for potential problems, undesirable events and developing strategies to address them, the project team can improve the chances of a successful, if not perfect, project closing”*. *“When the project team fails to plan accordingly, their project will fail on undesirable events”* (Terje Aven , 2016). *“An effective project risk management process should help to identify individual risk events within the project and enable them to be managed appropriately, and should also provide an indication of overall project risk exposure”* (Thomas. A & Donald.D, 2008).

In this FGP, the use of PMI standards is highly recommended.

According to Project Management Institute (2017) Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project. PMI indicates that project risk management contains seven (7) processes. These are as follow:

- . Plan Risk Management
- . Identify Risks
- . Perform Qualitative Risk Analysis
- . Perform Quantitative Risk Analysis
- . Plan Risk Responses
- . Implement Risk Responses
- . Monitor Risks.

Through the project risk management, the impact positive risks is increased while the negative one is greatly decreased. *The Figure 7 outlines:* The processes Involved in the Project Risk Management.

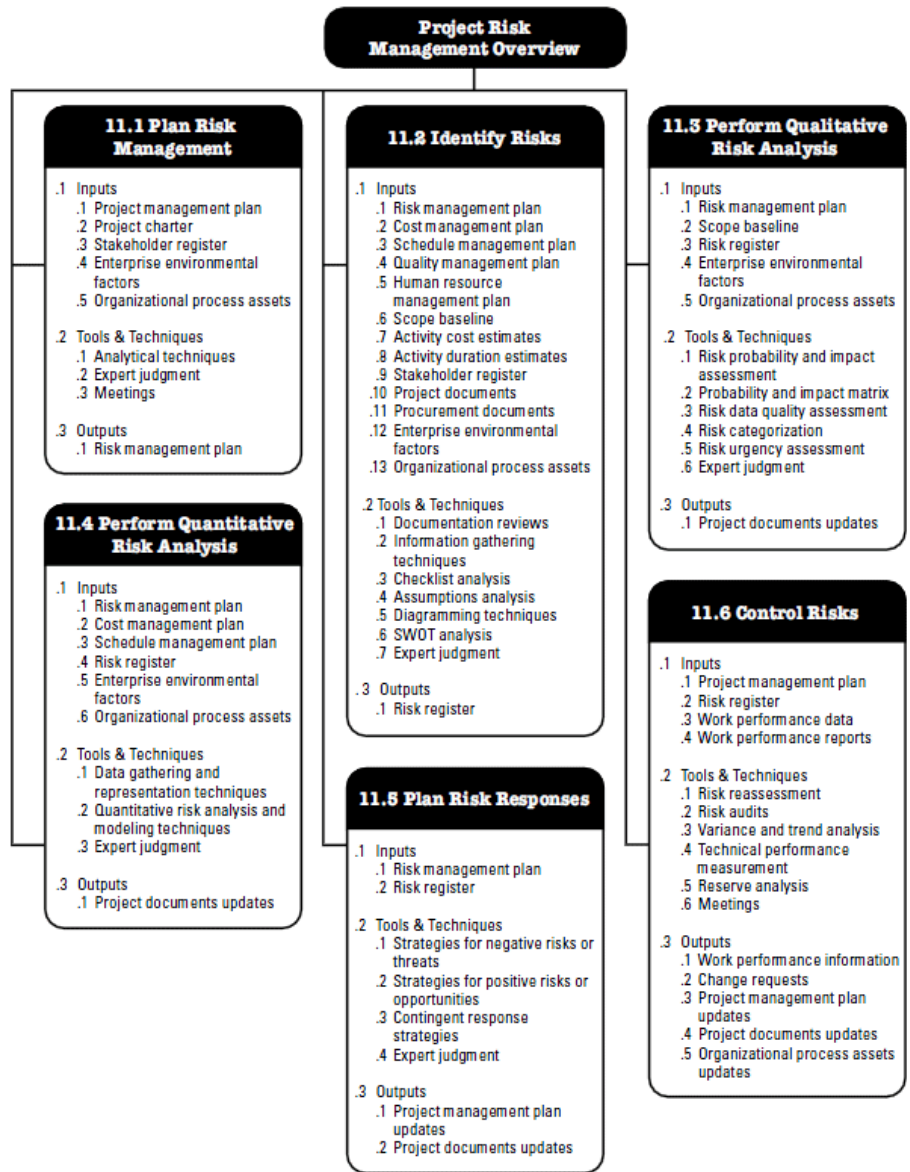


Figure 7. Project Risk Management Process Flow Diagram

Source: *PMI-Google images*

2.2.13. Project Human Resources Management:

Project Resource Management is the process required to identify, acquire, and manage the resources needed for the successful completion of the project (PMBOK, 2017; p.307). By resources PMI means project, team or talent, and quantities of material, supplies, and equipment to perform project work.

Project Resource Management contains six processes, which are as following:

- . Plan Resource Management
- . Estimate Activity Resources
- . Acquire Resources
- . Develop Team
- . Manage Team
- . Control Resources.

*The Figure 8 outlines:*The Processes of Project Human Resources Management.

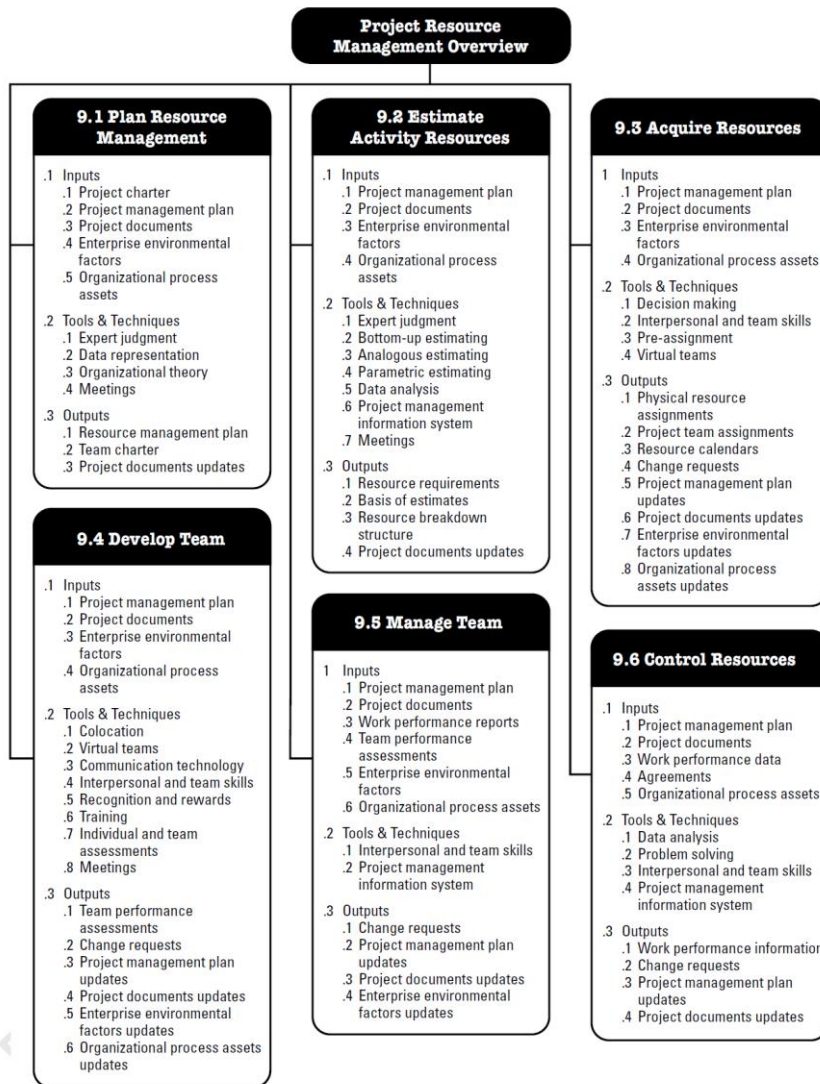


Figure 8. Project Human Resources Management Process Flow Diagram.

Source: PMI-Google images

2.2.14. Project Procurement Management:

Love et al. (2002) define procurement as “an organizational system which allows acquiring goods or services that aim to meet the desired needs with respect to the project goals”. Burke (2007) argues that “such services or goods may be materials, professional services from different suppliers, which are outside of the project team”. In his investigative research, Nissen (2009) defines the term “procurement

as any activity that deals with decision-making process about an item that may be made in-house (based on a make or buy analysis) or purchased from outside supplier or a third party". In terms of supply chain management and global sourcing, procurement process is very crucial for effective project outcomes.

Along the procurement life cycle, the procurement team, project manager and key stakeholders have to demonstrate compliance to *"the five key principles of procurement, which are value for money, ethics, competition, transparency, and accountability"* (Raymond, 2008). According to Davis (2007) *"an inappropriate procurement strategy, inadequate team or talent during a project implementation may adversely impact the project results, which may lead it to poor quality, cost and time overruns"*.

"Suppliers, vendors are key stakeholders in a project procurement success or failure as a good or poor performance will affect either way the project results" (Liu et al., 2014). As it is not an easy task to select the most appropriate supplier during the procurement process, Turskis (2008) argues that *"stakeholders' confidence is improved when the right suppliers, with respect to project goals, are selected"*. As de Aleida (2007) points out, *"project managers and procurement staff, to ensure good project results, should pay attention to the vendors, suppliers' selection as well as their evaluation based on the agreed terms or contracts"*. Evaluating the suppliers is viewed by Ng et al. (2002) as *"an assessment process where their performance is supervised, evaluated, controlled based on the agreed contract or agreed obligation"*. While Lambropoulos (2007) puts emphasis on the *"relevance of effective procurement method"*, Zolghadri et al. (2011a) investigate *"how the performance of the entire project is greatly influenced by the quality, the trust, ethical behavior between suppliers and their clients"*.

Kameshwaran et al, (2007) highlights that *"the e-procurement technology may positively impact project team's way of working on not only procurement activities, but also procurement performance"*. The e-procurement is of great help to the

integration of the supply chain along the procurement process and the project implementation.

Quite often, projects need services or products from third parties, to fulfill particular requirements” (Davis, 2007). By third parties, we mean anyone outside of the project. This can include either a different department within the organization or company, or anyone completely external to the company.

“The relationship, the collaboration between the project manager and the procurements team is a factor of major importance for successful project implementation” (Tang, 2006). In terms of both productivity and gains, plans which guide the execution of a project to an appropriate technical solution represent an important benefit for the project,. “The timely and cost efficient fulfillment of project needs, based on a solid procurement management plan, is a factor of major importance for a successful project execution” (Nissen, 2009).

Along the project procurement management, some mechanisms related to conflict resolution may need to be developed as procurement activities foster “an obligation to fulfill”. The listed mechanisms may include any process that can lead to an agreement when dispute on quality requirements or conflicts arise. As there is no guarantee that both parties will comply with the key requirements, such mechanisms may be of great help to help figuring out any unfavorable events associated with the lack of compliance. The views in interpretation of the agreements can be different and lead to dispute or conflicts. This will result in conflicts that require specific methods for their resolution. Burke (2007) argues *“that conflicts usually arise from procurement agreements and contracts, so understanding the fundamentals of conflict resolution are crucial for a project manager and procurement officer”.*

In addition, if contractual obligations are not timely and properly met by a provider, this can have negative impacts on quality and on both cost and time. *“A project manager can be frequently facing conflict situations in the context of procurements (Davis, 2007). “Good plans in procurement practices may help to reduce the risk of time and cost overruns due to conflicts with sellers of goods and services required by the project” (Raymond, 2008).*

In his investigative research Tang (2006) argues that *“goods or services that are purchased have a life cycle- a time-frame to be processed as any significant delay or quality problem may negatively impact the project performance”*. *“Projects are not implemented without any risks, so is the procurement management process” (Kameshwaran et al, 2007)*. For the risks to be either avoided or mitigated, the *“procurement management needs to be properly executed based on a governance policy or framework that prioritizes sustainable practices, transparency along the whole life cycle of the process. “As Tang (2006) argued, “The relationship, the collaboration between the project manager and the procurements team is a factor of major importance for successful project implementation”*.

2.2.15. Corruption’s Effect on Procurement Performance

In his investigation, Kenny (2012) points out the relevance of transparency in project procurement as a key practice to minimize corrupt, unethical behavior, and to fight corruption along the procurement process. Researchers like Locatelli et al., (2014) argue that *“corrupt practices along project procurement processes undermine the performance of projects”*. According to Kenny (2006) *“the main impact of corruption is essentially based on lack of precise information on construction project where very poor information is shared as to how much was spent to build it”*.

As it is stated and highlighted in the *institutional theory*, two aspects need to be taken into consideration: (1) *“the project context should be assessed”*(Scott, 2012)

to identify: the decision-making process, business practices that lead to project selection, and the context in which the project tends to be executed. The second one (2) places emphasis on *“investigating corrupt practices as an organizational practice rather than an individual unethical behavior”* (Uberti, 2016). Based on this theory; project procurement manager and staff should demonstrate compliance to ethical and transparent business practices within the project context. *“They should share the institutional core values; promote them- as failure to do so, to demonstrate such ethical business behavior may adversely impact the institution reputation”* (Sonuga et al., 2002).

“Corruption is associated with procurement in the process of winning, getting a contract on the global market” (Soreide, 2002). As researchers like Scott (2012) argue, *“project context matters, project alignment to the strategic goals of the organizations is essential to reduce corrupt practices along the procurement process”*.

2.2.15.1. Governance and Sustainability Policy Along the Procurement Process

“Countless organizations in the global market greatly value sustainability in their business practices and their strategic direction” (Sarkis et al., 2012). As the procurement management deals with: risks, undesirable events in the suppliers selection, their supervision, and evaluation, *“project managers, his staff and the procurement office should use relevant criteria and methods that take into account the needs of the client”* (Turskis, 2008). Berry and McCarthy (2011) define *“sustainable procurement as a process where the organizations satisfy their needs for services, goods in a way that achieves value for money in order to generate- through a long term thinking, benefits for the organization, the society, the economy with respect to the environment in which they operate”*.

PMI, a global standard in project methodology defines project procurement management as the process to purchase or acquire products, services, or results needed from outside the project team (PMBOK, 2017; p.459).

According to PMI, the project procurement management includes three processes.

These are:

- . Plan Procurement Management
- . Conduct Procurements
- . Control procurements.

Through this process the agreements, such as; contracts, purchase orders, memorandum of agreement are managed with ethics, transparency, and sustainable practices.

The Figure 9 outlines: The Processes of Project Procurement Management

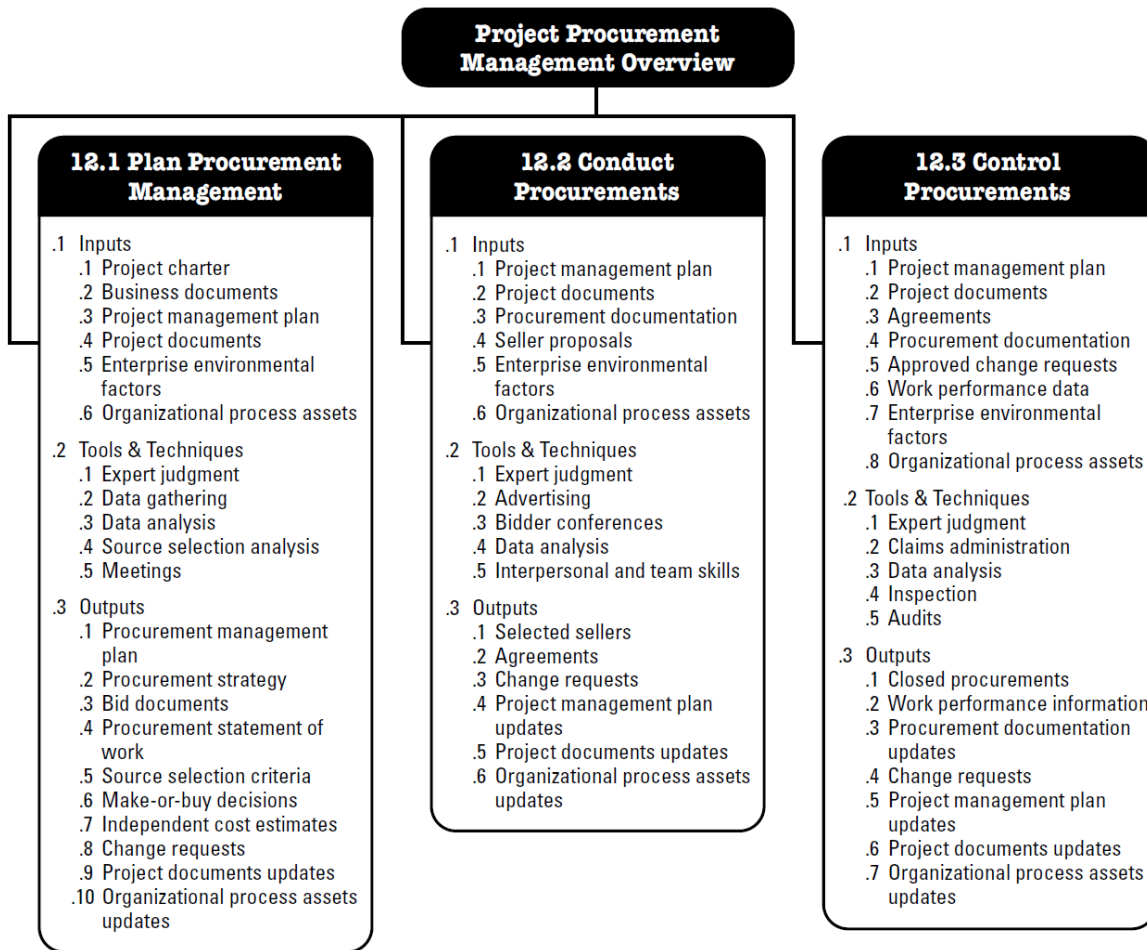


Figure 9. Project Procurement Management Process Flow Diagram

Source: PMI-Google images

2.2.16. Project Stakeholder Management:

A stakeholder is defined as any group or public that might be customers, suppliers, end users, employees, and beneficiaries affected by the operations or business activities done by the organization (Ray 1999). The relationship between the stakeholder and the organization is very crucial as it may be of great help in shaping the response to stakeholder pressures (Stephens et al. 2005). They further argue that the performance and project results of the organization may be

seriously impacted by unpredictable event that affects the expectancies and interests of stakeholders.

Along project execution both conflicts and crisis may arise between stakeholders. In their investigative research, Irvine and Millar (1996), highlight that a great amount of project issues or failure were not the results of technical failures but the inability of the organization to create and maintain excellent and mutually beneficial relationship with key, internal and external, stakeholders.

Although there is no universal framework that fits all projects, organizational structure under which an excellent or strong relationship, well established with stakeholders, would help organization avoid or avert crisis and conflicts. Researchers argue though that it can play a role of major importance, as to how, the organization manages conflicts it cannot avoid (Stephens et al. 2005).

According to PMI, project stakeholder management is the process required to identify the people, group, or organizations that could impact, or be impacted by the project. Analyzing their expectations and their impact on the project, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution (PMBOK, 2017; p.503). According to PMI, project stakeholder management contains four processes. There are as follow:

- . Identify stakeholders
- . Plan stakeholder engagement
- . Manage stakeholder engagement
- . Monitor stakeholder engagement

By managing stakeholders in a way that engage them in the whole project lifecycle and decision-making process, the project manager increases the support for successful project implementation and minimizes the resistance, which could be a threat to sustainable project outcomes. Project Stakeholder Management involves four needed processes to: identify, classify, plan, and manage all project

stakeholders and their expectations. As stakeholders, based on their needs, have their own expectations and fears, they need to be identified and engaged. Through this PMO proposal, methods of managing conflict priorities among stakeholders will be applied.

The Figure 10 outlines: The processes of Project Stakeholder Management

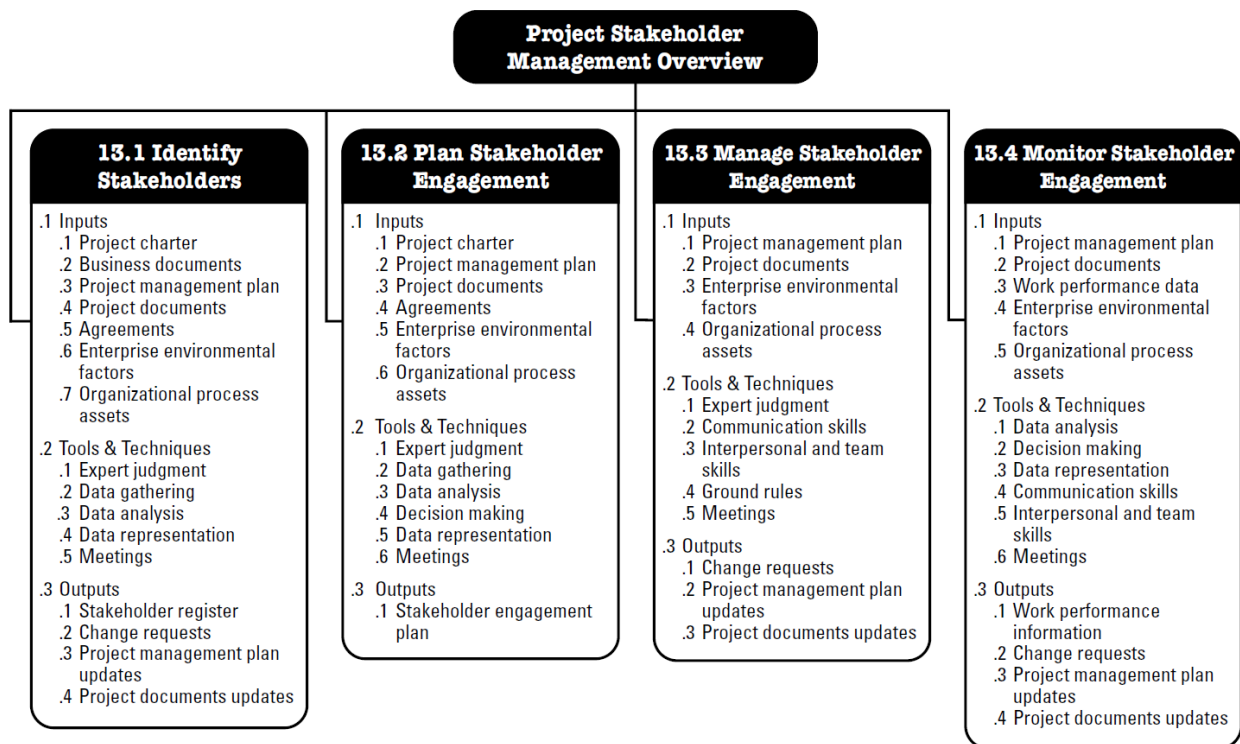


Figure 10- Project Stakeholder Management Process Flow Diagram.

Source: PMI-Google images

2.2.17. Project Integration Management:

According to PMI, the Project Integration Management is defined as the processes and activities involved in: identifying, defining, combining, unifying, and coordinating the various processes and project management activities within the Project Management Processes Groups (PMBOK, 2017; p. 69). The Figure 11 outlines: The processes of Project Integration Management

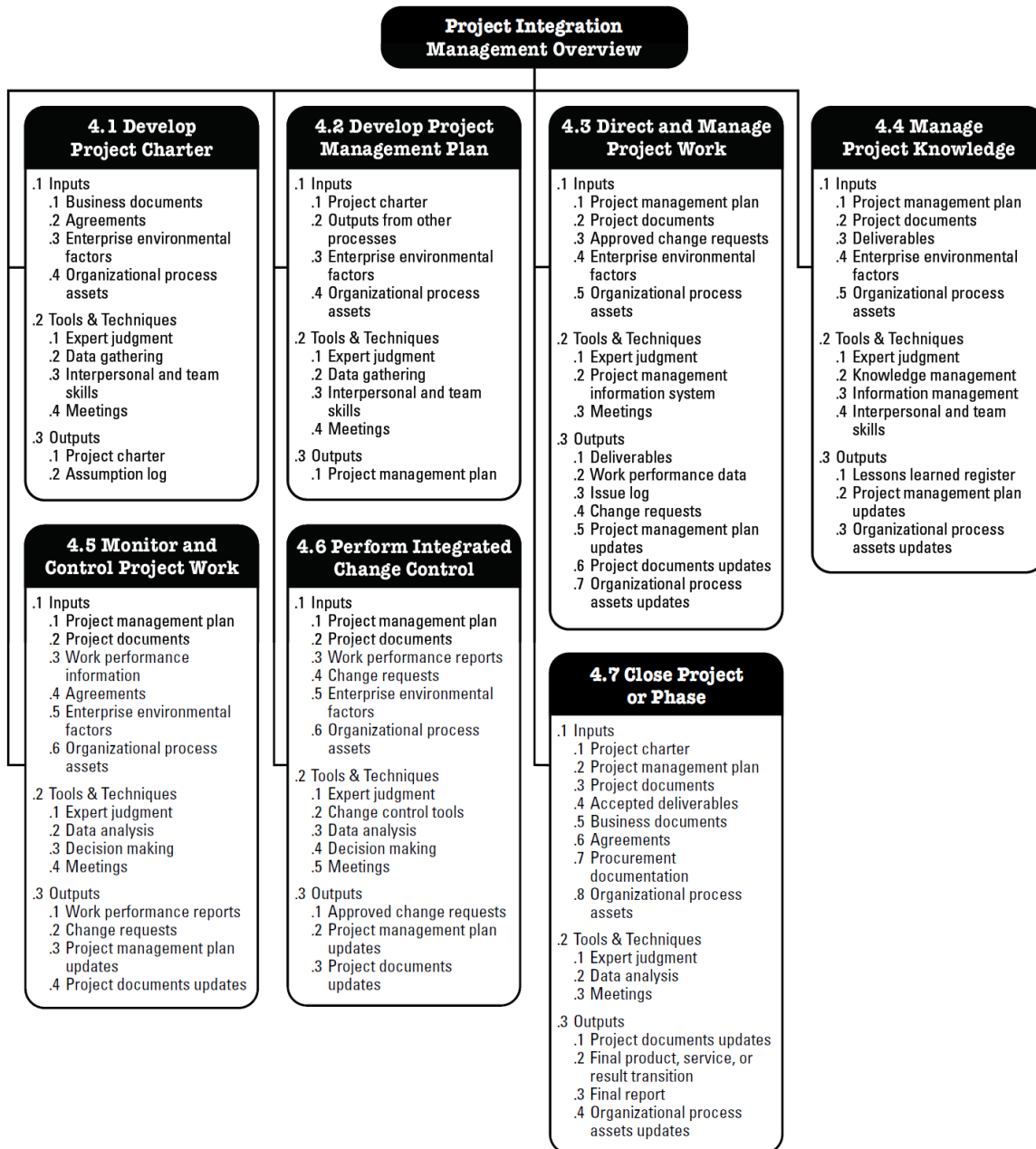


Figure 11. Project Integration Management Process Flow Diagram.

Source: *PMI-Google images*

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

2.3.1. Project Management Office (PMO):

A Project Management Office (PMO) is a management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques.

The responsibility of a PMO can range from providing project management support to directly managing one or more projects. (PMBOK, fifth Edition, p.10). PMI further indicates that the PMO in an organization may be the entity that defines and maintains the process standards related to: portfolio, program, or project management. (Governance of portfolio, programs, and projects: a practical guide, p.23).

There are three main types of PMO structures which are: supportive, controlling and directive. They differ in scope, authority, reporting hierarchy, and responsibilities. The first one plays a pivotal role in terms of consultancy, effective training and best practices while the second one requires compliance to project methodologies and quality performance. And the last one has a higher control than supportive and controlling PMO structure. It ensures compliance through audits ensures successful project completion and provides best practices.

2.3.2. Project Governance:

Project governance is defined as a framework, functions, and processes that guide project management activities in order to create a unique product, service, or result and meet organizational strategic and operational goals. (Governance of portfolio, programs, and projects: a practical guide, p.69).

2.3.3. Lean Thinking

As CHSC is located in areas in need, where motorcycle is the most popular transportation system for impoverished people, accidents that requires emergency care happens very often. Such situations increase the pressure on the emergency department as the amount of treatable cases increase and the time spent with each patient decrease. To avoid waste, Lean healthcare could greatly contribute to the satisfaction of the patients. According to Nelson & Leppa, (2007) “*Lean thinking is not a manufacturing tactic, nor a cost-reduction program, but rather a management strategy that is based on improving processes in a system*” (Nelson-Peterson & Leppa, 2007). The processes in the project implementation at CHSC may greatly improve with the PMO setup within the organization. The Lean thinking may change the staff work. The hospitals starting the implementation of Lean healthcare within the emergency department (Ben-Tovim et al., 2008; Mazzocato et al., 2012) all found it necessary to arrange the staff into some kind of multi-professional teams. Womack & Jones, (1996) recommend five principles as a framework for organizations implementing Lean thinking – value, value stream, flow, pull, and perfection

2.3.4. Portfolio, Program & Project Management Maturity Model (P3M3)

The P3M3 is a maturity model that provides a framework through which organizations can assess current performance and put in place improvement plans (tsoshop.co.uk). P3M3 also acts as a roadmap for ongoing and progression towards realistic and achievable goals that are suitable for business needs and aspirations of the organization.

The P3M3 provides three individual models: Portfolio Management Maturity Model (PfM3), Program Management Maturity Model (PgM3) and Project Management Maturity Model (PjM3).

P3M3 uses a five-level maturity framework and the five Maturity Levels are:

- Level 1 – Awareness of Process

- Level 2 – Repeatable Process
- Level 3 – Defined Process
- Level 4 – Managed Process
- Level 5 – Optimized Process

2.3.5. Lean Six Sigma

According to Black J., (2009) Six Sigma is a quality tool and used in many organizations which strives for near perfection. In other words, Six Sigma is a data driven, disciplined approach, and methodology (Hasle P & al; 2012). Lean thinking is based on eliminating the defects in any process. IJSER (2015) argues that —Six Sigma is a comprehensive and flexible system for achieving, sustaining, and maximizing business success. Through CSHC, the PMO set can greatly contribute to align projects to business strategy and business direction. Through this research, the Six Sigma methodology is used as it helps to lead organization to improve its internal process, increases satisfaction of customers, and give a clear idea of the state of the business.

2.3.6. Organizational Strategy & Project Alignment

According to Powell (2001) *“Organizations pursue competitive gains in their market by innovating, or taking a set of decisions, actions that aim to achieve strategic goals.* Nag et al. (2007) define strategic management as *“an iterative process that-based on strategic choice and competitive advantage, value and foster the organizational performance”*. Peteraf & Bergen (2003) argue that *“the Market-Based View of strategy puts emphasis on what determines the organization performance, which is market challenges or orientation and industry factor”*. *“The structure and the competitive dynamics play a crucial role in determining performance and profitability”* (Schendel 1994).

Projects are executed within organizations where a strategy and a vision is shared by the staff. As Roland (2013) highlights there is no project without risk or “*zero risk project*”. He further argues that in his investigative research, the project characteristics such as: uniqueness, complexity, assumptions, constraints, talent, people involved, expectations and requirements of stakeholders and the change it will carry in the environment in which it will be implemented, do not make any project free of risks. That being said, risk is present in every project.

Researchers have found that “*most individuals are not good at estimating either probabilities or impacts due to factors such as confirmation bias*” (Kahneman, 2013, cited in GPM ref.g, 2018). A lot of the identified risks are often not the real risks but their impact, which may deviate the project goals (Roland, 2013). Other researchers argue that “*like time, risk is invisible, and therefore cannot be managed as it cannot be seized- it can only be measured*” (Roland, 2013; p 8). As risk is an uncertainty that may or may not possibly occur. “*Project manager and team should manage is the actions through planning, monitoring and control to reduce or avoid any possible damage that a risk may cause*” (Tan, 2006; Roland, 2013).

2.3.6.1. CHSC and the Theory of Competitive Advantage

According to the theory of competitive advantage, the organization operates in an environment where external factors like bargaining power of supplier and sponsors may threaten the project results or business operations; it has its internal environment, its core competences (the Resource-based view), as a pivotal driver for competitive gains. “*Its capabilities, structure, abilities are of great help to outperform its competitors in a given market*” (Ramos-Rodriguez and Ruiz-Navarro, 2004). Powell (2001) argues that “*business strategy allows using the resources in a cost efficient way on projects that are aligned on the strategic directions of the company*”.

Through this process, the strategic thinking adds great value, foster, and create competitive advantage. As argues Grant (1991) "capabilities, innovation and lean thinking skills are source of competitive advantage". By placing the implemented PMO in the strategic position, key stakeholders commit to outperform the competitors of CHSC in the market. Taking a strategic advantage and integrating the standardized and sustainable project practices along their business activities.

2.3.6.2. The System Theory and Project outcomes

When controlling the projects and the PMO performance- efficiency and effectiveness- the focus on system theory may greatly help to get insights and view the organization as a system. As the system theory highlights and proposes an analysis of the relationship between the organizations and their environment, to evaluate the PMO performance, a system theory performance should be considered. For example; the procurement performance, project risk, communication management of an organization may greatly depend on the management competencies, good relations between the organization departments, and the governance policy. As the organization may be viewed as a system, it allows to understand that "*the project performance may be threatened by a poor management staff, inadequate governance policy and inefficient reporting practices*" (Tien and Berg, 2003).

Under the good vision for sustainable project outcome or effective procurement, a set of skills and knowledge is of major importance to contribute to effective and successful project execution. The decision makers, project managers, and staff are all, in some ways, affected by the value, quality policy and environment during the project life cycle,

That being said, "*when evaluating the performance of the PMO, a system approach needs to be considered*" (Mele and Polese, 2010).

2.3.6.3. The Contingency Theory and Effective Business Performance

It is beyond dispute that *“the performance management affects greatly the effectiveness of the organizations along their business operations and project implementation from a contingency theory perspective”* (Ferreira and Otley, 2009). According to this theory, there is no “fit all formula” that applies equally to all companies in different environments or conditions. *“Their effectiveness will mostly depend on contextual factors and specific business environment”* (Rejc, 2004). As Ferreira and Otley (2009) investigate, *“the external environment, culture, strategic direction, size and technology have an impact on the organization decision making-process”*.

On a contingency theory perspective, effective procurement outcome may be an illusion when the organizations fail to demonstrate a strong value system that promotes transparency, ethics, governance, and accountability. As Poole et al., (2001) define it; *“the organizational culture includes the norms, the system of values, principles and the beliefs that guide the way people work within a company”*.

That being said, effective procurement performance along a project implementation takes into consideration the beliefs, norms and ethics that the procurement team should comply with based on the procurement policy or governance of the organizations. The PMO will help to establish and maintain effective project implementation within CHSC.

2.3.6.4. The Relational Theory of Risks For Project Risk Understanding

According to the relational theory of risk; risk occurs in situated cognition that designs a relationship of risk. Asa. B. and Herve. C. (2010) point out that such relationship of risk, is between a risk object; uncertainties, undesirable events, and an object at risk, a project outcome. Asa.B & Herve. C. (2010) further argue that

such relationship exists so that the risk object, undesirable event, is considered to adversely impact the valued object at risk.

With the relational theory of risk the answers of why and how an uncertainty is considered as a risk are provided. This relational theory of risk plays a pivotal role in helping to approach the risk governance, risk management, and risk communication as it takes into consideration bounded rationalities of actions (preventive and corrective) along the risk management process (Boholm, A. 2003).

3. METHODOLOGICAL FRAMEWORK

3.1. Information Sources

Information can come from anywhere- expert opinions, academic journals (scholarly journals or peer review), magazines, news papers, books, and personal experiences. For the purpose of this research, information sources can be defined as a site, a location (physical or virtual), a regular institution from where data, information and knowledge can be gathered, stored and used for decision making process. Through this research the emphasis is mainly put on PMBOK, personal experiences, academic journals, literature reviews, and the CHSC archives.

3.1.1. Primary Sources

Primary sources are the original materials on which other research is based. It has to do with the direct source from which the original information is gathered and obtained.

To obtain original information for this research, interviews with the two managing directors of CHSC and with other key stakeholders shall be conducted.

3.1.2. Secondary Sources

Secondary sources are mainly based on the primary source. For this research the PMBOK, academic journals, literature reviews, the CHSC archives, and the world wide web constitute secondary sources of information.

Chart 1 Information (Source: the Author)

Objectives	Information Sources	
	Primary	Secondary
Assessing the organization maturity in order to evaluate the project management skills, needs of quality and compliance requirements.	CHSC operational process and procedures and business process layout.	Peer review journals about PMO design and Project management tools and techniques from experts with relevant experiences with PMO setup.
Analyzing and compare different type of PMOs in order to determine the most appropriate one based on the organization's context.	Meeting and interview with the two managing Directors of CHSC, key stakeholders.	Project management resources, virtual and peer review articles about PMOs.
Determining the location of the PMO in the organizational hierarchy, its mission, roles and responsibilities in CHSC	The project Manager, and the managing Directors.	PMBOK and peer review articles about PMOs from experienced practitioners.

3.1.3. Research Methods

According to Cambridge Dictionary, a research method is a particular way of studying something in order to discover new information about it or understand it

better (Dictionary Cambridge.org). According to Bryan (2012), research methods refer to a framework for the collection and analysis of data. A choice of research methods reflects decisions about the priority being given to a range of dimensions of the research process (such as *causality* and *generalization*).

Through this research, the methods used were literature reviews, observation, analytical, deductive, and inductive.

3.1.3.1. Analytical Method

The analytical method is defined as a generic process that combines the power of the scientific method with the use of formal process to solve any type of problem (thwink.org). Through the processes, the problem is decomposed into the right subproblems; the root causes of each subproblem is identified (Gabriel D.D, 2013).

3.1.3.2. Deductive-Inductive Research Method

According to, Dr. Deborah Gabriel, deductive approach research is concerned with testing theory while the inductive one deals with generation of new theory emerging from the data (Inductive and deductive approaches to research). Retrieved on November 2018.

Dr. Gabriel further argues that the inductive approaches are generally associated with qualitative research while the deductive approaches are commonly associated with quantitative research. The research is a mixed methods research as it combines qualitative and quantitative research methods.

3.1.3.3. Observational Method

Observational research is defined as a method of viewing and recording the actions and behaviors of participants. Through this method, researchers use their senses to observe participants in their natural setting or naturally occurring situation,

(Jorgensen, D. L. 1989). Mertens, D. M. (1998) argues that, as the name describes, “observational” methods are all about observing the participants. There is no experiment conducted and no variables manipulated.

Chart 2 Research Methods (Source: the Author)

Objectives	Research Methods		
	Observational Method	Analytical Method	Deductive-Inductive Method
Assessing the organization maturity in order to evaluate the project management skills, needs of quality and compliance requirements.	Through this method, the decision making process within CHSC was observed as it helps to understand how mature the organization is.	With this method the maturity of the organization was assessed and the baseline standard used was six sigma.	This deductive-inductive analytical method helped with literature reviews on articles from experienced experts on PMO setup.
Identifying and compare different type of PMOs in order to determine the most appropriate one based on the organization's context.	This method was used as it helps to understand the business process within CHSC- and based on its environment and context which PMO type is most appropriate for the organization.	To have an idea of how best to design the most suitable PMO for CHSC, this method was used with support of peer review articles on PMO's design.	This method was used as the role and mission of each type of PMO was assessed, understood based on available data to choose and design the most appropriate one

			for CHSC.
determining the location of the PMO in the organizational hierarchy, its mission, roles and responsibilities in CHSC.	Explain how the corresponding research method was applied for this objective.	This method is used to test the chosen tools and techniques.	Through this method peer review articles on location of PMO in an organization for better project outcomes.

3.2. Tools

Researches require many data gathering tools or techniques. And research tools are defined as data that needs to be collected and recorded in a way that is suitable for the intended analysis. Through the final graduation project, the tools used are interviews, meeting, analytical techniques, six sigma maturity model, and expert judgement.

Chart 3 Tools (Source: the Author)

Objectives	Tools
Assessing the organization maturity in order to evaluate the project management skills, needs of quality and compliance requirements.	Expert judgement and six sigma maturity model.
Identifying and compare different type of PMOs in order to determine the most appropriate one based on the organization's context.	Expert judgement, meeting.

<p>mining the location of the PMO in the in the organizational hierarchy, its mission, roles and responsibilities in CHSC.</p>	<p>Meeting, key stakeholders consultation, expert judgement.</p>
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3.3. Assumptions and Constraints

In the Dictionary of Statistics and Methodology (1993), W.Paul Vogt defines an assumption as “(a) *A statement that is presumed to be true, often only temporarily or for a specific purpose, such as building a theory;* (b) *The conditions under which statistical techniques yield valid results.*” In other words an assumption is an unexamined belief that is sometimes incorrect or misguided. Just because a researcher assumes something is true does not mean it is.

The assumptions for this final graduation projects are:

- It is assumed that the project manager and CHSC director will greatly help in gathering data and relevant information about CHSC to further this project.
- It is assumed that the project scope will not be changed in the short to medium term.
- It is assumed that an effective support system will be made available to the students by the university staff along the final graduation project.

It is beyond dispute that there are constraints in every working environment. Not all the time that key players and stakeholders are aware of the existence of the constraints. Constraints can be with lesser impact and some constraints may be with greater impact as McMullen (1998) categorized them. Chua et al. (2005) argue that constraints management is pivotal to project success as it contributes to two major project functions; planning and control.

As a contraining condition, constraint is defined as a force that limits the systems' performance in a given context (Ballard 2004).

The constraints for this final graduation project were as follow:

- The time allocated for the completion of the Final Graduation Project (FGP) is very short and may reduce the project scope in order to meet the academic requirements.
- Design the most appropriate PMO proposal for CHSC

Chart 4 Assumptions and Constraints (Source: the Author)

Objectives	Assumptions	Constraints
<p>Assessing the organization maturity in order to evaluate the project management skills, needs of quality compliance requirements.</p>	<p>It is Assumed that the project manager and CHSC Director will greatly help in gathering data and relevant information about CHSC to further this project.</p>	<p>The time allocated for the research may be too short.</p>
<p>Designing and compare different type of PMOs in order to determine the most appropriate one based on the organization's context.</p>	<p>It is assumed that the project scope will not be changed in the short to medium term.</p>	<p>Design the most appropriate PMO proposal</p>
<p>Determining the location of the PMO in the organizational hierarchy, its mission, roles and responsibilities in CHSC.</p>	<p>It is assumed that an effective support system will be made available to the students by the university staff along the final graduation project.</p>	<p>Time and scope</p>

3.4. Deliverables

Roseke (2014) defines deliverables as the product, service, and results that a project produces. He further argues that the deliverables are the cornerstone to project success.

That being said, the deliverables of a project are the specific work products that a project team has to produce in order to complete the project.

Chart 5 Deliverables (Source: the Author)

Objectives	Deliverables
Assessing the organization maturity in order to evaluate the project management skills, needs of quality and compliance requirements.	A report of the maturity level of CHSC
Identifying and compare different type of PMOs in order to determine the most appropriate one based on the organization's context.	A detailed report for the most appropriate PMO design for process efficiency within the organization.
Determining the location of the PMO in the in the organizational hierarchy, its mission, roles and responsibilities in CHSC	A design for the role and responsibilities of the PMO for better project management and project outcomes.

4. RESULTS

4.1. To Assess the Organization Maturity in Order to Evaluate the Project Management Skills, Needs of Quality and Compliance Requirements

The key stakeholders of CHSC attempted to design the PMO in order to achieve high levels of efficiency, effectiveness and best project management practices. For this to happen, key stakeholders defined key business objectives that the implemented PMO should satisfy. Through this research, a questionnaire was designed- using six sigma assessment methodology guidelines and P3M3 assessment model to determine a maturity level of CHSC.

A quality action research project may not depend on just one data collection method; two or more forms of data can give a more accurate data about a phenomenon (Anne Burns, 2010). After observing and analyzing the key stakeholders- to get their views, their expectations and desired organization, two questionnaires were designed and distributed to each of them.

The second questionnaire contains seven questions, one for each of the perspectives contained within P3M3 covering:

- Management Control
- Stakeholder Management
- Risk Management
- Organizational Governance
- Benefits Management
- Resource Management
- Financial Management

A random selection of fourteen employees was the respondents. Senior manager, functional manager, financial manager, procurement, and logistics managers were included in the selection process. More than three meetings were organized with different employees such as nurses, accountant, and project communication

officers with the ideas of giving them intent of the research purpose. The following maturity assessment results were obtained after a review and an analysis of the responses issued in the questionnaire.

As the areas of leadership alignment was assessed, it resulted that leadership is somewhat effective as it contributes to get the stakeholders involved in prioritizing the organization, the beneficiaries interest over their own desires, but in the project selection process the choice is made under the sponsors' s or donors requirements rather than the strategic direction of the organization.

The leadership and the Lean six sigma approaches were also assessed as it could give insights on the staff understanding, competencies of the lean six sigma practices in project management. 60% of the key staff was not good at applying this approach to CHSC.

When employees are fully involved, their performance is greatly increased. The employee involvement is another area that was also assessed to have insights on how committed the employees are when it comes to sustainable project outcomes. It resulted that 70% of the key staff, employees who responded to the questionnaires, are fully involved in the decision making process and process improvement.

In the category of "Training and Education", the maturity assessment indicated that training and education in project management and project methodology is not that frequent. Training on social services is given to some staff members, but not in the project management practices.

In the area of "Methodology of Continuous Improvement", the maturity assessment shows that CHSC has put in place a system control and monitor continuous improvement, but the system fails to deliver the desired results as the training and professional development is not that frequent in the organization.

The results from the " Value Stream Mapping " indicates that CHSC plan some of its project under value stream mapping practices, but they do not use this approach for all the relevant projects being executed in the organization.

Through the maturity assessment process, it was recorded that the selected areas show strengths, weakness, and opportunities of major importance. Key stakeholders agreed on the need of a PMO implementation within CHSC.

4.1.1. P3M3 Organizational, CHSC Maturity Assessment

Another model of collecting data and assessing the maturity of CHSC is P3M3. As stated in the theoretical framework, the Lean six sigma and the P3M3 were the two models used along this research to collect data in the CHSC maturity assessment process. The last model (P3M3) provides three individual models: Portfolio Management Maturity Model (PfM3), Program Management Maturity Model (PgM3) and Project Management Maturity Model (PjM3).

P3M3 uses a five-level maturity framework and the five Maturity Levels are:

- Level 1 – awareness of process
- Level 2 – repeatable process
- Level 3 – defined process
- Level 4 – managed process
- Level 5 – optimized process

CHSC ensures that each project, which is part of its portfolio, is executed to a minimum specified standard in order to deliver the project results.

Key issues:

Governance of relevant projects is defined in terms of sustainable, quality standard, and ethical practices; however there is a very limited consistency, coordination, which affects greatly the quality of the project results.

4.1.2. Portfolio Management Maturity assessment.

The maturity level was found to be level 2. The reason is that CHSC ensures that some relevant projects and programme run with its own procedures where high level standards were not observed.

At the Portfolio level, the organizational governance was found to be at level 3. The reason is that CHSC has a decision-making structure in place, which is constantly supported by centrally defined organizational controls that are applied to the portfolio.

Organisational Governance

CHSC put in place a centrally defined organizational controls that are applied to the portfolio, the organizational governance was found to be at level 3 within the portfolio management.

Benefits Management

The investment in many projects within CHSC failed to give insights or clear understanding concerning the real project benefits. Sometimes it took long to get the project benefits. At the Portfolio level, the benefits management was found to be at level 2. Another reason is that CHSC has documented benefits for compliance requirement, but not information on benefits ownership.

Financial Management

At the portfolio level, some standards are established for investment management procedures and the design of the business case. The portfolio investment costs are monitored and controlled as the donors required that. The financial management within the portfolio was found to be at level 3.

Management Control

At the Portfolio level, the management control was found to be at level 3. Through the assessment it was recorded that the portfolio management processes are centrally defined, documented and understood. The roles and responsibilities for delivery are also centrally defined.

Resource Management

Resource management within portfolio management was viewed at level 3. The resource management process is well-defined against the business priorities. The resource utilization helps to greatly manage and satisfy the business needs.

Risk Management

In the portfolio level, the risk management was found to be at level 3. The reason is that CHSC reviews its identified risks at the portfolio level in corporate risks management approach. At the portfolio level, threats and opportunities were assessed, analyzed and mitigated or accepted based on their impact.

Stakeholder Management

At the Portfolio level, stakeholder management was found to be at level 2. The reason is that Portfolios will be communicated to stakeholders, but it is more likely to be a personal initiative of the portfolio manager than to a structured approach deployed within CHSC.

Figure 13: Portfolio Management Maturity- Process Perspective

Portfolio Management Maturity	Score out of 5
--------------------------------------	-----------------------

Process Perspective	
Organisational Governance	3
Management Control	3
Stakeholder Management	4
Benefits Management	2
Financial Management	3
Resource Management	2
Risk Management	3

(Source: The Author)

Figure 14: Portfolio Management- Generic Attributes

Portfolio Management Generic Attributes	Score out of 5
Roles	2
Experience	1
Capability	1
Planning	2
Information	3
Scrutiny	2

Chart 6 Portfolio Management Maturity Process Perspective

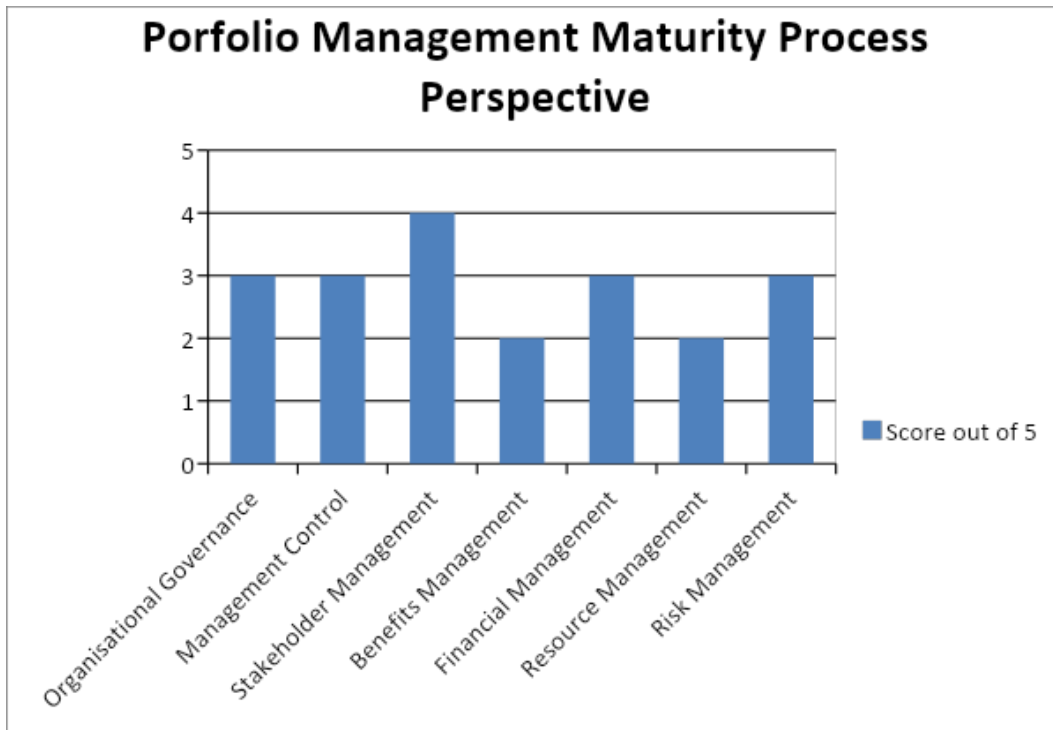


Chart Portfolio Management Maturity Process Perspective
(Source: The Author)

4.1.3. Programme Management Maturity Assessment

No centrally defined resource management or individual with high level expertise in programme management was observed. The staff had some employees with practical experience, but with no global standardized competencies. The programme management is assessed at level 2

Management Control

Within the programme it was observed that the management control could merely use the key concepts, terminology in the field of programme management. The key staff had no relevant expertise, specialties in the field. The reporting framework and procedures were inadequate. The Management control was found at level 2 within the programme management.

Risk Management

Risk Management within programme was viewed at level 3. Risks are constantly reviewed along the whole programme lifecycle. While risks are managed efficiently in the programme level, they failed to be well-managed in some of the beneficial projects. This due to of a lack of coordination and the absence of a centralized office who analyses and manages the risks before they become a threat for the project outcomes.

Stakeholder Management

At the programme level, stakeholder management was found to be at level 3, not level 2. Communication with stakeholders and their engagement in the whole programme lifecycle was fostered and planned. They are all involved in the decision-making process along the programme lifecycle.

Financial Management

Within the programme, the financial management was viewed in the level 3 and not level 4. The CHSC develops the programme business cases in a well-organized way to seek funding approval, based on a standardized procedure that was developed by some donors or sponsors.

Benefits Management

Within the programme, the benefits management was found to be at level 3. The reason is that, CHSC recognized the need to identify benefits associated with each project or programme. They develop some measurement criteria across some relevant programmes.

Organizational Governance:

Within the programme, the organizational Governance was viewed at the level 2 and not level 3. The reason is that not all the executed projects were aligned with the strategic direction of CHSC. The standards for governance in the decision making process was not evident.

Resource Management

Within the Programme, the Resource Management was viewed in the level 2. The utilization of people- although transparent, failed to deliver the technical staff needed for the value creation process. CHSH has no integrated resourcing plan for program or projects.

Figure 15: Programme Management Maturity Process Perspective

Programme Management Maturity Process Perspective	Score out of 5
Organisational Governance	2
Management Control	2
Stakeholder Management	3
Benefits Management	3
Financial Management	3
Resource Management	2
Risk Management	2

(Source: The Author)

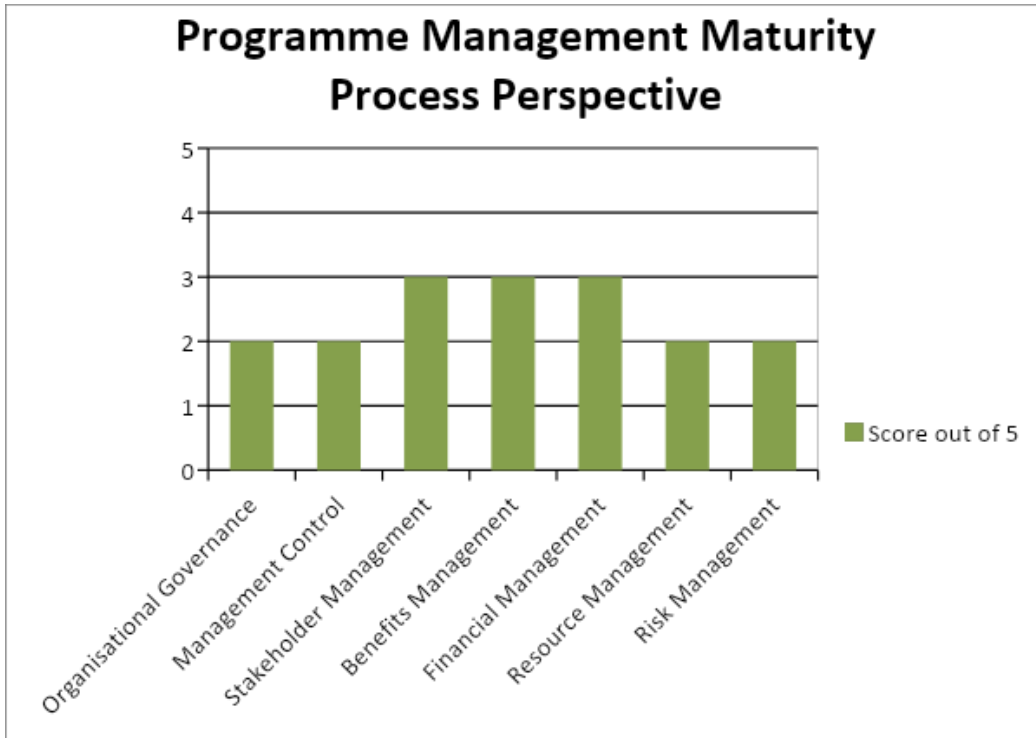
Figure 16: Programme Management-Generic Attributes

Programme Management Generic Attributes	Score out of 5
Roles	3
Experience	2
Capability	2
Planning	2
Information	3
Scrutiny	2

(Source: The Author)

Chart 7 : Programme Management Maturity Process Perspective

(Source: the Author)



4.1.4. Project Management Maturity Assessment

CHSC recognizes the role of value creation that projects may play within the organization; the stakeholders use the minimum specified standards along the project implementation. The project management maturity basement was found to be at level 2. Another reason is that no centralized entity was created to manage risks, benefits, and develop a governance framework to foster best project management practices.

Management Control

At the project level, management control was found to be at level 3. The reason is that all projects are monitored along the whole life cycle. The corporate decision makers were highly supportive toward the project team and the project manager.

Risk Management

At the project level, the risk management was viewed at the level 2. The reason is that no consistent template or tools are used by the project manager and project team along the project execution. Risks were certainly identified with stakeholders but failed to be controlled and mitigated or accepted on time.

Stakeholder Management

Within the project management level, the stakeholder management was found to be at level 3. The reason is that CHSC puts emphasis on excellent stakeholder management as they can greatly contribute to project success or failure. The engagement needs to be reinforced; and the communication with stakeholders needs to be improved to maintain their commitment and engagement.

Financial Management

Within project level, the financial management was viewed in the level 3. The reason is that CHSC takes very seriously its project business case documents, which are approved during the initiation phase. The concepts such as earned value should be well understood by the project team within the organization.

Benefits Management

At the project level, the benefits management was found to be at level 3. The reason is that within the business case documents, the concepts of benefits, outcomes are clearly mentioned, recognized, and measured in terms of project success.

Organizational Governance

At the project level, the organizational Governance was viewed at the level 2. CHSC recognizes that there is a need of a centralized entity to control and monitor

project progress. The stakeholders showed enthusiasm, great desire in being part of an entity that may define criteria prior to project approval and implementation.

Resource Management

The resource Management at the CHSC (in some of their recent project execution) was found to be at level 2 and not Level 1. The reason is that CHSC recognizes the needs to manage resources in a very cost-efficient way to enable successful project deliveries. CHSC should expand the training to key employees in the project team, they should provide training on project methodologies and standardized processes.

Figure 17: Project Management Maturity Process Perspective

Project Management Maturity Process Perspective	Score out of 5
Organisational Governance	2
Management Control	3
Stakeholder Management	3
Benefits Management	3
Financial Management	3
Resource Management	2
Risk Management	2

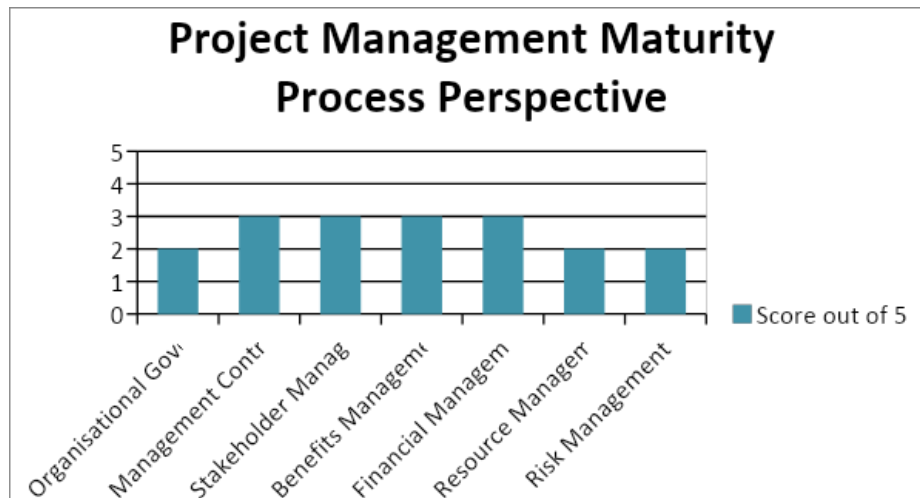
(Source: The Author)

Figure 18: Project Management- Generic Attributes

Project Management Generic Attributes	Score out of 5
Roles	3

Experience	3
Capability	2
Planning	3
Information	3
Scrutiny	2

Chart 8: Project Management Maturity Process Perspective



(Source: The Author)

4.1.5. Assessment Summary

A P3M3 (Portfolio, Programme and Project Management Maturity Model) assessment of the CHSC was conducted along the three meetings that were organized with key staff, employees and relevant stakeholders. As a designed questionnaire was distributed to the stakeholders, the P3M3 ratings derived from their input after the key concepts were made clear to each of them.

An analysis of their project, portfolio, and programme reports was undertaken to gain insights, understanding of their past, current formal methodologies and their management practices. Their policy was not assessed as it does not satisfy the

P3M3 definition. Through this process, senior managers, project managers and Portfolio staff selected as respondent.

Through this research, the seven (7) process perspectives (Management Control, Benefits Management, Financial Management, Stakeholder Management, Risk Management, Organisational Governance and Resource Management) were examined for every single sub-model P3M3. As there are five maturity levels (1.Aware, 2.Repeatable, 3.Defined, 4.Managed, 5. Optimised) in the P3M3 model, they are all applied within each of the three (3) models to assess overall maturity of CHSC.

4.2. To Analyze and Compare Different Types of PMOs in Order to Determine the Most Appropriate Based on the Organization's Context.

4.2.1. PMO selection and Strategic Objectives

The pursuit of strategic directions of an organization requires projects of major importance (Aubry et al., 2007). As projects tend to be a key priority in many organizations, some implement an organizational entity, which is Project Management Office . The main reason why they do so is to improve project efficiency by providing effective support and control to the project team (Cunha & Moura, 2014). The creation of such entity within an organization executing complex projects may greatly contribute to project team empowerment, their professionalism in project management (Dai & Wells, 2004).

In their investigative research, Singh, Keil & Kasi (2009) argue that a PMO plays a pivotal role in an innovative organization; it helps to improve the project management practices. Through the PMO, the success criteria for projects and their alignment on the strategic objective can be determined as it is very crucial to make trade-offs among schedule, cost, and scope (Hobbs et al., 2008). Other researchers like Desouza & Evaristo (2006) highlight that the PMO can greatly

contribute to a cohesive, cooperative, productive, and a high-performance project team; a well-motivated team that produces synergistic results.

4.2.2. The Recognition of a Need for Change

Organizations are created to change- and without a new direction they may not survive as the global competitive market pressures them to do so. Researchers like Jorgensen et al., (2008, cited by Hayes, J. 2014)” *have investigated that up to 60% of change programs fail to deliver desired results*”. Conducting change within an organization-like the setup of the PMO for CHSC, is not an easy task as it requires the recognition of a need- a new way to take a new path; a need to implement something new, which creates or fosters new business practices within an organization.

According to Hayes J. (2014, p.5), there are many theories about effective change conduction and their successful implementation: Teleological theories, evolutionary theories, and Life cycle theories. The last one, as indicated Hayes, J. (p.5, 2014), “*assumes that change is a process that takes place in a progressive way through necessary sequence of steps and stages where each of them contributes to the targeted results*”. During the change process, according to that theory, each stage carries out its own undesirable events, risk, threats, and opportunities. When an organization like CHSC decides to take the path of change- with an implemented PMO, it should also decide what other aspects will be affected by the desired change. Those aspects may be the project practices, organizational culture, technologies, and business activities.

It is not an easy task to implement a PMO within an organization. The organizational structure and the strategic goals have to be taken into consideration along the implementation process. As Hobbs and Blomquist (2010) argue, the type of PMO that has to be selected should take into consideration the core values of the institution and the functions that the PMO will support. As a great amount of

PMOs failed to experience successful implementation, Hurst & Thomas (2009) point out the value and importance of aligning the PMO implemented functions to the organization's needs- as they further argue, the success and the efficiency of a PMO depends on that.

Desouza and Evaristo (2006) have viewed an implemented PMO as an organizational entity that helps to reduce and minimize the risks of budget, quality, and schedule that projects constantly face. While many researchers highlight the value and the importance of an effective PMO implementation, others such as Hurst and Thomas (2009) advise organization senior managers to think twice and very carefully before they have to implement a PMO within their organization. Sometimes, the PMO does not really help the organizations in contributing to an effective project environment where project tools and methodology standards should be greatly valued.

It is beyond dispute that there are three broad types of PMO. In this paper, each type will be viewed and compared to the others so that- based on the context of the organization, the most appropriate one shall be selected. These are:

4.2.3. Supporting PMO

The primary role of this type of PMO is to report as its involvement in the project activities is very passive where there is no direct intervention in the project that they support. It plays an important role as to collect information about the project status and may make recommendations and provide additional administrative support to project managers. The degree of control provided by this type of PMO is very low as it has a consultative role to the project managers (Taylor & Ray, 2016).

4.2.4. Controlling PMO

This type of PMO has a role of major importance as it makes recommendations where necessary, to ensure effective project implementation. They ensure good practices method and compliance. The degree of control provided by this PMO is moderate as it involves in adopting project management framework, standardized tools and methodologies (Taylor & Ray, 2016).

4.2.5. Directive PMO

This third type of PMO is fully involved in the whole project management and life cycle. This PMO helps to enforce the best-project practices and the standards. Through directive PMO, the reporting methods and tools may easily be standardized. This type of PMO takes control of the projects by directly and fully involved in it. The degree of control provided by the PMO is high (Taylor & Ray, 2016).

Sometimes, projects are executed under a combination; a mixture of two types of PMO. When that happens, it is described as a "blended approach" As far as CHSC is concerned; the key stakeholders value a "blended approach" where the directive and controlling PMOs are mixed to enforce the common practices, the standardized methods to ensure successful project execution.

4.2.6. The Leadership During the Change Process

Corporate decision makers and key stakeholders of CHSC recognized, through one of the three meetings, the need for change and agreed on an effective PMO implementation to satisfy those needs and achieve the strategic goals. The employees and stakeholders of the organization can be alerted to the need for change –As Lewin (1951) describes that as an unfreeze process. As a balance of forces pushing for resisting change, the need for the change must have been

shared by key stakeholders for the forces “pro change” to win over the opposing force (The one against the change).

Kotter (1995) and Schein (1996) argue that *“the corporate decision makers, change managers have to foster and create a shared vision of a bright future for the organization in order to fully engage the key stakeholders in the change process. This is very crucial as they may strongly oppose the change.* As indicated in the second phase of Lewin's three -step process, the change managers should promote behavior that engages and contributes to high business performance. The attitudes of the stakeholders along project selection, analysis, and implementation have to be adjusted- and the structures that shape their behavior have to be reinforced in order to gain the desired outcomes.

In the third phase of Lewin's model, the new behavior is firmed up; reinforced in order to maintain a very high level of business performance, gain commitment and avoid regression. The corporate decision makers and senior managers have to take appropriate actions; strategies to move the team to the preferred business state, which has to become the goal and objective to achieve, for the team. As Curphy and Hugues (2008) indicate that “leadership is a necessity for every single action that creates and adds value in a business environment”.

The idea of implementing a PMO within CHSC requires effective communication plan and an excellent leadership for its successful implementation.

4.2.7. Anticipation of the Change Resistance

Conducting change within a company or organization is not without resistance. Employees and stakeholders may resist the change as they might see in it as a threat and a difficult challenge. According to the theory of reactive sequences, when change is being conducted, different key stakeholders with diverged interests may seek to pursue their own interests and prioritize them over the ones of the

organization. Depending on the power or weakness of each party or key stakeholders- they might have some fear about the emerging direction of the change. Those who see in the change a threat may not show effective collaboration or may even resist it; adversely impact its implementation. As far as CHSC was concerned, an effective communication plan was developed along the data collection process to avoid any unnecessary fear or resistance- as some key stakeholders would view the process as a threat and a non-necessary attempt.

Through the three meetings with the key stakeholders they expressed their commitment and desire to see the governance corporate culture, sustainability, and effective project management practices prevail within the organization. The key stakeholders determined the goals that the blended PMO structure needs to aims to achieve. The identified goals are as following:

- 1. Align talent, skills strategically with the project portfolio of CHSC.
- 2. Provide a basis for performance management for project.
- 3. Examine project management common needs and requirements in each department of the organization.
- 4. Develop project management methodology and train the project team on standardized practices.
- 5. Improve capacity planning and resource management.
- 6. Increase communication, collaboration across all projects.
- 7. Manage and control scope, cost, risk, and quality along all project implementation.

As the system theory highlights and proposes an analysis of the relationship between the organizations and their environment; to evaluate the PMO performance, a system theory perspective should be considered. For example, the procurement performance, risk and communication management of an organization may greatly depend on: the management competencies, good

relations between the organization departments, and the governance policy. As the organization may be viewed as a system, it allows one to understand that *“the project performance may be threatened by a poor management staff, inadequate governance policy and inefficient reporting practices”* (Tien and Berg, 2003).

Under the good vision for sustainable project outcome or effective procurement, a set of skills and knowledge is of major importance to contribute to effective and successful project execution. The value, quality policy, talent involved, and environment affect, all of them, in some way, the decision makers, project managers and staff during the project life cycle. That being said, *“when evaluating the performance of the PMO, a system approach needs to be considered”* (Mele and Polese, 2010).

4.2.8. The PMO Responsibilities

Based on the business goals and strategic objectives, an organization selects a type of PMO or PMO model. Englund, Graham and Dinsmore (2003) highlight three different PMO models, which all play a role of major importance in successful project implementation. The first one, known as, Project Support Office, is described as internal body or entity within the organization that provides consultancy on project activities. The referred activities may be described as project planning, scheduling, and project management tools.

The second one, known as, Project Management Center of Excellence, puts emphasis on best project management practices, effective methodologies, and human resources management. Through this office, the organization develops and trains the project team on standardized process and practices along the whole project lifecycle.

The third one is, Program Management Office. Irene D. (2017) points out that programs serve as a pivotal link between the strategic direction, the business

results, and the organizations as projects should be implemented to meet strategic goals. This office, according to Englund, Graham and Dinsmore (2003), promotes strong authority over every single projects being implemented within the organization. This office has a great responsibility over the choice, the selection of the projects, their alignment on the business strategies; and effective management of stakeholders.

Through this paper, the key stakeholders show agreement on the PMO's necessity within the CHSC. And the listed models would all fit needs and desired business results within the organization.

Projects value sustainable outcomes

Valuing creation is a crucial aspect of strategic goals in a project. Customers and the stakeholders tend to value sustainability processes along the project execution- as it greatly encourages innovative and responsible business practices. The PMO plays a role of major importance in fostering sustainable practices along the project implementation. As Aubry et al., (2008) indicate that " *a well-implemented PMO contributes to new management thinking as it can play different roles, such as controlling, supporting or facilitating*".

The PMO implementation at CHSC will greatly contribute to better sustainable practices along the project execution as it will provide overall guidance; improve the effectiveness of communication within projects; provide direction on how projects should be defined and aligned to ensure their excellence, performance, their value creation, and results.

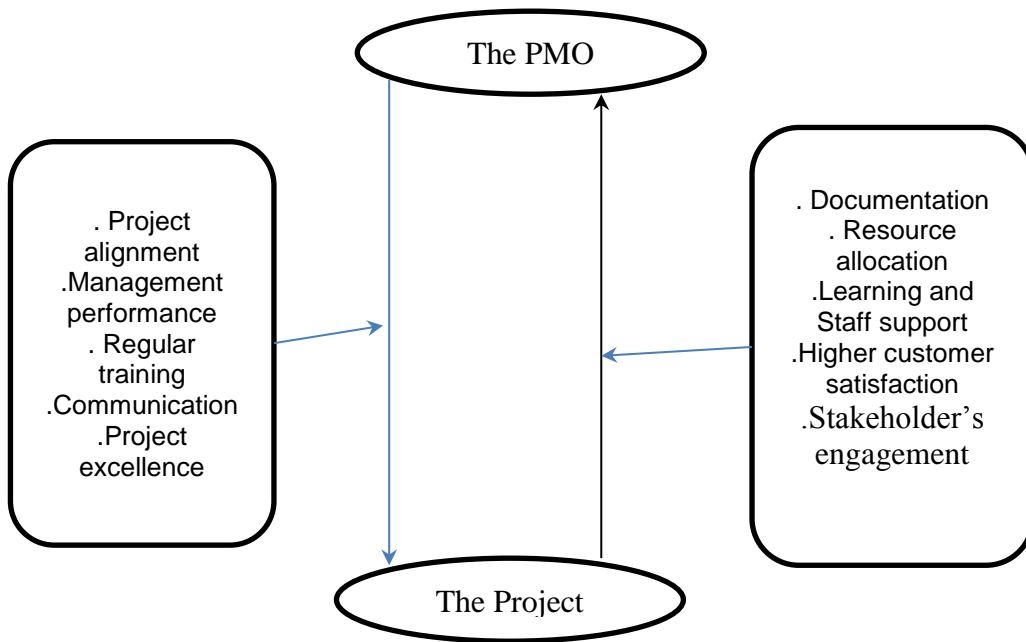


Figure 19: Relationship between PMO and running projects
(Author's own design)

4.3. To Determine the Location of the PMO n the Organizational Hierarchy, Its Mission, Roles and Responsibilities in CHSC

Each organization is unique, and so will the PMO be in each organization. The stakeholders play a crucial role in project success or failure; it was of major importance to meet with key stakeholders at CHSC to determine where the PMO would fit into the organization. As the CHSC pursues a centralized and coordinated management of selected projects, the desired results require that the position of the PMO is clearly defined.

In the literature review over 47 PMO models have been found; and as some models have similarities in names and the number is reduced in 25 models. Many authors propose three or five PMO models- based on the position of the PMO within hierarchy of the organization.

A great amount of projects have failed because of inadequate resources, poor risk analysis, lack of leadership, and misalignment between selected projects and the strategic direction of the organization. The implemented PMO, if well-positioned in the hierarchy of the organization can deliver greater value. As the maturity assessment of the organization implied that a new leadership needs to emerge to implement standardized process and procedures across all the project execution within the organization.

Through the meeting with the key stakeholders, it was highlighted the importance of positioning the PMO under the mandate of the general manager of CHSC, which is a strategic position. By placing the PMO into such strategic position, the key stakeholders count on an effective PMO implementation to achieve the strategic goals that the organization has set out. (See chart 15).

As it is highlighted in the contingency theory, *“an organization's capability, ability, which helps to meet its strategic goals, requires congruence between its organizational structure and its business objectives* (Kenny, 2006). That being said, to ensure effective and good project results, the implemented PMO should foster an effective governance policy and strategic purchasing framework, which are both aligned on the business objectives of CHSC.

According to the contingency theory a good relationship between: key stakeholders, a clear understanding on the PMO's position in the hierarchy, and effective management practices can greatly reinforce the organizational structure and increase the ability to meet its strategic goals within the organization (Kenny, 2006).

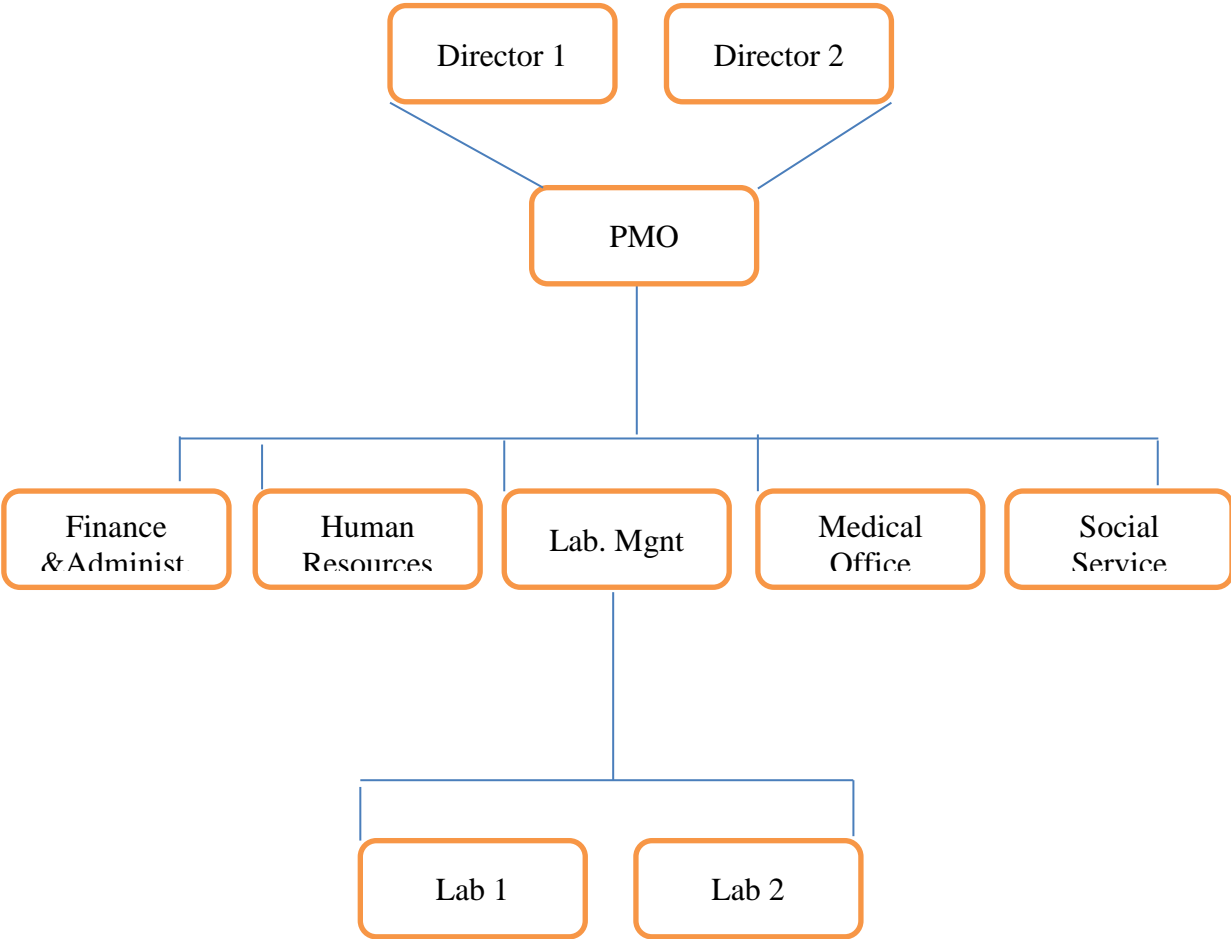
According to Powell (2001) *“Organizations pursue competitive gains in their market by innovating, or taking a set of decisions, actions that aim to achieve strategic*

goals. Nag et al. (2007) define strategic management as “*an iterative process that-based on strategic choice and competitive advantage, value and foster the organizational performance*”. Peteraf & Bergen (2003) argue that” *the Market-Based View of strategy puts emphasis on what determines the organization performance, which is market challenges or orientation and industry factor*”. “*The structure and the competitive dynamics play a crucial role in determining performance and profitability*” (Schendel 1994).

According to the theory of competitive advantage, the organization operates in an environment where external factors like bargaining power of supplier and sponsors may threaten the project results or business operations; it has its internal environment, its core competences (the Resource-based view), as a pivotal driver for competitive gains. “*Its capabilities, structure, abilities are of great help to outperform its competitors in a given market*” (Ramos-Rodriguez and Ruiz-Navarro (2004). Powell (2001) argues that “*business strategy allows using the resources in a cost efficient way on projects that are aligned on the strategic directions of the company*”.

Through this, the strategic thinking adds great value; foster, and create competitive advantage. As argues Grant (1991)” *capabilities, innovation and lean thinking skills are source of competitive advantage*”. By placing the implemented PMO in the strategic position, the key stakeholders commit to outperform market competitors of CHSCt;take a strategic advantage and integrate the standardized and sustainable project practices.

Chart 9 Showing the Position of the PMO in the Organization Hierarchy



5. CONCLUSIONS

1. Through the maturity assessment of the organization (CHSC), it was observed a few project areas where the organization has outstanding strengths. These are: leadership alignment, involvement of employees, and good lean thinking skills. However CHSC has shown weaknesses in areas that may adversely impact the project results. These are: inconsistent professional development on project methodologies, biased selection on project value, stream mapping, and a poor training on standardized processes, procedures, and tools in project management.

2. Through this research, different PMO models were viewed and the three basic types of PMO were analyzed- based on peer review journals and articles. Each of the basic type of PMO- Supporting, Directive and Controlling- has its levels of control on a company. As it happens to many organizations, based on their strategic directions, they use a mixture of at least two types of PMO; CHSC has chosen a hybrid PMO approach. Through this mixture, CHSC and its key stakeholders select a Controlling and Directive type of PMO to deliver project management excellence, best project management practices.

This was decided by the key stakeholders after they asked, through the three meetings, relevant questions about the functionalities, the roles, and the mandate of each type of the three basic PMO.

3. The functionalities and the roles assigned to the hybrid PMO approach should streamline:project value creation, foster best-project-practice management. multi-project management, supports portfolio management, conducting training, education, and contributes to organizational transformation for sustainable project outcomes.

4. It is beyond dispute that many scholars and researchers do not believe that the position of the PMO in the organizational hierarchy can greatly impact the multi-

project management process. They highlight that the PMO position may lead to administrative conflicts. However, as far as CHSC is concerned, the PMO should contribute to achieve strategic goals of the organization; develop effective project management methodology and competency; excellent project management procedures and processes; and organizational learning. Based on what it aims to achieve, the PMO is positioned below the mandate of General Manager 1 and General Manager 2.

6. RECOMMENDATIONS

The key recommendations that emerged from this research are grounded in the PMO that would be most suitable for CHSC.

- As there is no standardized PMO structure that is considered as a "fit all" or a compatible entity for every structure within the organization. The first recommendation should be, for the implemented PMO, to eventually assess the maturity and business practices of CHSC and to reinvent and rethink itself- based on the new maturity assessment results of the organization.
- The corporate decision makers, the senior managers should get key stakeholders involved in whole process of decision making as to when a project needs to be selected or prioritized over others. This is crucial, as sometimes, PMO managers make decision on strict respect of their framework rather than a deeper analysis on project ROIs, as it is viewed by other stakeholders.
- The PMO- when established should be constituted of staff with relevant knowledge on strategic business planning, efficient corporate finance, performance management, and governance, risks and corporate management. This aspect is of major importance as a poor talented staff may not deliver the business results as desired or expected along the CHSC's PMO operational activities.
- The PMO staff-when implemented, should be provided excellent training on managerial best practices or relevant skills. This will allow them to be able to transfer their acquired skills to their project staff for better project results.
- The corporate decision makers and senior managers of projects should not be too complacent- and should leave the PMO's door open for process

improvement. This would continuously foster best project methodology selection and execution and would adapt to the external environment when change is required.

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8. APPENDICES

Appendix 1: FGP Charter

PROJECT CHARTER	
<p>Formalizes the project start and confers the project manager with the authority to assign company resources to the project activities. Benefits: it provides a clear start and well defined project boundaries.</p>	
Date	Project Name:
November 11, 2018	The design of a Project Management Office (PMO) proposal for Centre Hospitalier Saint-Camille (CHSC), Haiti
Knowledge Areas / Processes	Application Area (Sector / Activity)
<p>Knowledge areas: Project Integration Management, Scope Management, Time Management , Cost Management, Quality Management, Human Resource Management, Communication Management, Risk Management, Procurement Management & Stakeholder Management</p> <p>Process Groups: Initiation, Planning, Execution, Monitoring and Control & Closing</p>	Health industry/ Hospital
Start date	Finish date
November 11, 2018	May 5, 2019

Project Objectives (General and Specific)

General Objective:

To develop a PMO proposal for Centre Hospitalier St-Camille (CHSC) to optimize and standardize the project results implemented by CHSC

Specific Objectives:

To assess the organization maturity in order to evaluate the project management skills, needs of quality and compliance requirements.

- 2- To analyze and compare different type of PMOs in order to determine the most appropriate one based on the organization's context.
- 3- To determine the location of the PMO in the in the organizational hierarchy, its mission, roles, and responsibilities in CHSC

Project Purpose or Justification -Merit and Expected Results

In Haiti, there are many hospitals that operate with few high-quality staffs, few resources and poor management skills, which has greatly affected the quality performance along their project execution. They fail, very often, to demonstrate compliance set by major funding agencies such as USAID, EU, IDB and World Bank.

It is beyond dispute that the advent of the advanced technologies in today's business and industrial domains has drastically increased the complexity of managing the various phases of the project execution (Austin et al.; 20002). This, in turn, has led organizations, small and medium size, to face unprecedented management challenges.

Through this thesis, in an attempt to improve the performance of the business projects- this PMO proposal would help hospitals in Haiti, especially CHSC to implement successful projects, those that are aligned with their business strategies.

Description of Product or Service to Be Generated By the Project – Project Final Deliverables

- PMO application documents of methodology, processes, and standards

- PMO template for management reporting and measurable indicators to evaluate project outcomes

Assumptions

- It is assumed that the project manager and CHSC director will greatly help in gathering data and relevant information about CHSC to further this project.
- It is assumed that the project scope will not be changed in the short to medium term.
- It is assumed that an effective support system will be made available to the students by the university staff along the final graduation project.

Constraints

The time allocated for the completion of the Final Graduation Project (FGP) is very short and may reduce the project scope in order to meet the academic requirements.

Preliminary Risks

If the violent demonstrations against corruption- for Petro Caribe, funds in Haiti take place in the areas of the CHSC that might impact the delivery time and project quality.

Budget

The cost of this project has not established yet.

Milestones and Dates

Milestone	Start date	End date
Project Charter	November 5, 2018	November 11, 2018
Introduction Chapter	November 12, 2018	November 18, 2018
Theoretical Framework	November 19, 2018	November 25, 2018

Methodological Framework	November 26, 2018	December 2, 2018
Annexes, Executive Summary and Biography	December 3, 2018	December 9, 2018

Relevant Historical Information

Centre Hospitalier St Camille is health center that provides medical treatment at a low cost in the city of Croix-Des-Bouquets. Patients from impoverished areas get treated in that hospital. They also get funded for HIV, cholera, and school-construction project. As their funding is very limited they have faced challenges in terms of lack of structured project methodologies and standards. By implementing a PMO in CHSC, the project planning; management reporting and portfolio management will greatly and successfully increase project outcomes.

Stakeholders

Direct Stakeholders:

2 Directors of the Organization

Indirect Stakeholders:

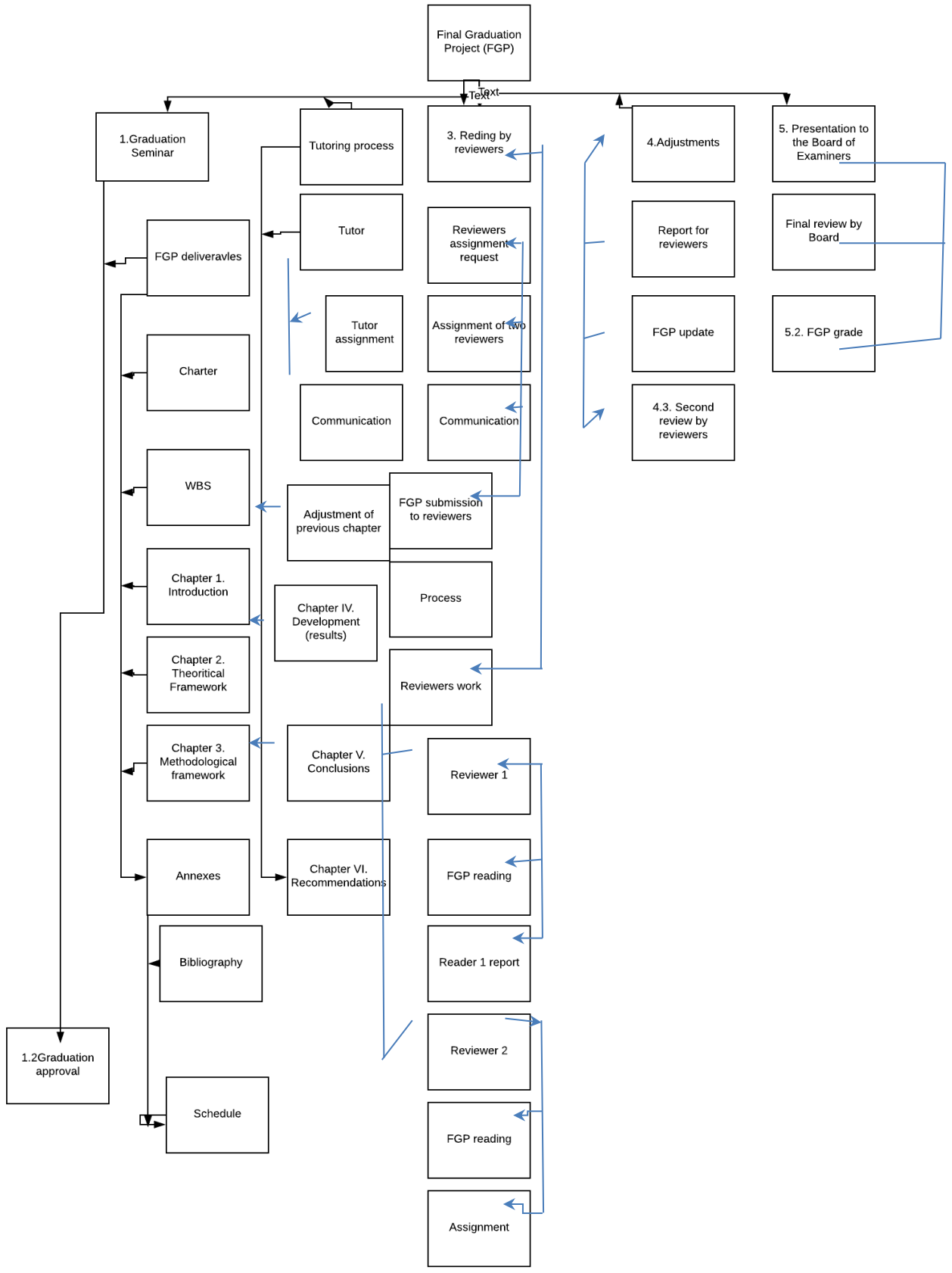
- Project Manager
- Procurement Director
- Accountant
- Medical Director
- Office staff
- Patients
- Local NGOs
- Local Authorities
- Patients
- Funding Agencies
- Suppliers

Project Manager: Deaudier Robert

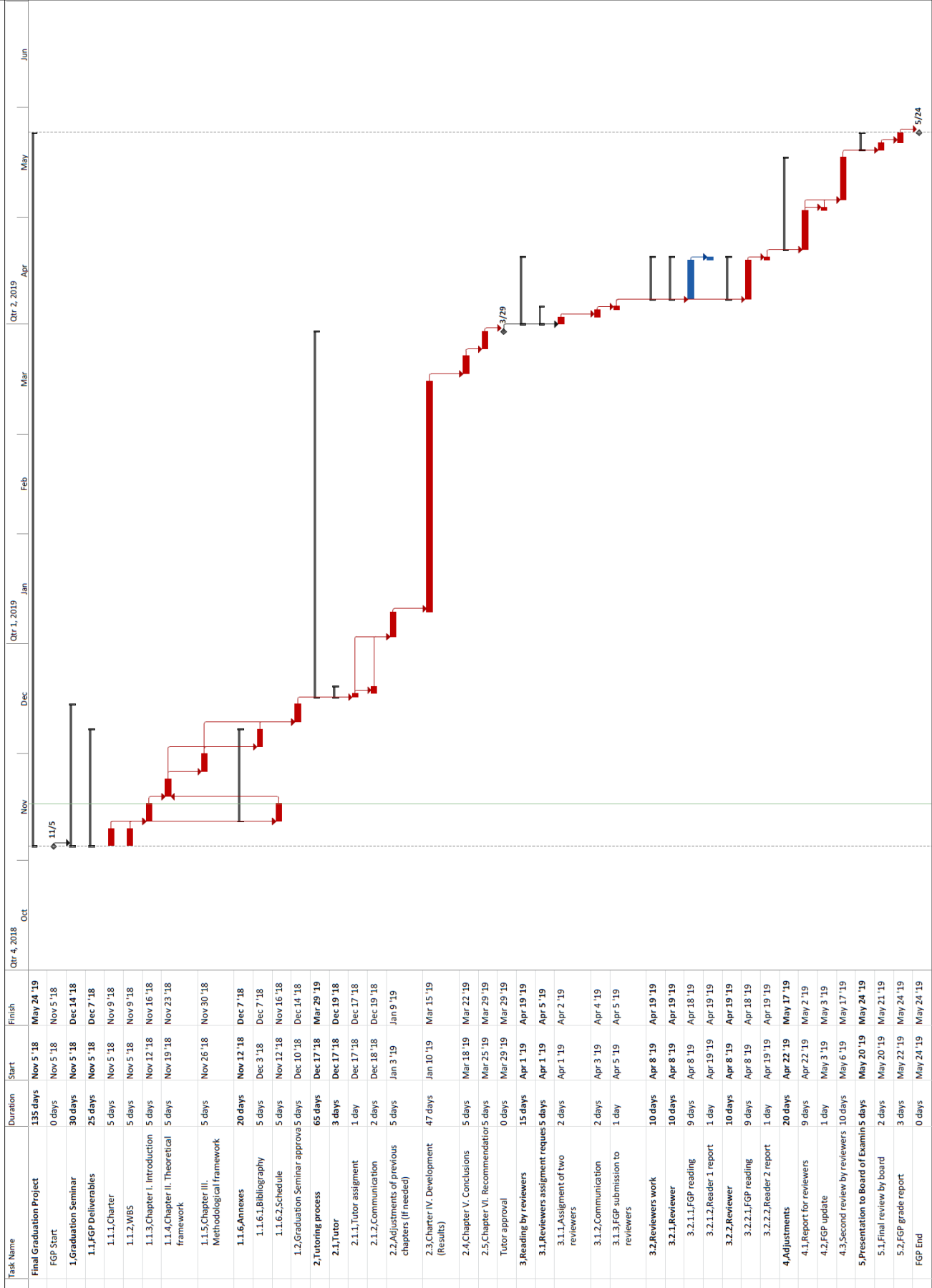
Signature: Deaudier Robert

Authorized by: Deaudier Robert	Signature: Deaudier Robert

Appendix 2: FGP WBS



FINAL GRADUATION PROJECT DEVELOPMENT SCHEDULE



Legend:

- Task: Blue bar
- Split: Dotted line
- Milestone: Diamond
- External Milestone: Diamond with outline
- Inactive Task: Grey bar
- Inactive Milestone: Diamond with outline
- Summary: Blue bar
- Project Summary: Dotted line
- External Tasks: Grey bar
- Manual Summary Rollup: Blue bar
- Manual Summary: Blue bar
- Start-only: Blue bar
- Finish-only: Blue bar
- Deadline: Blue bar
- Critical: Red bar
- Critical Path: Red bar
- Progress: Blue bar
- Critical Split: Dotted line

Appendix 4: Level of Maturity Assessment Questionnaire

Leadership Alignment:

1. An effective leadership is of major importance for the process improvement of an organization or company. When you refer to CHSC business practices, do you think leadership is aligned with the process improvement?

R1- No leadership alignment for process improvements.

R2- Leadership aligned with process improvements, visible and active selection and review of projects. No resources available to support projects.

R3- Leadership is somewhat aligned with process improvements, but visible and active selection and review of projects are not in place. No trained and committed resources available to support projects.

R4- Leadership is aligned with vital few metrics, visible selection and review of projects. Some trained resources available.

R5- Trained and committed resources supporting projects.

Leadership Approach Towards Lean:

2. Do you think the key staff, the leadership, of CHSC demonstrates a good understanding of the Lean approach to maximizing productivity?

R1- Company executives demonstrate no understanding of the Lean approach.

R2- Executives demonstrate an understanding of the Lean approach.

R3- Executives demonstrate an understanding of Lean but do not have full faith.

R4- Executives demonstrate good understanding and have faith in Lean. Leadership committed but not prepared for accelerated biz improvement

5- Key staff has full understanding and faith in Lean;

Employee Involvement:

3. Are CHSC employees involved in the decision making for the process improvement of the organization?

R1- Little or no involvement of people in process improvements.

R2- People form cross-functional teams whenever a problem arises.

R3- Involvement of people in process improvements to some extent and people are eager to work in teams.

R4- Quality improvement, problem solving, and corrective action teams in place. 40 to 70% of employees involved in teams,

R5- 50% or more involved in teams; open access to top management; empowered to improve the process for quality,

Training/Education:

4. Does CHSC provide professional development training or any form of education aligned with the process improvement?

R1- More than 5% of employee time devoted to training and implementing improvements: Process improvement.

R2- Few team members have heard about different concepts of improvement methodology and not formally trained.

R3- Team members are trained in some basic concepts such as 5S, Lean overview and PriSM methods.

R4- Team members have good understanding of process improvement methodologies.

R5- No training on Lean tools or quality improvement tools, methodologies or even concepts.

Standard Work Procedures

4. Does CHSC put in place and ensure the use of standard work procedures to ensure the consistent quality delivery of projects?

R1- No standard work procedures exist. No understanding of the connection between CI and work standards.

R2- All standard work procedures can be seen in most areas. Process owners know the what, when, where, why, and how of their areas. Ownership taken, to use standards and keep them current.

R3- Some standard work procedures exist to show how the process made, materials flow, and administrative processes function but are neither current nor displayed. Thinking of internal customers begins.

R4- Standard work procedures are current and posted in appropriate areas.

R5- Employees have quick and free access to all standard work.

Value Stream Mapping

5. Does the organization use value mapping to as a tool for future improvements?

R1- Most understand value of stream mapping. Action plans are in place.

R2- No process is mapped according to the value stream.

R3- A number of people has been trained in value stream mapping, some processes mapped. No improvements.

R4- An understanding of value stream mapping is evident. Few attempts have been made to map a simple process.

R5- Most processes mapped with results of action plans recorded Accounting support to Lean 74

Appendix 5: Maturity Assessment Responses Per Category

Question 1- Leadership Alignment

Leadership Alignment

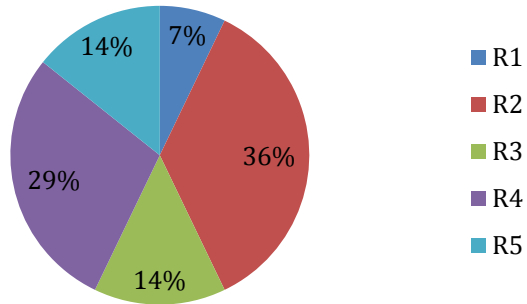


Chart 10

Question 2- Leadership Approach Towards Lean

Leadership Approach Towards Lean

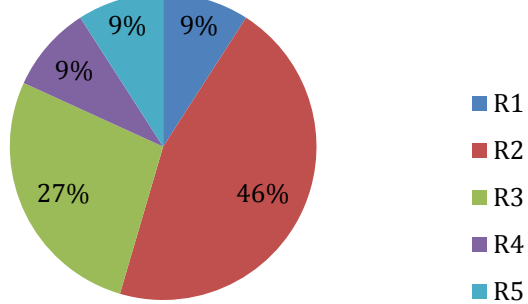


Chart 11

Question 3- Employee Involvement

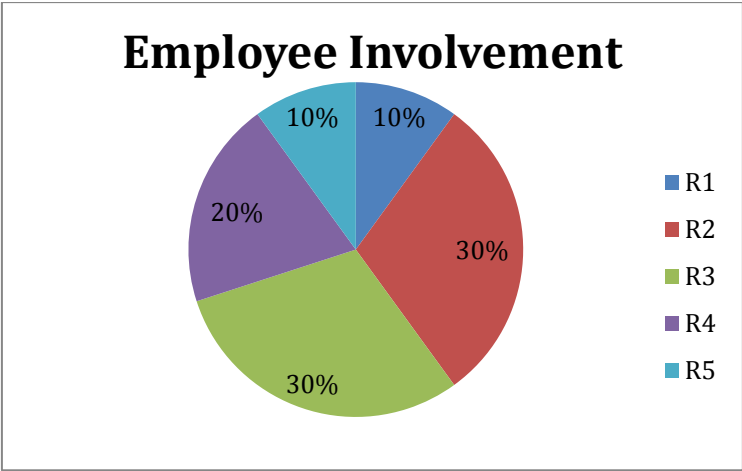


Chart 12

Question 4- Training/Education

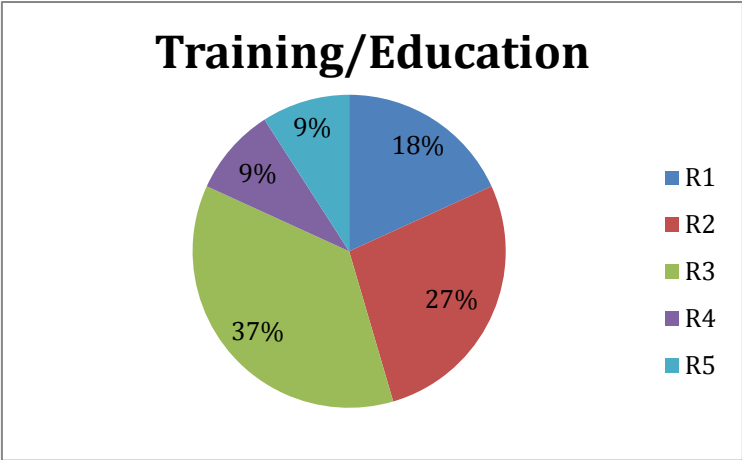


Chart 13

Question 5- Standard Work Procedures

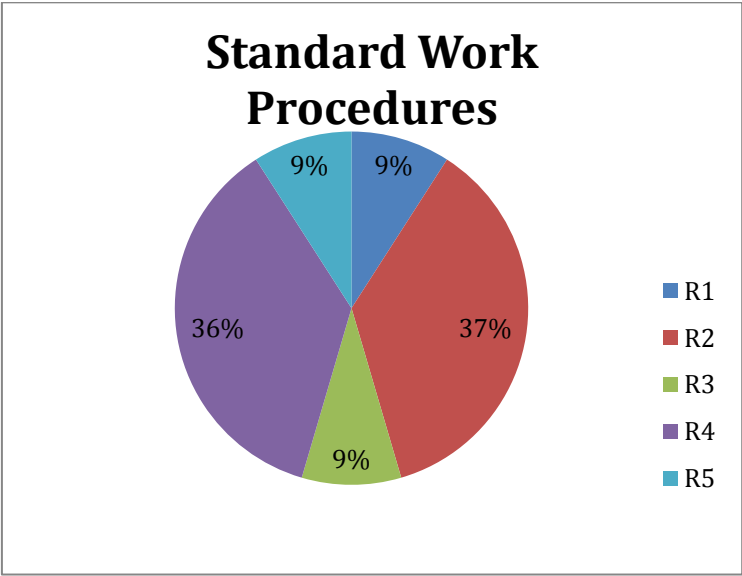


Chart 14

Question 6- Value Stream Mapping

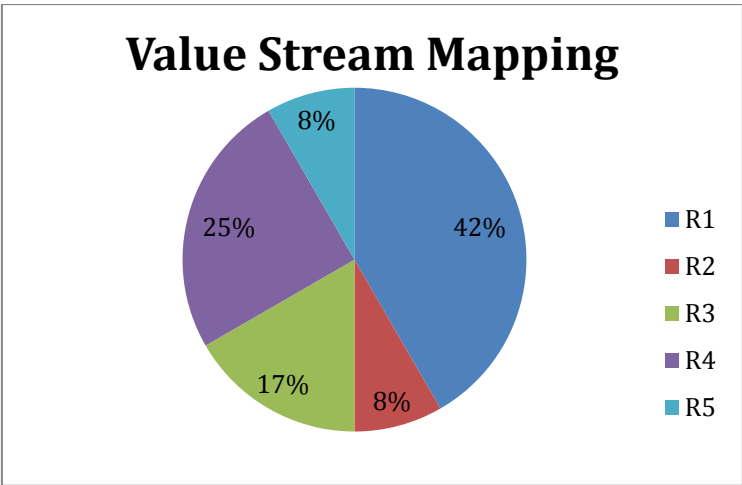
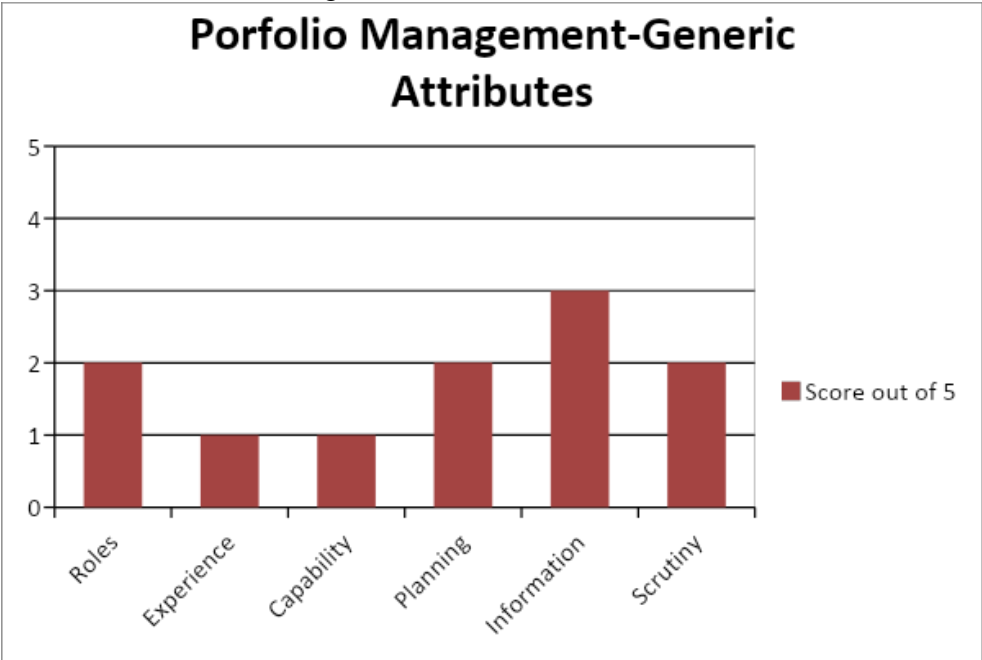


Chart 15

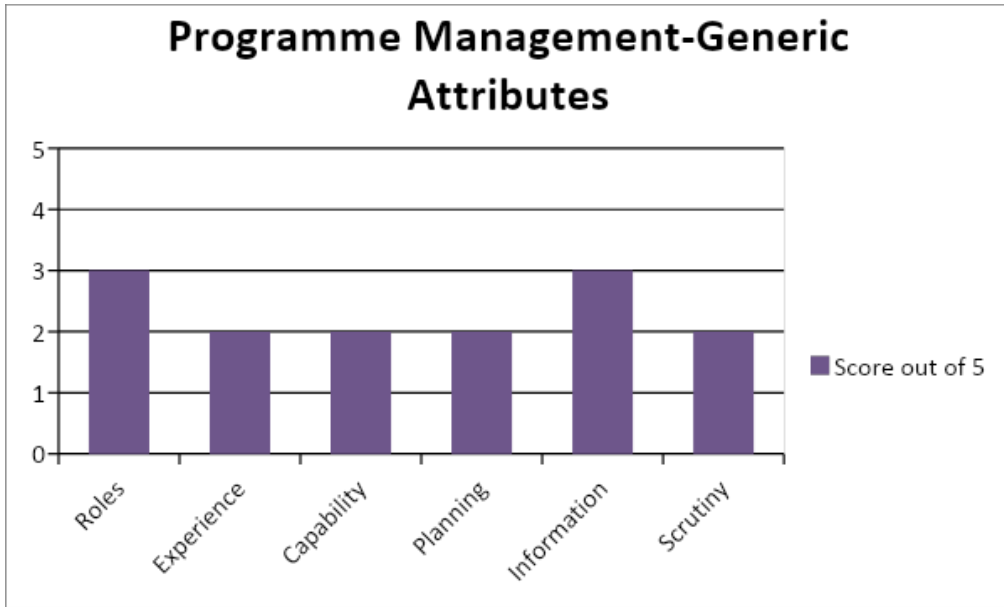
Appendix 6: P3M3 Maturity Assessment- Generic Attributes

Chart 16: Portfolio Management- Generic Attributes



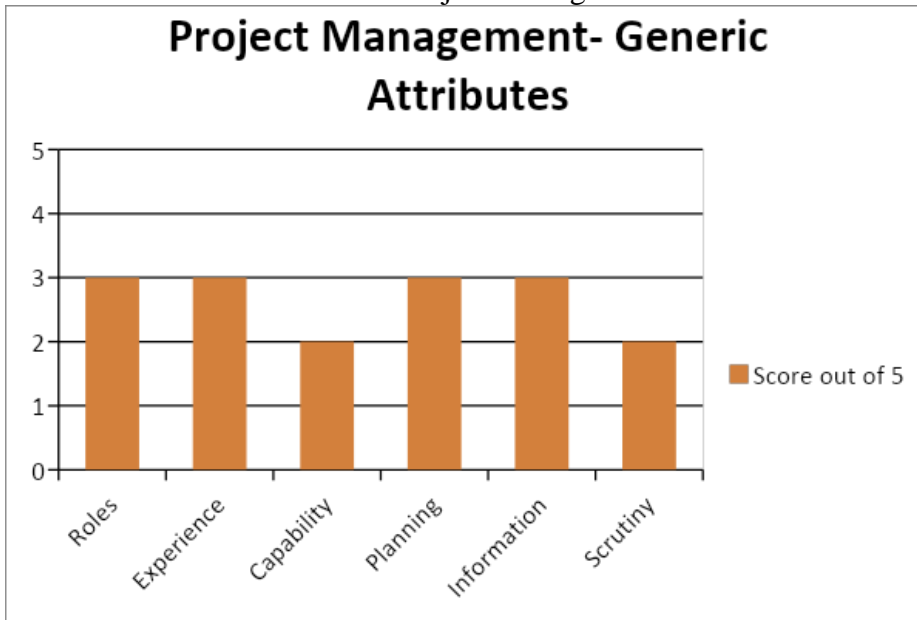
Portfolio Management- Generic Attributes
-Source: the Author.

Chart 17: Programme Management- Generic Attributes



Programme Management- Generic Attributes
-Source: the Author,

Chart 18: Project Management- Generic Attributes



Project Management- Generic Attributes

-Source: the Author.

To who this may concern,

I MA Djali Vesela along, with the team of my project Linguistic Expert Services (www.linguistic-expert.eu) having been assisted by Communication and Agile Technologies specialist Maria Repa, **have proofread the final work of graduation project**

The Design of a Project Management Office (PMO) Proposal for Centre Hospitalier Saint-Camille (CHSC) in Haiti

Written for Universidad Para Cooperacion Internacional

by Seguinde St Hilaire

19nd May, 2019

1369 UNISA  university of south africa	2110 University of Brighton
DJALI VESELA MISS NECHYLONA 24 PRAQUE 4 CZECH REP. 140 00	800-838-7 800M TEL: 4292880 FAX: - GRADUATE: 429-2531 
	16/12/2011
DEAR MISS DJALI VESELA	<i>Djali Vesela</i>
I WISH TO CONFIRM THAT YOU HAVE COMPLIED WITH ALL THE REQUIREMENTS PRESCRIBED FOR YOUR DEGREE B.A. IN SOCIOLINGUISTICS	<i>has been awarded the</i> Degree of Bachelor of Arts
UNIVERSITY OF SOUTH AFRICA	<i>with Second Class Honours (First Division)</i> <i>in English Studies and Linguistics,</i> <i>Translating and Interpreting</i>
UNIVERSITY OF SOUTH AFRICA	8 July 2009
 SIGNATURE OF STUDENT	YOURS FAITHFULLY  M. H. STOCKHOFF REGISTRAR (ACADEMIC)  Chairman of the Board of Governors  Julian M. Carr Vice-Chancellor