UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)

Project Management Plan for Paradise Vision Center,
St. John's, Antigua

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DEDICATION

This project is dedicated to my late partner and best friend, Ognel Browne, who God called home on March 3, 2018. Your belief in my ability to successfully complete this journey motivated me to carry on. You are gone, but not forgotten. Rest In Peace.

ACKNOWLEDGMENTS

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ABBREVIATIONS AND ACRONYMS

AC – Actual Cost

BAC - Budget at Completion

BSC -Balanced Score Card

CPI - Cost Performance Index

CSR – Corporate and Social Responsibility

EAC - Estimate At Completion

EV – Earned Value

EVM - Earned Value Management

FGP – Final Graduation Project

IPMA - International Project Management Association

KPIs - Key Performance Indicators

PDCA – Plan Do Check Act

PMBOK ® Guide - A Guide to the Project Management Book of Knowledge

PMI – Project Management Institute

PRiSM – Projects Integrating Sustainable Methods

PV – Planned Value

PVC - Paradise Vision Center

RBS – Risk Breakdown Structure

ROM - Rough Order of Magnitude

SDGs – Sustainable Development Goals

SPI - Schedule Performance Index

TCPI- To-Complete Performance Index

UCI - Universidad para la Cooperación Internacional

UN – United Nations

WBS – Work Breakdown Structure

EXECUTIVE SUMMARY (ABSTRACT)

Antigua and Barbuda has often struggled to provide its citizens with quality optometry services. There have been numerous government initiatives which saw health care professionals from countries such as Cuba, Venezuela, and China visiting the island to provide optometry services under short-lived government initiatives. Having witnessed this, Jamella Fabian embarked upon a journey to provide quality optometry services through the creation of Paradise Vision Center (PVC). It was anticipated that PVC would provide quality optometry services that included: comprehensive eye exams, glaucoma screening, refractions, diabetic retinopathy screening, cataract screening and pterygium.

Ms. Fabian, like many young budding entrepreneurs in Antigua, had conceptualized the success of her business without the perception of project management. Entrepreneurs do not understand that their ideas must be properly planned, initiated, executed, monitored and controlled, and by doing so, the probability of project success and continuity is enhanced. All ventures- irrespective of size- should utilize project management professionals from as early as project conception, to ensure successful implementation and achievement of project goals, within schedule, scope and budget.

The purpose of this project was to create a project management plan, utilizing PMI best practices to guide Ms. Fabian with the proper planning needed to realize a venture of this magnitude. The benefits to the people of Antigua that can be derived from this project include efficient, quality optometrist services utilizing the efficiency of resources, new technology, and innovative strategies. Further, it was anticipated that the services offered by PVC would rival that of Cuba, Venezuela, and China.

To this end, this FGP has shown the need for project management plans and how they can guarantee project results, the general objective being:
To develop a project management plan for Paradise Vision Centre located in St. John's, Antigua, to be used as a guideline for the establishment of a world class eyecare service center.
The realization of this objective was achieved through the implementation of specific objectives, which were: To create a scope management plan to explicilty outline the work that will be undertaken to achieve the project's general objective. To develop a time management plan to create and manage project schedule and resources to ensure timely delivery of project deliverables. To create a cost management plan to describe how project funds will be sourced, managed and controlled, to ensure that the project is completed within the specified budget. To produce a quality management plan to describe the activities that will be undertaken to ensure delivery of quality project outputs and to ensure stakeholders expectations are met.To develop a risk management plan to identify, manage, monitor and control project risks to ensure successful delivery of project objectives within budget, scope and schedule.

The research methods used to collect, analyze, and present the data included analytical and qualitative techniques. The main source of information and guidance stemmed from A Guide to the Project Management Body of Knowledge (PMBOK® Guide) Fifth Edition, PVC business plan and many interviews and meetings with Ms. Fabian. The information was then analyzed and used to develop this document.

The tools and techniques used to create the project management plan were based on best practices as set out in the PMBOK® Guide fifth edition. Social responsibility policies, local economic conditions and environmental plans were important factors to create the plan that included Corporate and Social Responsibility (CSR) recommendations and thereby emphasising the need for CSR to be ingrained in the culture of PVC. Reference was made to the Sustainable Development Goals (SDGs) that this project would support.

The results showed that quality will be the catalyst for PVC's success and this was emphasised with the focus on the need for continuous customer service training. It is important that PVC's patients are satisfied and thereby maintaining their loyalty to the PVC's brand. Compliance to quality standards and guidelines must become the responsibility of all staff members. Further, PVC must continue to develop its brand to gain market share, and eventually becoming the number one source for quality eyecare services. The Balanced Score Card (BSC) will aide in this.

The main recommendation for PVC's project management team was based on adherence to the project management plan. Consideration was also given to the knowledge and expertise of the project manager, therefore, it was recommended that the project manager has a thorough understanding of the project management plan, and the importance of communication and an effective change mangement process.

The general objective of this project focused on the creation of a project management plan for PVC to be used as a guideline for the establishment of a world class eyecare service center. This objective was achieved using PMI best practices as outlined in the PMBOK® fifth edition.

1 INTRODUCTION

1.1. Background

Paradise Vision Center (PVC) is located in Antigua, which is the larger and most developed of the twin-island states of Antigua and Barbuda. The English speaking twin islands are located in the Windward Islands and are said to be approximately 39 miles apart if accessed by airplane ("Distance from," n.d."). Antigua is 108 square miles in size with a growing population of just about 102,417, this according to ("Antigua and Barbuda," n.d.").

PVC is an Entrepreneur venture undertaken by Jamella Fabian, a vibrant young female Antiguan who is passionate about life and health, especially eye care. She completed optometry studies in Cuba, and upon her return to Antigua; she further enhanced her knowledge and skills by working alongside Antigua's best ophthalmologist and optometrists. This motivated her to embark upon the journey of implementing PVC. The establishment will be located in the capital, St. John's, this centralized location will allow for easy access to the business by potential patients. Ms. Fabian strongly believes in giving patients the best care possible.

PVC, under the guidance of Ms. Fabian, will specialize in:

- Comprehensive eye exams
- Glaucoma screening
- Refractions
- Diabetic retinopathy screening
- Cataract screening
- Pterygium

This research is proposing that a project management plan be created and used to guide the implementation of PVC. The project management plan will consist of all supplementary plans needed for the creation of a project management plan which adheres to Project Management Institute (PMI) best practices.

1.2. Statement of the problem

Many aspiring entrepreneurs do not know or consider the need for proper planning when undertaking entrepreneur ventures. Instead, most persons who aspire to own

and operate a business are focused on obtaining business plans since this can be seen as the gateway to receive a loan from a financial lending institution. However, the business plan may provide details on the business objective and financial needs, but it does not provide details on how the venture will be initiated, planned, executed, monitored and controlled. The lack of proper planning has led to the failure of many ventures, and in some cases, abandonment even before they are established. The utilization of project management professionals from the project's conception and the creation of a project management plan can guide entrepreneur undertakings, such as PVC, towards a successful business implementation.

This Final Graduation Project (FGP) will show the need for creating and executing a project management plan for ventures such as this.

1.3.   Purpose

The purpose of this study is to show the importance and need for project management plans. Proper planning is essential for the establishment of a business, as such, this FGP will present a project management plan, which will be used to guide PVC towards a successful implementation and the realization of its objectives. PMI (2013), states that a project management plan "defines how the project is executed, monitored and controlled and closed" (p.74). Projects fail for many reasons; this, according to Lim (2016), can be attributed to factors such as poor planning, lack of documentation and incompetent leadership. In order to ensure the successful implementation of PVC, this project proposes that a project management plan is created and used to guide the establishment of PVC. The effectiveness of the project management plan will be supported by the creation of the scope, time, cost, quality, and risk management plans.

1.4.   General objective

To develop a project management plan for Paradise Vision Centre located in St. John's, Antigua, to be used as a guideline for the establishment of a world class eyecare service center.

1.5.   Specific objectives

1. To create a scope management plan to explicilty outline the work that will be undertaken to achieve the overall project objective.

2. To develop a time managemnt plan to create and manage project schedule and resources to ensure timely delivery of project deliverables.

3. To create a cost management plan to describe how project funds will be sourced, managed and controlled, to ensure that the project is completed within the specified budget.

4. To produce a quality management plan to describe the activities that will be undertaken to ensure delivery of quality project outputs and to ensure stakeholders expectations are met.

5. To develop a risk management plan to identify, manage, monitor and control project risks to ensure successful delivery of project objectives within budget, scope and schedule.

2 THEORETICAL FRAMEWORK

2.1   Company/Enterprise framework

2.1.1   Company/Enterprise background

Optometry is a medical profession focused on providing eye care through comprehensive eye examinations. Healthcare professionals who conduct optometry services are referred to as Optometrists. According to American Association for Pediatric Ophthalmology and Strabismus (2011), "Optometrists are healthcare professionals who provide primary vision care ranging from sight testing and correction to the diagnosis, treatment, and management of vision changes." An optometrist must be licensed to practice optometry and can only perform " eye exams and vision tests, prescribing and dispensing corrective lenses, detecting certain eye abnormalities, and prescribing medications for certain eye diseases" (American Association for Pediatric Ophthalmology and Strabismus, 2011). Services offered by an optometrist are usually for common eye problems such as dry eyes, eye infections and chronic eye diseases such as glaucoma and cataract. However, should the patient require advanced medical treatment, the optometrist will refer the patient to an ophthalmologist (The College of Optometrists, 2017).

PVC was conceptualized and designed by optometrist Jamella Fabian. Ms. Fabian's passion for eye care grew out of her own struggles, having been born cross-eyed (Strabismus); this motivated her - at a very early age- to pursue studies in optometry. Through the Government of Antigua and Barbuda, she was awarded a scholarship to study optometry in Cuba. After completing her studies and returning to Antigua she capitalized on the knowledge and experience gained while performing Clinicals in Cuba's health care system, by working alongside some of Antigua's most competent ophthalmologists and optometrists. Some of these working experiences were at senior and managerial level.

Ms. Fabian speaks fluent Spanish and this afforded her the opportunity to work in the hotel industry via a mobile eye care company who offers concierge services to hotels, homes, and businesses. Before pursuing entrepreneurship, she wanted to ensure that she gave back to her country and community by volunteering with community groups, schools, churches, clubs and organizations, to provide free screenings. Ms. Fabian has a long-standing partnership with the Ministry of Youth Affairs where she provides free eye screening at their community events. In addition to this, she volunteers her services in nearby islands such as Barbuda and Montserrat.

Ms. Fabian is passionate about her career and she appreciates the service-oriented aspect of eye care, which she attributes to her humble experience in Cuba. This she believes allows health care professionals to truly connect with their patients and provide genuine care.

2.1.2 Mission and vision statements

Mission Statement:

Paradise Vision Center prides itself on providing quality vision care to all patients in need. Detecting vision defects and correcting them is our priority; while providing the patients with unique style and fashion that stands out from our competitors.

Vision Statement:

Our vision is to be the best in providing optical care to our patients, by improving their vision, providing high quality unique eyewear and polarized sunglasses.

2.1.3 Organizational structure

The organizational structure of a business is dependent on factors such as the industry, size, the services or products being offered, and the roles and responsibilities of its employees (Sullivan, 2017). PVC is a small company and intends to operate under a basic organizational structure with all decision making and communication being channeled through the managing director. Currently,

PVC plans to begin operating with an initial staff complement of four (4) persons. Two (2) full-time staff members, who are the managing director/optometrist and the secretary. The two (2) part-time staff members are the maintenance/technician and the cleaner. It is hoped that once the company establishes its presence in the market and achieves its targeted market share, as well as its projected revenue during this time, that the staff complement will be increased.

Figure 1 below, depicts the company's current organizational chart. The company is managed and operated by Ms. Jamella Fabian. All staff will report directly to Ms. Fabian, with the exception of the cleaner who will report to the secretary.
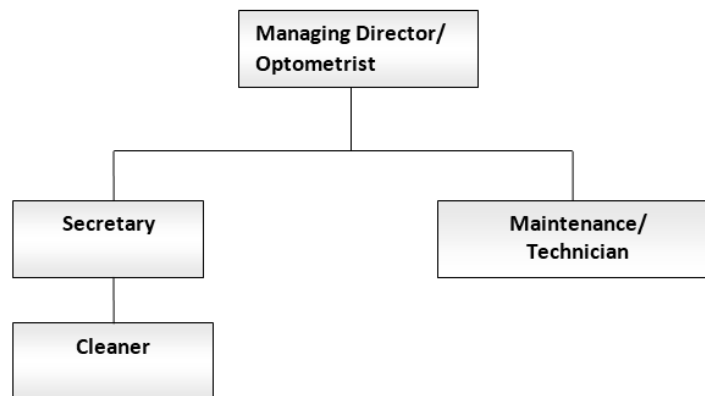
Figure 1 Organizational Chart (Source: compiled by Wakeyshia Hampson, Author)

2.1.4 Products offered

Products:

- Completed eyewear
- Contact Lenses
- Polarized Sunglasses
- Glasses Accessories (lens cases and glasses cord)
- Eye drops

PVC main services will be to:

- Examine eyes for health and vision problems

- Diagnose and give referrals to treat eye disease
- Detect and identify general health problems manifested in the eye (i.e. diabetes, high blood pressure, sickle cell anemia, etc.)
- Detect and give referrals for glaucoma, cataract, and pterygium
- Prescribe glasses or other devices for specialized vision needs.
- Evaluate eye coordination for reading and provide vision therapy
- Set up industrial vision programs vision screening Work with schools and community groups on vision screening, career days, programs on eye care, etc.

2.2 Project Management concepts

2.2.1 Project

The word project appears to be mostly associated with business ventures, however this not always the case. A project should not be seen as strictly a business venture, in fact, it is "an undertaking that creates an avenue for businesses and individuals to achieve a goal" (MyMG Team, 2010). A Project can be as simple as renovating a room in your house or as complex as starting a new business. It is this disparity, which creates varying definitions of what a project is.

Oxford dictionary defines a project as "An individual or collaborative enterprise that is carefully planned to achieve a particular aim." While A Guide to the Project Management Body of Knowledge (PMBOK Guide) Fifth Edition (2013), states that a project is "a temporary endeavor undertaken to create a unique product, service or result" (p.3). Tello (2014) also expresses this sentiment in stating, "temporary does not necessarily mean the duration of the project is short. It refers to the project's engagement and its longevity." Another interesting definition is that of the International Project Management Association (IPMA) who defines a project as, "a time and cost-constrained operation to realize a set of defined deliverables (the scope to fulfill the project's objectives) up to quality standards and requirements."

Regardless of the definition of a project, all projects share one overall objective and that is achieving a unique product or result. However, the achievement of this objective will face constraints such as schedule, scope, cost, and quality. The schedule of a project is quite important, as it is through this that projects achieve their product. Added to that, is the inclusion of milestones, which are used to monitor project progress. These milestones ensure that the project's overall objective is achieved within scope, schedule, budget, and quality. Further, although projects are said to be unique in nature, this uniqueness is not only based on the overall results of the project but includes a combination of the aforementioned constraints, ("What is a project?" n.d"). The need for projects to have a clearly defined scope, budget, schedule, and quality can never be overstated.

For the purpose of the FGP, this document speaks to the creation of a project management plan for PVC. PVC, like many other entrepreneur ventures, may not know or appreciate the need for proper project planning and the utilization of a project management plan to achieve the desired project deliverables. There are many benefits to be derived from the creation of a project management plan, among these – and critical to project success- are the early identification, mitigation and elimination of project risks. Projects are fraught with uncertainty, even when planned; therefore, proper planning and management must be utilized to achieve a successful project outcome.

2.2.2 Project management

To achieve project success, it is critical that effective project management is incorporated into projects. PMI (2013) defines project management as "the application of knowledge, skills, tools and techniques to project activities to meet the project requirements" (p.47). The application of these knowledge, skills, tools, and techniques requires an adept project manager possessing the interpersonal skills necessary to effectively manage the project. Additionally, the project manager must also be able to skillfully apply the five (5) process groups and ten (10) knowledge areas which are the backbone of successful project management. Tello

(2014) writes that "Project management is accomplished through the appropriate application and integration of the 47 logically grouped project management processes, which are categorized into five Process Groups". He further lists the process groups as initiating, planning, executing, monitoring and controlling, and closing. The process groups and knowledge areas will be discussed in depth later on in this paper.

Project management is a discipline that utilizes a combination of both technical and soft skills; both of which are equally important factors in project management. Emphasis should be placed on communication, as this is vital for conflict resolution and strong leadership, which are essential contributing factors needed for successful management. Communication is a critical tool used to resolve interpersonal conflicts, acquire and allocate resources, as well as monitoring and controlling stakeholders' expectations, while ensuring alignment with project objectives (Harned, 2015).

Additionally, conflicts can cripple projects and therefore should be resolved immediately, as these can negatively affect morale, productivity and by large the successful outcome of the project. To achieve effective communication, project managers should ensure the creation and implementation of a communications management plan. This will ensure that key stakeholders are kept informed of project progress and deliverables are on track as per project schedule. Moreover, it also allows for benchmarking to determine whether current project status is on par with planned project status.

In line with the FGP, a project management plan will be created for PVC once the project charter has been approved. The creation of this project management plan will be treated as a project.

2.2.3 Project life cycle

The project life cycle refers to the path a project takes in order to accomplish its objectives. PMI (2013) defines a project life cycle as, "the series of phases that a project passes through from its initiation to its closure" (p.554). PMI points out that the phases are generally conducted in sequential order and are restricted by time, cost and scope. Although projects vary in size and complexity, all projects will go through, the project life cycle. PMI (2013) emphasizes that "the project life cycle should not be confused with the process groups" (p.51). However, they do interact with the process groups and will be engaged in every phase of the project lifecycle, Figure 2 below, shows a depiction of this.
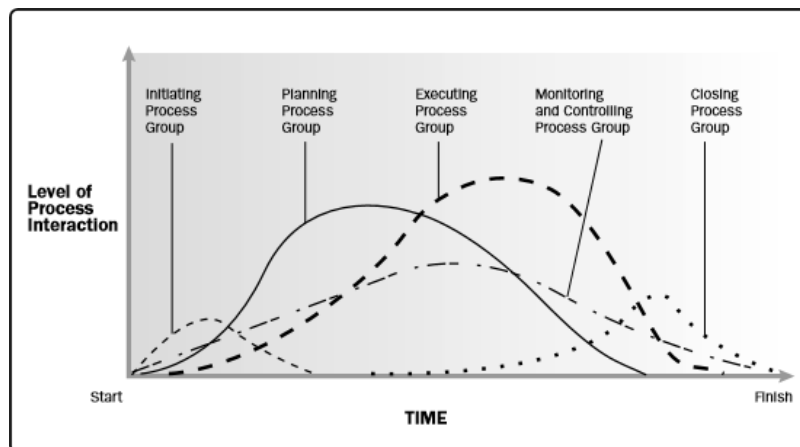
Figure 2 Interaction of the process groups at different phases (Source: PMI 2013, p.419)

The project life cycle focuses on answering the question, "what to do to get the work done?" (Lee, 2017) what needs to be done may differ based on the industry and nature of the project. However, according to PMI (2013) "the four basic characteristics of the project life cycle are: Starting the project, Organizing and preparing, carrying out the project work, and Closing the project" (p. 39). Figure 3 below provides a visual illustration of the project life cycle.
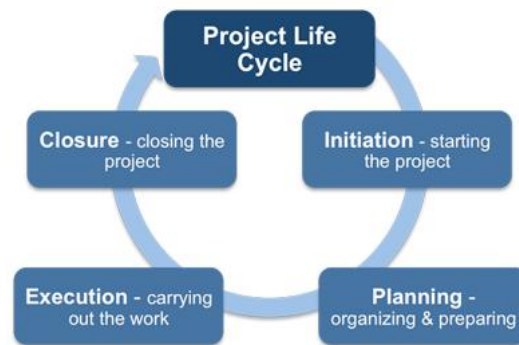
Figure 3 Project Life Cycle (source : http://www.free-management-ebooks.com/faqpm/principles-08.htm)

The project life cycle plays an important role in project management. It is used to ensure that project resources are adequately utilized and the right work is being conducted at the right time in order to achieve project objectives (Watt, n.d). With this in mind, all aspects of the project life cycle are considered critical, equally important and interdependent on each other. Further, taking into consideration the progressively elaborate nature of projects, at each phase of the life cycle challenges will be encountered and must be addressed to secure the best interest of the project objective, while at the same time staying within the realm of the project life cycle.

The project life cycle should not be confused with the product life cycle, as the project life cycle takes into account the project and the product life cycle considers the end product or results generated from the project. This FGP will consider the project life cycle, which are the stages that will be utilized to achieve the final results of the project.

2.2.4 Project management processes

PMI (2013) states that a process is "a set of interrelated actions and activities performed to create a pre-specified product, service or result" (p.47). This definition holds true to provide an image of how the project management processes interact "to ensure the effective flow of the project throughout its life cycle" (PMI, 2013,

p.47). The PMBOK© goes on to describe the relationship of the project management process as it relates to the "integration between the processes, their interactions, and the purpose they serve" (p. 48). There are five (5) process groups and these are referred to as project management process groups, this is illustrated in figure 4. The processes along with their purpose -as discussed in PMI (2013)- and how they interact with the project are as follows:

- Initiating – the concept of the product is defined and the overall objective and expectations are documented, in the project charter. The project manager will be selected at this phase as well.

- Planning – this is an extremely delicate stage, where the documented project plan, stipulating how the project will be executed is created, and as the project progresses changes will be made to this document.

- Executing – The work defined in the project management plan - created during the planning phase - will be carried out during the process.

- Monitoring and controlling – this process takes place during the life of the project. All activities are monitored and controlled to ensure adherence to project scope, schedule, cost, and quality. This process also ensures that stakeholders expectations are kept in line with project objectives.

- Closing – processes related to the acceptance of the final end project are conducted during this process. This signals the end or completion of the project.
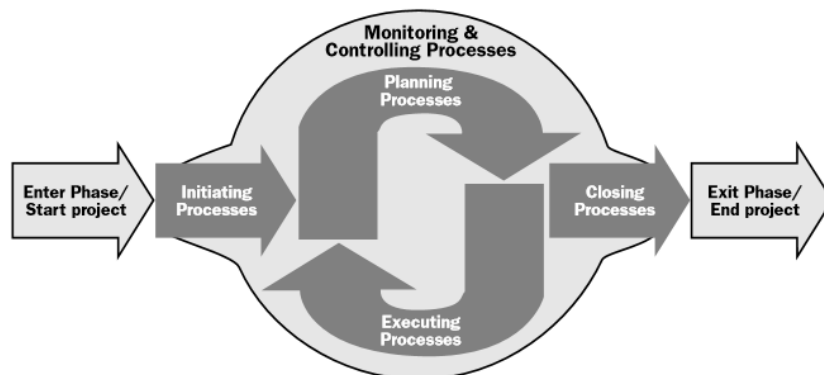
Figure 4 Project Management Process Groups (source: PMI 2013, p. 50)

Only the initiating and planning processes will be used to develop the project management plan for PVC, this is due to time constraints of the FGP. The project management plan will be compiled using PMI best practices to include the complementary management plans mentioned in the project charter (see appendix 1).

Figure 5 below, provides a graphic of the project management plan development process.
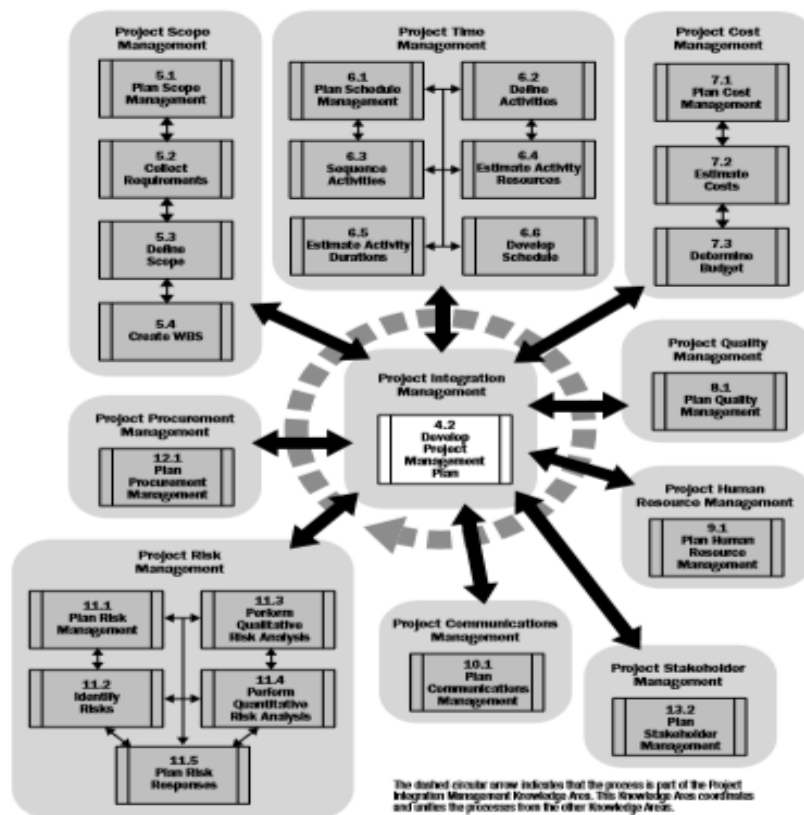
Figure 5 Project Management Plan development process (Source: PMI 2013, p.428)

2.2.5 Project management knowledge areas

There are 12 knowledge areas associated with project management and these knowledge areas interact with the five (5) project management process groups, which are essential for project success. These knowledge areas according to PMI (2013) "represents a complete set of concepts, terms, and activities that make up a

professional field, project management field, or are of specialization" (p. 59). The knowledge areas as pointed out by PMI (2013) are project scope management, project time management, project cost management, project quality management, and project risk management.

For achieving the overall objective of the FGP and at the same time producing a quality deliverable, the project management plan for PVC will incorporate all of the previously mentioned knowledge areas.

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

2.3.1 Corporate Social Responsibility

Businesses have become increasingly aware of their impact on society and the environment and, no longer can they be simply concerned about their profit margin. Companies have now realized that they must be socially responsible. In essence, this means that they must be committed to the welfare of society in order to continue operating effectively. This responsibility, according to the International Organization of Standardization(ISO) is referred to as CSR and is defined – by the ISO - as the responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behavior that:

- Contributes to sustainable development, including the health and the welfare of society
- Takes into account the expectations of stakeholders
- Complices with applicable law and consistent with international norms of behavior, and
- Is integrated throughout the organization and practised in its relationships

As project managers, we are responsible for understanding the above definition of CSR and must become familiar with the CSR policies of the project organization. Moreover, we must seek to find out the CSR policies of project stakeholders to

ensure that these policies are in line with the business and the applicable law, and is consistent with international norms of behavior. It is our responsibility as project managers to ensure that the project lives up to its social responsibilities.

PVC will incorporate CSR best practices into its daily culture taking into consideration the benefits this will bring to the business and society on a whole. The inclusion of CSR will be the responsibility of the project manager who will provide the project sponsor with knowledge of CSR and the importance of the same. Recommendations will also be made to provide the sponsor with guidance on how to implement CSR into PVC's culture. The business will seek to integrate the applicable United Nations Sustainable Development Goals (see figure 6) into the project.

Figure 6 United Nations Sustainable Development Goals (Source: http://www.un.org/sustainabledevelopment/sustainable-development-goals/)

3. METHODOLOGICAL FRAMEWORK

3.1 Information sources

A study conducted by Adio, Abu, Yusuf and Nansoh (2016) defined information sources as "various means by which information is recorded for use by an individual and organization" (p. 2). The authors went on to state that sources of information are encountered in our daily lives and include, "radio, television, friends and colleagues, newspapers and magazines, books/leaflets, phones, libraries and institutes" (Adio et al., 2016, p.2). Additionally, Adio et al. (2016) went on to provide further examples in stating that information sources can be derived through the "observation of people organizations, speeches, documents, picture and art work"(p. 2).

3.1.1 Primary sources

Primary sources of information as defined by Bell (2010) are "those which came into existence in the period under research" (p.128). In this case, the person providing the information would have had firsthand knowledge of the events. Primary sources can include recordings, artifacts, letters, and interviews, just to name a few.

For the purpose of this FGP the primary sources of information that will be used are interviews and meetings, this information is summarized in Chart 1 below.

3.1.2 Secondary sources

Secondary sources as defined by Bell (2010) are "interpretations of events of that period based on primary sources" (p. 128). Unlike primary sources, the person providing the information did not have direct knowledge of the events. Secondary sources include textbooks and encyclopedias.

For the development of the FGP secondary sources such as the internet, PMI database, PMBOK ® Guide will be used. A summary of the secondary sources that will be used can be found in Chart 1 below.

Chart 1 Information Sources (Source: Wakeyshia Hampson, Author, December 2017)

Objective	Information Sources	
	Primary	**Secondary**
To create a scope management plan to define what the project will deliver.	Interviews and meetings with sponsor.	PVC business plan, PMI database, PMBOK ® Guide, the internet, books, articles, periodicals, journals.
To develop a time management plan to manage project schedule and resources, to ensure timely delivery of project deliverables.	Interviews and meetings with sponsor.	PVC business plan, PMI database, PMBOK ® Guide, the internet, books, articles, periodicals, journals.
To create a cost management plan to document the policies and procedures outlining how project funds will be manged and controlled.	Interviews and meetings with sponsor.	PVC business plan, PMI database, PMBOK ® Guide, the internet, books, articles, periodicals, journals.
To produce a quality management plan to ensure delivery of quality project outputs and to ensure stakeholders expectations are met.	Interviews and meetings with sponsor.	PVC business plan, PMI database, PMBOK ® Guide, the internet, books, articles, periodicals, journals.
To generate a risk management plan to	Interviews and meetings with sponsor.	PVC business plan, PMI database, PMBOK ®

identify, manage, monitor and control project risks to ensure successful delivery of project objectives within time, scope and schedule		Guide, the internet, books, articles, periodicals, journals.

3.2 Research methods

Research entails the "collection, selection, analysis and presentation of data" (Blaxter, Hughes & Tight, 2011, p. 55). While methods is defined as "to related principally to the tools of data collection or analysis: techniques such as questionnaires and interviews" (Blaxter et.al., 2011, p. 59). Based on these definitions, it could be concluded that research methods is the technique used to collect information, which is then used to make informed decisions. A summary of the research methods used in this FGP can be found in chart 2 below.

For the completion of the FGP the following research methods will be used.

3.2.1 Analytical method

Analytical research is the "in-depth study and evaluation of available information" (Seemant, n.d, slide 5). This type of research involves "interpreting relationships, by analyzing the facts or information already available" (Seemant, n.d, slide 5.). Chart 2 shows how this method of research will be used to produce this FGP.

3.2.2 Qualitative method

The qualitative research method is "a formal method of inquiry, with its emphasis on the individual and the role that context and relationships play in forming thoughts and behavior, is at the core of what it means to conduct research with human subject" (Roller, Lavraks, 2015, p. 1). For the purpose of the FGP the qualitative method will be used to gather information that will aid the creation and development of the knowledge areas mentioned in the project charter.

Chart 2 Research Methods (Source: Wakeyshia Hampson, Author, December 2017)

Objective	Research Methods	
	Analytical	**Qualitative**
To create a scope management plan to define what the project will deliver.	This method will utilize the information received from the information sources mentioned in chart 1 objective 2. This information will form the basis for the creation of the scope management plan.	This method will be used to gather information to be used for the creation of the scope management plan. It will further provide knowledge on how and why decisions will be made about the scope management plan.
To develop a time management plan to manage project schedule and resources, to ensure timely delivery of project deliverables.	This method will utilize the information received from the information sources mentioned in chart 1 objective 3. This information will form the basis for the creation of the time management plan.	This method will be used to gather information to be used for the creation of the time management plan. It will further provide knowledge on how and why decisions will be made about the time management plan.
To create a cost management plan to document the policies and procedures outlining how project funds will be manged and controlled.	This method will utilize the information received from the information sources mentioned in chart 1 objective 4. This information will provide the guideline for the	This method will be used to gather information to be used for the creation of the cost management plan. It will further provide knowledge on how and why decisions

	creation of the cost management plan.	will be made about the cost management plan.
To produce a quality management plan to ensure delivery of quality project outputs and to ensure stakeholders expectations are met.	This method will utilize the information received from the information sources mentioned in chart 1 objective 5. This information will aide decision making for the creation of the quality management plan.	This method will be used to gather information to be used for the creation of the quality management plan. It will further provide knowledge on how and why decisions will be made about the quality management plan.
To generate a risk management plan to identify, manage, monitor and control project risks to ensure successful delivery of project objectives within time, scope and schedule	This method will utilize the information received from the information sources mentioned in chart 1 objective 8. This information will aide decision making for the creation of the risk management plan.	This method will be used to gather information to be used for the creation of the risk management plan. It will further provide knowledge on how and why decisions will be made about the risk management plan.

3.3 Tools

According to PMI (2013) a tool is defined as "something tangible, such as a template or software program, used in performing an activity to produce a product or a result" (p. 565).

The following are the tools that will be used in the FGP; these tools are further summarized in chart 3 below.

a) Activity list template -   captures the activities authorized for the project.

b) Cost management plan template - used to develop the cost management plan that will be used to manage the projects budget.

c) Cost base line template – used to monitor and control the overall cost of the project.

d) Check Sheets –collects data for analyzing and decision making purposes.

e) Microsoft Visio Professional 2016 – used for the creation of flowcharts, organizational charts, context diagrams and or decision making diagrams.

f) Project charter template – provides the outline for the development of the project charter.

g) Project management template – used to guide the creation of the FGP.

h) Probability and impact matrix – prioritizing of risks will be done using this tool.

i) Quality management template - used to generate the guidelines for quality management.

j) Responsibility Assignment Matrix - identifies team members and their roles and responsibilities.

k) Requirements traceability matrix – used to link and keep track of work requirements against what is actually produced.

l) Risk register template- identified risks will be documented here.

m) Risk management plan template – Risk assessment, classification and mitigating action will be documented here.

n) Risk probability and impact assessment template – the likelihood of risks occurring will be documented here.

o) Schedule management plan template – utilized to define the project schedule and guide project implementation.

Chart 3 Tools (Source: Wakeyshia Hampson, Author, December 2017)

Objectives	Tools
To create a scope management plan to define what the project will deliver.	Microsoft Word 2010, requirements traceability matrix, project management software.
To develop a time management plan to manage project schedule and resources, to ensure timely delivery of project deliverables.	Schedule management plan template, Microsoft Project 2016, Activity list template, Microsoft Word 2010, project management software.
To create a cost management plan to document the policies and procedures outlining how project funds will be manged and controlled.	Project management software, cost management plan template, cost base line template.
To produce a quality management plan to ensure delivery of quality project outputs and to ensure stakeholders expectations are met.	Check sheets, Microsoft Word 2010, project management software, and quality management template.
To generate a risk management plan to identify, manage, monitor and control project risks to ensure successful delivery of project objectives within time, scope and schedule	Risk probability and impact assessment template, probability and impact matrix, risk register template, Risk management plan template.

3.4 Assumptions and constraints

PMI (2013) defines assumptions as "a factor in the planning process that is considered to be true, real, or certain, without proof or demonstration" (p.124). PMI (2013) also defines a constraint as "a limiting factor that affects the execution of a projects process" (p. 124). The assumptions and constraints considered for this FGP are summarized in chart 4 below.

Chart 4 Assumptions and constraints (Source: Wakeyshia Hampson, Author, December 2017)

Objectives	Assumptions	Constraints
To create a scope management plan to define what the project will deliver.	• It is assumed that the sponsor will disclose all pertinent information need for the creation of the scope management plan. • It is assumed that the project scope will not change. • It is assumed that all tasks needed to complete the project will be identified in the scope management plan.	• Sponsor's availability for sharing of information needed for creation this plan. • Time allocated for the creation of this plan.

Objectives	Assumptions	Constraints
To develop a time management plan to manage project schedule and resources, to ensure timely delivery of project deliverables.	• It is assumed that the plan will be completed within the time allotted. • It is assumed that the schedule crafted in this plan will be enough time to complete the tasks outline in the scope management plan.	• Time allotted for the creation of the plan.
To create a cost management plan to document the policies and procedures outlining how project funds will be manged and controlled.	• It is assumed that the funds will be made available. • It is assumed that the allotted funds will be enough to complete project objectives.	• Budget approved for the project.
To produce a quality management plan to ensure delivery of quality project outputs and to ensure stakeholders expectations are met.	• It is assumed that the quality management plan will outline the quality assurance processes. • It is assumed that the business will adhere to the stipulated quality standards.	• The cost of quality. • The knowledge and competency of staff members. • The type and kind of services and products.

Objectives	Assumptions	Constraints
To generate a risk management plan to identify, manage, monitor and control project risks to ensure successful delivery of project objectives within time, scope and schedule	• It is assumed that risk all risks associated with the project will be identified. • It is assumed that a risk response action plan will be implemented to avoid, mitigate or eliminate identified risks. • It is assumed that the risk management plan will guide the projects risk management process.	• Risks need to be identified early in the project. • The management reserve allocated for unknown unknowns. • The contingency reserve allocated for known unknowns.

3.5 Deliverables

A deliverable is defined as "any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project" (PMI, 2013, p. 537). Chart 5 below, shows a summary of the deliverables for this FGP.

Chart 5 Deliverables (Source: Wakeyshia Hampson, Author, December 2017)

Objectives	Deliverables
To create a scope management plan to define what the project will deliver.	• Scope management plan – defines how the project scope will be defined, developed, monitored and controlled. • Requirements documentation - shows how defined requirements are in line with the business needs for the project. • Requirements management plan- describes how the requirements will analyzed, documented and managed. • Requirements traceability matrix – links requirements from their origin to deliverables that satisfies them.
To develop a time management plan to manage project schedule and resources, to ensure timely delivery of project deliverables.	• Schedule management plan – defines how schedule details will be managed and controlled. • Activity list – shows the activities required to execute the project. • Activity resource requirements – defines the resources needed to execute the activity.

	- Activity duration estimates – defines the time needed to conduct the activity.
To create a cost management plan to document the policies and procedures outlining how project funds will be manged and controlled.	- Cost management plan – defines the cost associated with project completion. - Activity cost estimates - defines cost associated with project activities.
To produce a quality management plan to ensure delivery of quality project outputs and to ensure stakeholders expectations are met.	- Quality management plan – stipulated the quality standards of the project. - Process improvement plan – d efines the steps needed to identify activities that enhance the value of deliverables.
To generate a risk management plan to identify, manage, monitor and control project risks to ensure successful delivery of project objectives within time, scope and schedule	- Risk management plan – shows how project risks will be handled. - Risk register – lists identified project risks.

4 RESULTS

4.1.Project Scope Management

4.1.1 Introduction

The scope management plan is a document that documents "how the project scope will be defined, validated, and controlled" (PMI 2013, p107). It also documents the roles and responsibilities of the project team. The purpose of this scope management plan is to ensure that only work required for the successful establishment of PVC will be undertaken.

The scope management plan will require the gathering of information from the project sponsor, and this will be achieved using tools and techniques such as, interviews, meetings, expert judgement, the business plan and the project the charter. Additionally, information gathered will be used to create the requirements management plan and the requirements traceability matrix, this can be found in chart 7 below.

4.1.2 Requirements Management Plan

Overview

The main objective of the requirements management plan is to specify the guidelines for the processes that will be used for capturing, managing, and documenting project requirements needed to develop a project managment plan aimed at establishing PVC.

PVC will strive to provide a world class eyecare service center by providing the best quality vision care with exceptional product and servicing care to its patients. This will be accomplished through the used of local competitive benchmarking, taking into consideration the competition's performance, quality of eye care services offered, quality of customer service, processes and overall operation.

This plan is intended to be used as a framework for the requirements gathering and management process and will utilize the following processes (Project Management, 2013):

- Collection- gathering the basic needs of stakeholders.
- Categorization – categorizing those needs.
- Prioritization – prioritizing those needs and identifying "must haves".
- Tracing – tracking how those needs are addressed throughout the life of the Project.
- Change Management – the process by which we will change our requirements as needed.
- Verification – how we will verify that requirements have been met.

4.1.2.1 Requirements Collection

This process entailed determining, documenting and managing the sponsor's needs as it pertains to achieving the overall project objectives for PVC. Consideration was also given to local regulatory requirements, and industry standards governing the same. Information was collected using interviews, meetings, emails and PVC's business plan.

Through the process it was also observed that not all of the needs identified were actual requirements. Nonetheless, they were identified, understood and documented. Chart 6 depicts the requirements documentation process.

Chart 6 Requirements Documentation (Source: Wakeyshia Hampson, Author, March 2018)

Requirement name	Description	Stakeholder	Importance	Acceptance criteria
To provide quality patient service	PVC's main aim is to provide world class eye care	Sponsor	High	Customer service training plan

	services and this can be achieved through quality customer service that embodies industry standards best practices			and the creation of a customer satisfaction survey scorecard
To realize a profit between 2% and 5% within the second year of operating	This can be accomplished through aggressive marketing. Markup/cost plus pricing will be used to make sure that the products and services are profitable for the business as the goal is to make a profit within 24 months of operating.	Sponsor	Medium	Creation of an aggressive marketing plan.
To achieve significant market presence and growth within the first 2 years of operating	PVC aims to own a large market share in the Optometry Industry. In light of this PVC will employ many strategies, to aid in strategically entering the market, and maintaining market presence.	Sponsor	High	Market research will be conducted to identify, understand and meet the needs of the target market

To determine how to achieve, retain and improve customer satisfaction	The brand of PVC will be built on the premisis of customer satisfaction. Methods will be put in place to test patients satisfaction and to identify ways of improving the product and services offered by PVC .	Sponsor	High	Creation of a customer satisfaction plan and surveys.
To identify staff training needs and create a plan to develop and improve needed skills.	PVC will focus on building its brand by training and developing employees to provide quality customer service to patients. Training will foucs on best practices and industry standards. All staff, including the sponsor will receive training. It is anticipated that refresher training will be conducted once yearly.	Sponsor	High	The creation of a training plan

4.1.2.2 Requirements Categorization

This process requires logically grouping requirements, the following categories were used:

Performance

This category focuses on staff performance and by extension the overall performance of PVC. In this category, emphasis was placed on training and developing employees, accentuating the benefits to be derived through work commitment.

1. Identify the need for continuous and development training through the use of a training plan (see appendix 4).
2. Establish a method for motivating and rewarding staff.

Quality

This category focuses on buidling a brand for PVC, and therefore patients satisfaction was at the core of the process. Quality was defined in terms of factors, metrics and criteria.

1. To provide the best quality vision care with exceptional product and servicing care to its patients.
2. To identify how to provide quality customer service and maintain customer satisfaction.

Operational

This category places emphasis on the daily operations of the business and takes into consideration how the business will function, the types of services and products offered as well as the equipment needed to meet client satisfaction and build the PVC brand. Corporate and Social Responsibility (CSR) will also be a factor and will be incorporated into the culture of PVC, ensuring sustainable practices are undertaken that positively impacts the economy, environment and society.

1. To identify the operational culture of PVC.
2. To identify the CSR knowledge and policies of PVC.

4.1.2.3 Requirements Prioritization

Requirements prioritization involves prioritizing requirements to minimize risk. It ensures that the most cifitical requirements are addressed immediately, and identifies requirements dependencies, if any. The approach used to prioritize dependencies was done in collaboration with the sponsor.

4.1.2.4 Requirements Traceability

For this category, a requirements traceability matrix was created to track identified requirements, the objectives they support and the part of the Work Breakdown Structure (WBS) where it is addressed. This helps in understanding how they are being addressed throughout the life of the project, and ensures that requirements authorized in the requirments documenatation are delivered as per specification. The requirements traceability matrix can be found in Chart 7.

The project manager will be responsible for tracking requirements and will inform the sponsor, within 24 hours, of any impact to project requirements based on current performance.

Chart 7 Requirements Traceability Matrix (Source: Wakeyshia Hampson, Author, March 2018)

Requirement	Priority	Category	Source	Related WBS Code
To provide quality patient service	High	Quality	Project Sponsor	1.1.3, 1.4.3, 1.4.4, 1.6.4
To realize a profit between 2% and 5% within the second year of operating	Medium	Performance	Project Sponsor	1.2.1, 1.2.2, 1.3.1, 1.3.2

Requirement	Priority	Category	Source	Related WBS Code
To achieve significant market presence and growth within the first 2 years of operating	High	Performance	Project Sponsor	1.1.1, 1.2.1, 1.2.2, 1.2.3
To determine how to achieve, retain and improve customer satisfaction	High	Operational	Project Sponsor	1.1.1, 1.2.1, 1.6.1, 1.6.2, 1.6.4
To identify staff training needs and create a plan to develop and improve needed skills.	High	Performance	Project Sponsor	1.4.1, 1.4.2, 1.4.3, 1.4.4

4.1.2.5 Change Management

A change management process will be used to define the procedure for controlling and managing scope changes. Any changes requested by the sponsor, must first be evaluated by the project manager to determine its impact on project constraints. Changes that are deemed feasible, once approved, must be documented by the project manager and the relevant documents updated to reflect the change. Figure 7 below, shows the change management process which will be used.
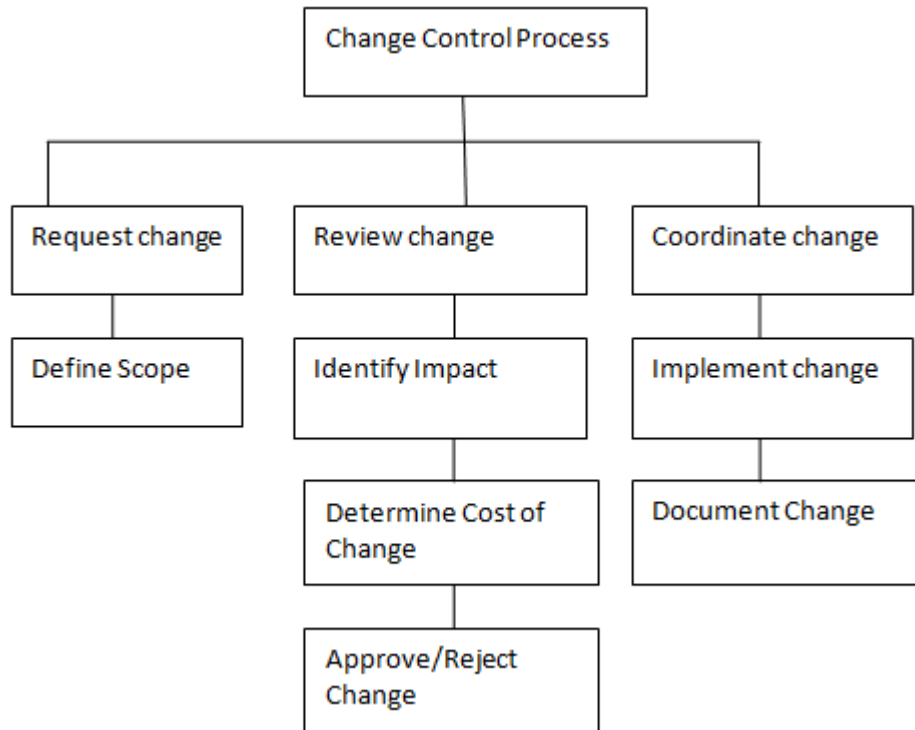
Figure 7 Change Management Control Process (Source: compiled by Wakeyshia Hampson, Author, March 2018)

4.1.2.6 Requirements Verification

Verification of requirements will be conducted to evaluate compliance with requirements documentation ensuring that the delivered output meets the specified requirements. To achieve this a requirements verification matrix will be created. Chart 8 illustrates this.

Chart 8 Requirements Verification Matrix (Source: Wakeyshia Hampson, Author, March 2018)

Requirement	Related WBS codes	Metric (What will be measured?)	Date (When it will be measured?)	Responsibility (Who will measure it?)	Achieved (How it will be measured?)
To provide quality patient	1.1.3, 1.4.3, 1.4.4,	The professionalism with which	Upon interaction with patients	Project sponsor	Customer satisfaction survey

service	1.6.4	patients are afforded care at PVC			scorecard, which should deliver 90% favourable results.
To realize a profit between 2% and 5% within the second year of operating	1.2.1, 1.2.2, 1.3.1, 1.3.2	The amount of revenue generated from services and product sales.	18 – 24 months into operating and annually thereafter.	Project sponsor	Taking into consideration key performance indicators such as gross profit margin, overead costs, and Return on Invested Capital.
To achieve significant market presence and growth within the first 2 years of operating	1.1.1, 1.2.1, 1.2.2, 1.2.3	The amount of patients who visit PVC and the popularity of PVC	Every fiscal year	Project sponsor	This will be achieved through an aggressive and continuous marketing campaign and sales promotions.
To determine how to achieve, retain and improve customer satisfaction	1.1.1, 1.2.1, 1.6.1, 1.6.2, 1.6.4	The level of customer satisfaction will be measured using customer surveys	Every six months	Project Manager and project sponsor	Creation of a quality customer service plan
To identify staff training needs and create a plan to develop and improve needed skills	1.4.1, 1.4.2, 1.4.3, 1.4.4	The level of competency of staff members along with an assement of knowledge as it pertains to the operations of PVC	Yearly evaluations will be done	Project Manager and project sponsor	Staff assessment and creation of an employee training plan

4.1.3 Scope Management Plan

The scope management plan will be used to communicate exactly what the project will deliver and provides guidance for the execution of this project. As such, this plan will speak to the scope management approach, roles and responsibilities, scope definiton, scope statetment, WBS and the WBS dictionary.   All project matters which relates to the project's scope should adhere to the scope management plan.

4.1.3.1 Scope Management Approach

Scope management will be the responsibility of the project manager, who will be responsible for effectively documenting and relaying the scope of work, the statement of work, and the work breakdown structure to the project sponsor. The project manager will liaison with the project sponsor to agree upon a framework for determining and measuring project scope. Changes, if any, required to the scope of the project can negatively impact project schedule, budget, quality, and the overall successful completion of the project. In an effort to guard against this, and the negative effects of scope creep, due consideration will be given to the implementation of a change control mechanism, thereby ensuring the successful completion of the project within constraints. Figure 8 below depicts the project scope managment process.
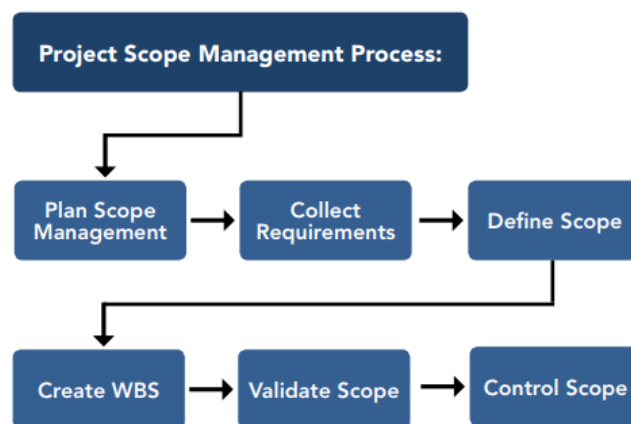
Figure 8 Scope Mangement Process (source:
https://edisciplinas.usp.br/pluginfile.php/3741148/mod_resource/content/1/Texto%20-
%20scope%20management..pdf)

4.1.3.2 Roles and Responsibilities

The importance of assigning roles and responsibilities in project management can never be overstated and is of vital importance for ensuring that activities conducted during the life of the project are well within project scope. Additionally, the identification of roles and responsibilities help to mitigate or eliminate the threat of scope creep. For this project, the project manager in collaboration with the sponsor will identify the roles and responsibilities necessary for achieving a successful project outcome. Chart 9 shows the assignment of roles and responsibilities to be undertaken for the scope management of this project.

Chart 9 Scope Management Responsibilities (Source: Wakeyshia Hampson, Author, March 2018)

Name	Role	Responsibilities
Jamella Fabian	Sponsor	• Establish project scope • Scope change requests • Approval/rejection of scope changes. • Accept project deliverables
Wakeyshia Hampson	Project Manager	• Establish project scope. • Adherence to project scope. • Scope monitoring and controlling. • Update project documents to reflect scope changes. • Measuring and verification of scope.

4.1.3.3 Scope Development

Sources

In order to develop and define the scope of this project, the project manager worked with the project sponsor and examined the documents listed below to arrive at the scope definition. The definition of the scope can be found in the scope definition section below.

- Project Charter
- Business plan
- Requirements documentation
- regulatory requirements, and industry standards

4.1.3.4 Requirements Gathering

This process is described and defined in the requirements management plan, and is supported by the requirements traceability matrix.

4.1.3.5 Scope Definition

The scope definition provides a common understanding of the project's scope to all stakeholders, and is made up of the project scope statement, work breakdown structure and the WBS dictionary. These will also form the scope baseline and will all be discussed subsequently.

Project Scope Statement

To develop a project management plan for Paradise Vision Centre located in St. John's, Antigua, to be used as a guideline for the establishment of a world class eye care service center. The plan will be complemented with a scope management plan, a time management plan, a cost management plan, a quality management plan, and a risk management plan.

Work Breakdown Structure

To ensure all of the work required to meet the project's objective, within scope, schedule and budget is effectively managed, the work will be subdivided into manageable sections. This will enable the project manager to efficiently manage the project's scope. Figure 9 depicts the WBS for this project.
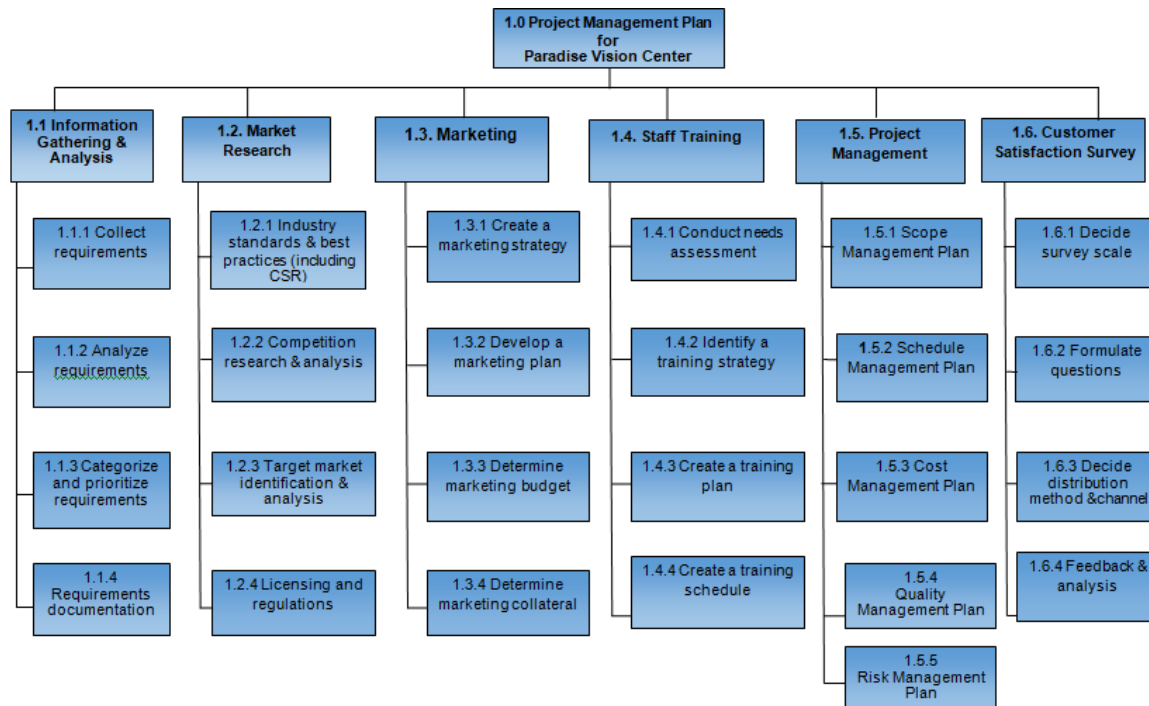
Figure 9 Project Management Plan WBS (Source: compiled by Wakeyshia Hampson, Author, March 2018)

WBS Dictionary

The WBS dictionary provides detailed information on the WBS components and includes information on work packages such as scheduling information, task information, estimated time for delivery, and dependencies, if any. The WBS dictionary is included below as Chart 10.

Chart 10 WBS Dictionary (Source: Wakeyshia Hampson, Author, March 2018)

WBS Number: 1.1	WBS Name: Information Gathering and Analysis	Work Package? □ Yes / ☒ No
WBS Predecessor(s): none	**WBS Description:** Research and analysis of information required to create an effective project management plan aligned with PMI best practices.	
Must-Start Date: 02.07.2018		
Must-Finish Date: 14.08.2018		
WBS Estimated Effort: 32 days	**Assumptions:** All the required information needed to develop the plan will be delivered on time as per schedule. The analysis will determine whether all the "needs" are indeed requirements.	
Assigned to: Project Manager	**Constraints:** Availability of project sponsor and project manager at the same time since there might be conflict in time availability due to personal schedules.	

WBS Number: 1.1.1	WBS Name: Collect requirements	Work Package? ☒ Yes / □ No
WBS Predecessor(s): none	**WBS Description:** The gathering of information using various tools and techniques such as interviews, emails, observations and meetings to ascertain the expectations of the stakeholder. It is important that these requirements are quantifiable, relevant and detailed.	
Must-Start Date: 02.07.2018		
Must-Finish Date: 13.07.2018		
WBS Estimated Effort: 10 days	**Assumptions:** All the required information needed to develop the plan will be cleary expressed and delivered on time.	
Assigned to: Project Manager	**Constraints:** Availability of project sponsor and project manager at the same time since there might be conflict in time availability due to personal schedules.	

WBS Number: 1.1.2	WBS Name: Analyze requirements	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): 1.1.1	**WBS Description:** The analysis will be conducted to ensure user requirements are clearly understood and inline with the project's overall objective.	
Must-Start Date: 16.07.2018		
Must-Finish Date: 27.07.2018		
WBS Estimated Effort: 10 days	**Assumptions:** This process will ensure that the final product meets the users expectations.	
Assigned to: Project Manager	**Constraints:** Stakeholders ability to clearly articulate needs.	

WBS Number: 1.1.3	WBS Name: Categorize and prioritize requirements	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): 1.1.2	**WBS Description:** Requirements will be catergorized by grouping them into functional and non-functiontional. A scale from 1 (very low) to 5 (very high) will be used to indicate how important the requirement is. Requirements with higher ranking will be prioritized. It is important to note that consideration will be given to those needs that can accomplish project goals in the least amount of time and with a minimal amount of resources.	
Must-Start Date: 30.07.2018		
Must-Finish Date: 07.08.2018		
WBS Estimated Effort: 7 days	**Assumptions:** It is assumed that stakeholders understand that not all requirements share the same level of importance/priority.	
Assigned to: Project Manager	**Constraints:** The prioritization of a requirement is dependent on its categorization and resource needs.	

WBS Number: 1.1.4	WBS Name: Requirements documentation	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): 1.1.3	**WBS Description:** Once the requirements have been gathered, analysed, categorized	

Must-Start Date: 08.08.2018	and prioritized, will be documented in detail and handed over to the sponsor for review and approval. The method and channel of documentation will be based on industry standards best practices. Chart 6 illustrates the requirements documentation.
Must-Finish Date 14.08.2018	
WBS Estimated Effort: 5 days	**Assumptions:** Requirements were properly gathered, analysed, categorized and prioritized, to reflect the needs of the stakeholder.
Assigned to: Project Manager	**Constraints:** Time frame given to complete this task.

WBS Number: 1.2	**WBS Name**: Market Research	**Work Package?** ☐ Yes / ☒ No
WBS Predecessor(s): none	**WBS Description:** Research will be conducted to gather information about patients needs and preferences as well as industry standards and best practices, in order to determine the best strategy for entering the market, gaining and maintain market presence and creating a competitive edge. This research will afford PVC the ability to generate its customer profile, and thereby ascertain its target market.	
Must-Start Date: 15.08.2018		
Must-Finish Date: 25.09.2018		
WBS Estimated Effort: 30 days	**Assumptions:** local Information will be available and readily accessible.	
Assigned to: Project Manager	**Constraints:** Project schedule, considering time given to complete research.	

WBS Number: 1.2.1	**WBS Name:** Industry standards & best practices (including CSR)	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): none	**WBS Description:** Research will focus on finding out best practices and industry standards in order to deliver world class eye care services. This is critical in helping to build the brand of PVC.	
Must-Start Date: 15.08.2018		
Must-Finish Date 23.08.2018		
WBS Estimated Effort: 7 days	**Assumptions:** Information will be readily available and can be implemented within	

Assigned to: Project Manager	project budget. **Constraints:** Time frame given to complete this task.

WBS Number: 1.2.2	**WBS Name:** Competition research & analysis	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): 1.2.1 **Must-Start Date:** 23.08.2018 **Must-Finish Date** 31.08.2018	**WBS Description:** PVC will focus on positioning the company's brand on gaining a competitive advantage. This is extremely important as an entry strategy into the optometry market, as there are several rivals. Understanding the competition through effective research will aide in PVC implementing strategies aimed at gaining the number one spot in the market.	
WBS Estimated Effort: 7 days	**Assumptions:** There are low barriers to enter the market. Information on competitors will be easily accessible.	
Assigned to: Project Manager	**Constraints:** Time frame given to complete this task.	

WBS Number: 1.2.3	**WBS Name:** Target market identification & analysis	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): 1.2.2 **Must-Start Date:** 03.09.2018 **Must-Finish Date** 13.09.2018	**WBS Description:** This work package will focus on business survival which is dependent on locating patients. A target market analysis will be conducted to identify the type of patients that PVC will market and sell to. The analysis wil take into consideration the five W's and H of PVC's potential patients: who, what, when, where, why and how.	
WBS Estimated Effort: 9 days	**Assumptions:** There will be a need for eye care services of this kind.	
Assigned to: Project Manager	**Constraints:** Demographics, not everyone can be considered a potential patient.	

WBS Number: 1.2.4	**WBS Name:** Licensing and regulations	**Work Package?** ☒ Yes / ☐ No

WBS Predecessor(s): 1.2.3	WBS Description: This will foucs on ensuring that all necessary steps are taken to secure the documents needed to operate the business. Assuring that they are in accordance with the local laws and to ascertain that Ms Fabian is duly registered with the Antigua Medical Board.
Must-Start Date: 14.09.2018	
Must-Finish Date 24.09.2018	
WBS Estimated Effort: 7 days	Assumptions: Ms Fabian is a registered Optometrist with the Antigua Medical Board.
Assigned to: Project Manager	Constraints: Bureaucratic processing could be time consuming, and negatively affect project schedule.

WBS Number: 1.3	WBS Name: Marketing	Work Package? ☐ Yes / ☒ No
WBS Predecessor(s): none	WBS Description: PVC will promote its business by using advertisement on social media; more specifically Facebook and Instagram. This allows for mass communication that is affordable and current. Here the owner will use this platform to update and inform her patients about changes that occur in PVC. Also, 4"x 6" flyers will be used to advertise the business as well. Print media and broadcast media will also be employed, however on a smaller scale due to finances.	
Must-Start Date: 25.09.2018		
Must-Finish Date: 12.11.2018		
WBS Estimated Effort: 35 days	Assumptions: Marketing strategy will reach the intended target market.	
Assigned to: Project Manager	Constraints: Marketing budget.	

WBS Number: 1.3.1	WBS Name: Create a marketing strategy	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): none	WBS Description: PVC will focus on positioning the company's brand on gaining a competitive advantage by employing sales promotion, pricing strategy and competition strategy. The implementation of this will enable PVC to position itself as the provider of world class eye care services. The marketing mix will be taken into consideration when	
Must-Start Date: 12.11.2018		

Must-Finish Date 30.11.2018	creating this strategy.
WBS Estimated Effort: 15 days	**Assumptions:** This strategy will attract the intended potential patients.
Assigned to: Project Manager	**Constraints:** Time and budget available for completing and implementing the strategy.

WBS Number: 1.3.2	**WBS Name:** Develop a marketing plan	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): 1.3.1	**WBS Description:** Develop an aggressive marketing campaign that reaches out, identifies with and focuses on the identified target market. The marketing plan can be found in appendix 8.	
Must-Start Date: 03.12.2018		
Must-Finish Date 14.12.2018		
WBS Estimated Effort: 10 days	**Assumptions:** The plan will attract the intended target market.	
Assigned to: Project Manager	**Constraints:** Time and budget available for completing the plan	

WBS Number: 1.3.3	**WBS Name:** Determine marketing budget	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): 1.3.2	**WBS Description:** PVC will utilize social media for most of its marketing strategy; hence, this will afford the business the opportunity to dramatically minimize costs associated with marketing. The projected start up expenses have allocted USD $600 for initial marketing and promotion.	
Must-Start Date: 17.12.2018		
Must-Finish Date 21.12.2018		
WBS Estimated Effort: 5 days	**Assumptions:** Social media will be enough to reach target audiences.	
Assigned to: Project Manager	**Constraints:** Target market's access to social media	

WBS Number: 1.3.4	WBS Name: Determine marketing collateral	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): 1.3.3 **Must-Start Date:** 26.12.2018 **Must-Finish Date** 02.01.2019	**WBS Description:** PVC will promote its business by using advertisement on social media. 4"x 6" flyers will be used to advertise the business as well. These will be disseminated by workers, family and friends on a regular basis. The front of the flyer will contain generic information about PVC while the back will elaborate on the products and services offered by PVC. There will also be radio and TV appearances.	
WBS Estimated Effort: 5 days	**Assumptions:** This will be enough to reach the intended target market.	
Assigned to: Project Manager	**Constraints:** Target market's access to social media, print media and broadcast media.	

WBS Number: 1.4	WBS Name: Staff Training	Work Package? ☐ Yes / ☒ No
WBS Predecessor(s): none **Must-Start Date:** 03.01.2019 **Must-Finish Date:** 07.02.2019	**WBS Description:** PVC will focus on building its brand by training and developing employees to provide quality customer service to patients. Training will foucs on best practices and industry standards. All staff, including the sponsor will receive training. It is anticipated that refresher training will be conducted once yearly.	
WBS Estimated Effort: 26 days	**Assumptions:** There is enough funds in the project budget to facilitate training and employees will be receptive to training. Training will be completed within projected schedule.	
Assigned to: Project Manager	**Constraints:** Project schedule and project budget.	

WBS Number: 1.4.1	WBS Name: Conduct needs assessment	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): none	**WBS Description:** This is necessary in order for employees to successfully carry out	

Must-Start Date: 03.01.2019	the organization's goals, and will focus on the identification of strengths and weakenss of the staff. An assessment will be conducted to determine the competency gap among employees.
Must-Finish Date 09.01.2019	
WBS Estimated Effort: 5 days	**Assumptions:** Assessment will be completed within scheduled time frame, and the information received will
Assigned to: Project Manager	**Constraints:** Time to complete the assessment

WBS Number: 1.4.2	**WBS Name:** Identify a training strategy	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): **1.4.1** **Must-Start Date:** 10.01.2019 **Must-Finish Date** 18.01.2019	**WBS Description:** The training strategy will be developed based on the results of the needs assessment. The strategy will consider the budget and the method of deliverying the training i.e. one on one, group seesions, on site or off site.	
WBS Estimated Effort: 7 days	**Assumptions:** Employees will be committed to the training and the budget allocated will be enough.	
Assigned to: Project Manager	**Constraints:** Time allocated to complete the training	

WBS Number: 1.4.3	**WBS Name:** Create a training plan	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): **1.4.2** **Must-Start Date:** 21.01.2019 **Must-Finish Date** 29.01.2019	**WBS Description:** The training plan (see appendix 4) will be developed based on the results of the needs assessment and the identified training strategy. The plan will consider the budget and the method of deliverying the training, it will also determine the frequency of training and the need for refresher training, as well as the identification of a designated staff member to be considered as an in house trainer.	
WBS Estimated Effort: 7 days	**Assumptions:** Employees will be committed to the training and the budget	

Assigned to: Project Manager	allocated will be enough. **Constraints:** Time allocated to complete the training

WBS Number: 1.4.4	**WBS Name:** Create a training schedule	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): **1.4.3**	**WBS Description:** The training schedule will be developed based on the training plan. The schedule will consider the time needed to deliver the objective of the training, the critical aspects of the training and the time allocated in the project for delivery of staff training.	
Must-Start Date: 30.01.2019		
Must-Finish Date 07.02.2019		
WBS Estimated Effort: 7 days	**Assumptions:** Employees will be committed to the training and the budget allocated will be enough.	
Assigned to: Project Manager	**Constraints:** Time allocated to complete the training	

WBS Number: 1.5	**WBS Name**: Project Management	**Work Package?** ☐ Yes / ☒ No
WBS Predecessor(s): none	**WBS Description:** Project management will focus on completing the overall objective of the project, which is the creation of a project management plan to include the subsidiary scope, time, cost, risk and quality management plan. It is critical that these plans are completed on time, within budget and within scope.	
Must-Start Date: 08.02.2019		
Must-Finish Date: 21.03.2019		
WBS Estimated Effort: 31 days	**Assumptions:** The plans will be completed within time, scope and budget.	
Assigned to: Project Manager	**Constraints:** Project schedule, scope, quality and budget	

WBS Number: 1.5.1	**WBS Name:** Scope Management Plan	**Work Package?** ☒ Yes / ☐ No

WBS Predecessor(s): none	WBS Description: Project planning will focus on collecting information needed for the creation of the project's boundaries.
Must-Start Date: 08.02.2019	
Must-Finish Date 18.02.2019	
WBS Estimated Effort: 7 days	Assumptions: All the requirements and resources will be identified during this phase
Assigned to: Project Manager	Constraints: Time allocated to complete this phase.

WBS Number: 1.5.2	WBS Name: schedule management plan	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): 1.5.1	WBS Description: This will focus on the gathering of information pertaining to the projects time line.	
Must-Start Date: 19.02.2019		
Must-Finish Date 26.02.2019		
WBS Estimated Effort: 6 days	Assumptions: All the requirements will be identified during this phase Constraints: Time allocated to complete this phase.	
Assigned to: Project Manager		

WBS Number: 1.5.3	WBS Name: cost management plan	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): 1.5.2	WBS Description: This will focus on the process involved in estimating, budgeting,	

Must-Start Date: 27.03.2019	funding, managing and controlling costs, so that the project is completed within the approved budget.
Must-Finish Date 06.03.2019	
WBS Estimated Effort: 6 days	**Assumptions:** Time allocated is sufficient for completing each phase **Constraints:** Time allocated to complete this phase.
Assigned to: Project Manager	

WBS Number: 1.5.4	**WBS Name:** Quality management plan	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): **1.5.3**	**WBS Description:** This will focus on the process needed to ensure the quality of the final product meets stakeholders expectations.	
Must-Start Date: 07.03.2019		
Must-Finish Date 14.03.2019		
WBS Estimated Effort: 6 days	**Assumptions:** Information will be shared on time, using the right channels and methods **Constraints:**	
Assigned to: Project Manager	Availability of technology.	

WBS Number: 1.5.5	**WBS Name:** Risk management plan	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): **1.5.3**	**WBS Description:** This will focus on how to identify, manage and control risks.	
Must-Start Date: 15.03.2019		

Must-Finish Date	
22.03.2019	
WBS Estimated Effort: 6 days	**Assumptions:** Information will be shared on time, using the right channels and methods **Constraints:** Availability of technology.
Assigned to: Project Manager	

WBS Number: 1.6	**WBS Name**: Customer Satisfaction Survey	**Work Package?** ☐ Yes / ☒ No
WBS Predecessor(s): none	**WBS Description:** This will focus on creating a survey (see appendix 5) to measure patients satisfaction, and to also identify ways of improving the product and services offered by PVC. This is an important aspect as the information gathered will aide in PVC gaining a competitive edge in the market.	
Must-Start Date: 22.03.2019		
Must-Finish Date: 30.04.2019		
WBS Estimated Effort: 28 days	**Assumptions:** **Constraints:** Project schedule, scope, quality and budget	
Assigned to: Project Manager		

WBS Number: 1.6.1	**WBS Name:** Decide survey scale	**Work Package?** ☒ Yes / ☐ No

WBS Predecessor(s):
none
	WBS Description:
	This will focus on identifying a rating scale to be used which will ask patients to rate the quality of services and products offered at PVC. The Likert 5-point scale format will be used to measure satisfaction using the following range:
	  1. Very satisfied
	  2. Satisfied
	  3. Neither satisfied nor dissatisfied
	  4. Dissatisfied
	  5. Very dissatisfied
	 In addition to this, there will be open questions and yes and no questions.

Must-Start Date: 22.03.2019	
Must-Finish Date 28.03.2019	

WBS Estimated Effort: 5 days	Assumptions: The range provided will be enough to adequately collect patient's satisfactory rating
Assigned to: Project Manager	Constraints: The willingness of patients to complete the survey.

WBS Number: 1.6.2	WBS Name: Formulate questions	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): 1.6.1	WBS Description: This work package will focus on the questions that will be asked on the survey. It is important that the questions asks reflects what is considered important to customers in terms of PVC's quality, staff courtesy, ease of doing business, and value for money- just to name a few.	
Must-Start Date: 29.03.2019		
Must-Finish Date 11.04.2019		
WBS Estimated Effort: 10 days	Assumptions: Questions asked will be enough to get a true understading of customer satisfaction	
	Constraints: The length of the survey. This places a limit on the amount of questions that can be asked on the survey.	
Assigned to: Project Manager		

WBS Number: 1.6.3	WBS Name: Decide distribution method & channel	Work Package? ☒ Yes / ☐ No
WBS Predecessor(s): 1.6.2	WBS Description: The distribution method used will be a survey consisting of 10 questions created in Microsoft Word. The channel of distribution used will be face to face. Patients will be asked to complete the survey- before leaving the premesis- after receiving care at PVC.	
Must-Start Date: 12.04.2019		

Must-Finish Date 18.04.2019		
WBS Estimated Effort: 5 days	**Assumptions:** Patients will be willing to complete the survey. **Constraints:** The quality of data gathered from the survey is limited to the amount and kind of questions asked.	
Assigned to: Project Manager		
WBS Number: 1.6.4	**WBS Name:** Feedback & analysis	**Work Package?** ☒ Yes / ☐ No
WBS Predecessor(s): **1.6.3** Must-Start Date: 19.04.2019 Must-Finish Date 30.04.2019	**WBS Description:** This will focus on reviewing the information received from the survey. A thorough anlysis will show the areas where PVC will need to improve inorder to meet suctomer satisfaction and achive their overall objective of offering quality customer service.	
WBS Estimated Effort: 8 days	**Assumptions:** The information collected will aide in strengthening the quality of services offered at PVC.	
Assigned to: Project Manager	**Constraints:** Time to complete this task.	

4.1.3.6 Scope Validation

PMI (2013) states that "validate Scope is the process of formalizing acceptance of the completed project deliverables. The key benefit of this process is that it brings objectivity to the acceptance process and increases the chance of final product, service, or result acceptance by validating each deliverable" (p133). This definition cleary suggests that the scope validation process is concerned with the acceptance of deliverables. For this project the valídate scope will focus on the following deliverables:

1. Staff customer service training plan.

2. Customer satisfaction survey and scorecard.
3. Strategic marketing plan.
4. Customer Satisfaction plan.

Scope Verification

This process involves the acceptance of project deliverables and will be verified by back checking the scope statement, WBS and the WBS dictionary. The requirements documentation and requirements traceability matrix will also be used as supporting documents in this process. Quality control will form part of this process to ensure that the deliverables meet their quality requirements.

Scope verification will be the responsibility of the project manager who will then share the findings with the project sponsor for sign off and approval. The verification and monitoring of scope will be performed in accordance with the stipulated dates set out in the project's schedule. Chart 11 below, depicts the template that will be used for the scope verification process.

Chart 11 Scope verification template (Source: Wakeyshia Hampson, Author, March 2018)

WBS ID	WBS Name	Deliverable	Verified By	Discrepencies	Comments

Deliverables Acceptance or Rejection

Upon successful completion of the project, the project manager will present all deliverables to the project sponsor for final acceptance and sign off; this will be

documented using Chart 13. The deliverables acceptance or rejection roles and responsibilities for this project can be found in Chart 12.

Chart 12 Deliverables acceptance/rejection (Source: Wakeyshia Hampson, Author, March 2018)

Name	Role	Responsibility
Wakeyshia Hampson	Project Manager	Project deliverables verification
Wakeyshia Hampson	Project Manager	Presentation of project deliverables
Wakeyshia Hampson	Project Manager	Project deliverables review
Jamella Fabian	Project Sponsor	Accepts or rejects project deliverables

Chart 13 Deliverables Acceptance and Rejection Log (Source: Wakeyshia Hampson, Author, March 2018)

WBS ID	Deliverable	Reviewed by	Accepted	Rejected	Comments

4.1.3.7 Scope Control

This involves monitoring the status of the project and ensuring that deliverables are within the project's scope and that changes to the scope baseline is monitored.

Monitoring

The project sponsor in collaboration with the project manager will be in charge of monitoring the project scope to ensure that the project remains within the defined scope baseline. The WBS dictionary will be used as a reference and guidance in this process to ensure that project activities are conducted on time and within the

requirements documented. Chart 14 provides information on responsibilities as it relates to the scope monitoring process.

Chart 14 Scope monitoring Activities (Source: Wakeyshia Hampson, Author, March 2018)

Name	Role	Activities
Wakeyshia Hampson	Project Manager	• Ensures that project activities are completed within budget, schedule, and scope. • Establishes how project variances and changes are managed, documented and communicated with the project sponsor.
Jamella Fabian	Project Sponsor	• Monitors to ensure that activities are on track • Ensuring that funds allocated are being spent as per budget. • Approves adjustments/changes if needed

Work Performance Data

This data will be captured by the project manager and handed over to the project sponsor. The information will provide details on the "as –is" status of the project. It will also provide information on work being carried out such as the actual cost, actual duration, and the percent of work physically completed. The data collected will also identify any deviation from the project scope.

Variance Analysis

Variance analysis technique will be utilized to ascertain the difference between the scope baseline and the actual performance. This technique, according to PMI

(2013) is necessary for determining the cause and degree of difference between scope baseline and actual performance and to maintain control over the project. The project manager will be responsible for identifying and monitoring project variances, who will then share this information with the project sponsor. The information will be captured using a pivot table created in Microsoft Excel.

Change Control Process

The change control process will be implemented to outline how approved changes to the scope will be implemented. The change management process is a technique used to initiate, record, assess, approve and resolve project changes. Project changes are needed when it is deemed necessary to change the scope, time or cost of any previously approved project deliverables. These changes may be requested by the project manger or the project sponsor. However, it is important that the project sponsor reserves the right to approve or reject these changes. Upon reaching a decision, the sponsor will share her decision with the project manager who will verify the need for change and its impact. The project manager will also be responsible for implementing the change and updating the necessary documents. Figure 7 shows the change management process which will be used.

The change control log in chart 15 will be used to record, track and monitor change requests.

Chart 15 Change Request Log (Source: Wakeyshia Hampson, Author, March 2018)

Project Name	PVC Project Management Plan	Date	03.04.2018
Project Number	01	Document Number	01
Project Manager	Wakeyshia Hampson	Project Owner/Client	Jamella Fabian

Change Number	Description of Change	Requestor	Date Requested	Impact (H/M/L)	Implemented (yes/no)	Approved by	Status

4.1.3.8 Assumptions

All projects have assumptions, these are things we tend to hold true throughout the life of the project. However, when these assumptions do not hold true, then they become a problem for the project and are classified as project risks. Assumptions identified for this project will be tracked using an assumption log and will be entered into the risk mangement plan for futher monitoring and controlling. Chart 16 documents some of the assumptions associated with this project.

Chart 16 Project assumption log (Source: Wakeyshia Hampson, Author, March 2018)

ID	Assumption	Responsibility	Status	Actions
001	It is assumed that the project will be completed within budget, time and scope.	Project manager	open	Transferred to risk management plan
002	It is assumed that project scope is aligned with the contents of the project charter	Project manager	open	Transferred to risk management plan
003	It is assumed that project resources will be available to allow for the successful completion of work packages.	Project manager	open	Transferred to risk management plan
004	It is assumed that the sponsor's expectations will be met	Project manager	open	Transferred to risk management plan
005	It is assumed that the project manager has the skills needed to successfully deliver project results	Project manager	open	Transferred to risk management plan

4.1.3.9 Issues

Issues are inevitable in project management and must be adddressed with urgency. The project manager will communicate issues to the project sponsor and necessary action taken to mitígate or eliminate these issues. They will then be transferred to the risk management plan for further monitoring. This process will be facilitated using the issue log template in chart 17 below.

Chart 17 Project Issue log template (Source: Wakeyshia Hampson, Author, March 2018)

ID	Issue Description	Priority	Status	Action/Comment

4.1.4 Risks

Projects have many sources of uncertainties, which could cause risky events to occur. These sources arise for many reasons, such as inaccurate scope definition, flaws in establishing appropriate project activity parameters (e.g., task dependencies, task durations and resource constraints). PMI defines project risk as "…an uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives..." (p.310). A detailed risk management plan will be created to document, monitor and control risks identified.

4.1.4.1 Scope Management Plan Approval

By affixing our signatures below, Jamella Fabian and Wakeyshia Hampson are officially approving the scope management plan.

Approved by:

_____ Date: _____
Project Sponsor

_____ Date: _____
Project Manager

4.1.5 Customer Service Training Plan

Customer service will play a key role in enabling PVC to meet its general objective of offering world class eye care services. To achieve this, it is important that staff receives the necessary training as it relates to customer service. This training will be conducted on a yearly basis, recommendations will also be made to promote customer service certification initiatives with compensation for successful completion. Appendix 4 provides details on this training.

4.1.5.1 Customer Satisfaction Plan

The success of PVC will be based on its ability to build clientele. This entails its ability to attract new customers, retain customers and to continuously improve the quality services it offers patients. A customer satisfaction plan will be used as a framework for achieving customer satisfaction. Appendix 7 provides a sample of this plan.

4.1.5.2 Customer Satisfaction Survey

Surveys will be conducted every six months to assess patients satisfaction with the quality of services offered at PVC. These surveys will be brief and will be analysed to determine if PVC has met its objective of offering world class eye care service and if not, what needs to be done to achieve this. Surveys will be created using Microsoft Word. Appendix 5 illustrates PVC's customer satisfaction survey.

4.1.5.3 Customer Satisfaction Scorecard

The customer satisfaction scorecard, located in appendix 6 will be used to record the satisfaction results based on the results of the customer satisfaction survey. It is hoped that customer satisfaction will achieve the targeted range of 90% or more.

4.1.6 Marketing Plan

A marketing plan will be created to determine how to reach the target market and the marketing strategy which will be used to do so. An aggressive marketing strategy must be undertaken in order for PVC to gain a competitive edge in the industry. The marketing plan can be found in Appendix 8.

4.1.6.1 Market Research

Research will be conducted to gather information about patients needs and preferences as well as industry standards and best practices, in order to determine the best strategy for entering the market, gaining and maintain market presence and creating a competitive edge. This research will also look at the barriers to entry.

4.1.7 Corporate Social Responsibility recommendations

The project manager will be responsible for making recommendations for the implementation of CSR and stressing the importance of incorporating this into the culture of PVC. The recommendations will seek to incorporate the applicable SDGs and the elements in the GPM P5 Standard for Sustainability in project management.

The project manager will also highlight that CSR is considered best practices and is not about philantrophy, but should be seen as a tool for development and competitiveness. According to PRiSM (2013) CSR is "a process with the aim to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere…"(p.9).

It is recommended that PVC seeks the implementation of the following:

Labour Practices and Decent Work

This incoroprates employment, labour and management relations, health and safety, training and education and organizational learning. This inclusión will allow PVC to provide continuous growth, equality and opportunites for staff. It also empowers the staff to know their rights and act appropriately. Recommendations are made for:

- Ensuring staffs knowledge of local labour and employment laws.
- Staff and labour management realationships are at the forefront of the organization.
- Continuous training programs to build staff capacity.
- Implementation of best practices for safety & health in the work place

These recommendations are made in accordance with SDG 4, 5,8,10 and 17.

Society and Customers

Transparency and accountability will be the focus here. Customers must know that they are protected and covered by eithical practices. Therefore, it is recommended that:

- Procedures are put in place to secure customer data.
- Action taken to ensure ethical behaviour by staff.
- The rights of staff and customers are respected and protected.
- The impact of the business on society must be known.

These recommendations are made in accordance with SDGs 1,3,8,10, and 16

Ethical Behaviour

Ethics form the brand and culture of any company; therefore, it is important that PVC builds its image on the foundation of good ethical standards. Workers should know that unethical behaviour will not be tolerated and will not go unpunished. It is recommended that:

- The establishment of a procedure to pursue reported unethical practices/behavior.
- Clear guidelines that states the type of behavior PVC expects from its staff.
- Proposed punishment for unethical behaviour are communicated.
- Each staff member should receive a copy of the code of conduct.

4.2. Time Management Plan

Project time management provides information on the time needed to complete the project within a triple constraint composed of time, cost, and scope. Project time management is the effective way in which a project manager achieves an effective use of time through the project life, by means of allocating the right time to the right activity (PMI, 2011). Furthermore, effective time management allows for the estimation of the activities duration, based on factors such as resource requirements, calendars and enterprise environmental factors. The schedule development, which is an important part of the time management plan, will be developed and expedited using Microsoft Project 2016. This is the scheduling software application tool. It is important to note that as changes are made to the project, the baseline should also be updated. Changes should follow the change management process outlined in Figure 7 above.

PMBOK Guide lists the seven processes of the project time management knowledge area as:

1. Plan Schedule Management.
2. Define Activities
3. Sequence Activities

4. Estimate Activity
5. Estimate Activity Durations
6. Develop Schedule
7. Control Schedule

4.2.1 Schedule Management Approach

The schedule management approach will consider the time needed to complete activities needed for the successful delivery of project objectives. The plan will include the sequence of those activites, which will look at the order in which activities need to be completed. Estimate activity resources, will determine the type and quantity of resources, including human, equipment, material etc... needed to complete the activity. Estimate activity duration will factor in the number of time needed to complete the activity within the allocated resources. Once the the list of project activities, estimates of their durations and resource requirements are defined the schedule can then be baselined. Additionally, the schedule will be created using a 40 hour weekday work-week, and taking into consideration local holidays.

4.2.1 Activity List Creation

The activity list will be created by the project manager, in collaboration with the project sponsor. It will show the activities that are needed to complete the work packages, located in chart 10. It shows the activity description, activity identifier, assigned resources, and details of the scope of work needed to complete the tasks. The activity list is important so that it is clear on what needs to be accomplished and who is responsible for doing so. For this project, the project manager will be responsible for completion of all work identified in the activity list.

The activity list will be completed during the planning phase. Consequently, it might be too early to capture all the information needed to achieve the activities. In light of this, the process will utilize the rolling wave planning technique where a "detail decomposition of the high-level activities is performed only for those activites in the

"near term"..."(PMI, 2011,p.15). This technique allows for updates to the list as information becomes available or as changes are made to the baseline. Figure 10 provides an example of this technique.
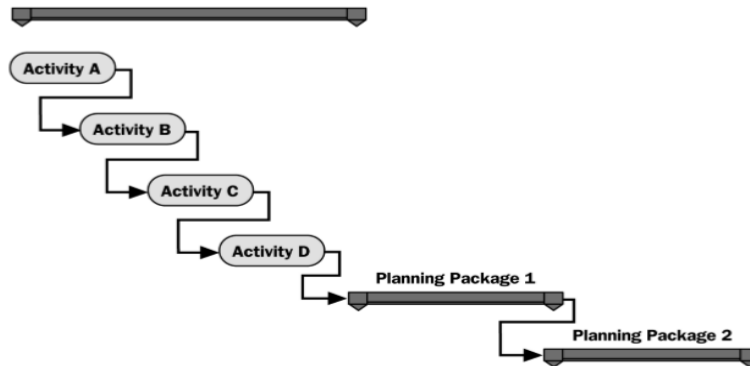

Figure 10 Example of Rolling Wave Planning (Source: Practice Standard for Scheduling. P.15)

Chart 18 Activity List (Source: Wakeyshia Hampson, Author, March 2018)

Project Name: PVC Project Management Plan		Date: March 2018	
Project Manager: Wakeyshia Hampson		Project Owner: Jamella Fabian	
WBS ID	Activity Name	Activity Description	Deliverable
1.1	Information gathering and analysis	Research and analysis of information required to create an effective project management plan aligned with PMI best practices.	Data sorted and analysed.
1.1.1	Collect requirements	The gathering of information using various tools and techniques such as interviews, emails, observations and meetings to ascertain the expectations of the stakeholder.	Identification of Sponsor's expectations
1.1.2	Analyze requirements	Analysis will be conducted to ensure user requirements are	Analysis of requirments

		clearly understood and inline with the project's overall objective.	
1.1.3	Categorize and prioritize requirements	A scale from 1 (very low) to 5 (very high) will be used to indicate how important the requirement is. Requirments with higher ranking will be prioritized.	Matrix of requirements sorted and categorized
1.1.4	Requirements documentation	Once the requirements have been gathered, analysed, catergorized and prioritized, they will be documented in detail and handed over to the sponsor for review and approval.	Documented requirements
1.2	Market Research	Research will be conducted to gather information about patients needs and preferences, as well as industry standards and best practices, in order to determine the best strategy for entering the market.	Market information
1.2.1	Industry standards & best practices	Will focus on finding out best practices and industry standards in order to deliver world class eye care services	Information on best practices and standards
1.2.2	Competition research & analysis	This will focus on positioning the company's brand on gaining a competitive advantage.	Information on local competitors and their marketing strategy
1.2.3	Target market identification & analysis	Will focus on business survival which is dependent securing patients. A target market analysis will be conducted to identify the type of patients that	Breakdown of target market

		PVC will target.	
1.2.4	Licensing and regulations	Will foucs on ensuring that all necessary steps are taken to secure the documents needed to locally operate the business.	Commercial license and Optomerty license
1.3	Marketing	This will look at how to promote the business using advertisement on social media; more specifically Facebook and Instagram.	Marketing information
1.3.1	Create a marketing strategy	Focuses on positioning the company's brand on gaining a competitive advantage by employing sales promotion, pricing strategy and competition strategy.	Marketing strategy
1.3.2	Develop marketing plan	Develop an aggressive marketing campaign that reaches out, identifies with and focuses on the identified target market	Marketing plan
1.3.3	Determine Marketing budget	PVC will utilize social media for most of its marketing strategy; hence, this will afford the business the opportunity to dramatically minimize costs associated with marketing.	Marketing budget
1.3.4	Determine marketing collateral	PVC will promote its business by using advertisement on social media. 4"x 6" flyers will be used to advertise the business as well. This will be disseminated by workers, family and friends on a regular	Marketing channel

		basis.	
1.4	Staff Training	This will focus on building PVC's brand by training and developing employees to provide quality customer service to patients. Training will foucs on best practices and industry standards.	Training agenda
1.4.1	Conduct needs assessment	This is necessary in order for employees to successfully carry out the organization's goals, and will focus on the identification of strengths and weakenss of the staff. An assessment will be conducted to determine the competency gap among employees.	Gap and competency analysis
1.4.2	Identify a training strategy	The training strategy will be developed based on the results of the needs assessment. The strategy will consider the budget and the method of deliverying the training.	Training strategy
1.4.3	Create a training plan	The plan will determine the frequency of training and the need for refresher training, as well as the identification of a designated staff member to be considered as an in house trainer.	Training plan
1.4.4	Create a training schedule	The training schedule will be developed based on the training plan. The schedule will consider the time	Training schedule

		needed to deliver the training, the critical aspects of the training and the time allocated in the project for the completion of staff training.	
1.5	Project management	Project management will focus on completing the overall objective of the project, which is the creation of a project management plan to include the subsidiary scope, time, cost, risk and quality management plan.	Project management plan
1.5.1	Create scope management plan	Project planning will focus on collecting information needed for the creation of the project's boundaries.	Scope management plan
1.5.2	Develop schedule management plan	This will focus on the gathering of information pertaining to the projects time line.	Schedule management plan
1.5.3	Develop cost management plan	This will focus on planning, managing, and monitoring the project's budget.	Cost management plan
1.5.4	Develop quality management plan	This will focus on ensuring the final product meets stakeholders expectations, and pre-defined quality standards are adhered to.	Quality management plan
1.5.5	Create risk management plan	This will focus on how project risks will be identified, managed and controlled.	Risk management plan
1.6	Customer satisfaction	This will focus on creating a survey to measure patients	Customer satisfaction agenda

		satisfaction, and to also identify ways of improving the product and services offered by PVC. This is an important aspect as the information gathered will aide in PVC gaining a competitive edge in the market	
1.6.1	Decide survey scale	This will focus on identifying a rating scale to be used which will ask patients to rate the quality of services and products offered at PVC.	Identification of survey style and type
1.6.2	Formulate questions	This work package will focus on the questions that will be asked on the survey.	Questions that will be asked on the survey
1.6.3	Decide distribution method & channel	How do we get the patiets to take part in the survey?	Idenfied method and channel survey distribution.
1.6.4	Feedback & analysis	This will focus on reviewing the information received from the survey. A thorough analysis will show the areas where PVC will need to improve in order to meet suctomer satisfaction and achive their overall objective of offering quality customer service.	Report indicating the results of the survey.

4.2.2 Estimate Activity Resources

According to PMI (2011), estimate activity resources "is the process of determining the type and quantities of material, personnel, equipment required to perform each activity" (p.30). This is a critical process as it allows for the identification of the type and quantity of resources needed to complete the activity. This, in turn, allows for

better estimation of cost and duration. The availability of resources can negatively affect project schedule and cost, and by extension the successful completion of project objectives.

4.2.3 Estimate Activity duration

An estimation or duration, as the name implies, will focus on determining the likelihood of how long it will take to complete an activity. This calculation will look at the number of resources needed to complete the activity, the availability of resources and the competency of those resources.

Activity duration will be estimated using the Program Evaluation and Review Technique (PERT), which uses three estimates to define the closest range for an activity's duration, taking into consideration known unknowns and unknown unknowns. According to page 170 of the PMBOK© 5th edition PERT utilizes the following:

- Most likely (tm)- This is based on the duration of the activity, given the resources likely to be assigned, their productivity, realistic expectations of availability for the acitivty, dependencies on other participants, and interruptions.
- Optimistic (tO) – The activity duration based on analysis of the best–case scenario for the activity.
- Pessimistic (tp) - The activity duration based on analysis of the worst-case scenario for the activity.

Taking into consideration the above, the estimated activity duration (tE) will be calculated using the formula below. Additionally, an illustration of the three-point estimating technique to be used to calculate the expected duration (tE) for each activity can be fount in chart 19.

$$tE = (tO+4tM+tP)/6$$

A gantt diagram could also be used to show the activities, however, to show dependencies the network diagram will be employed, this will give a more accurate
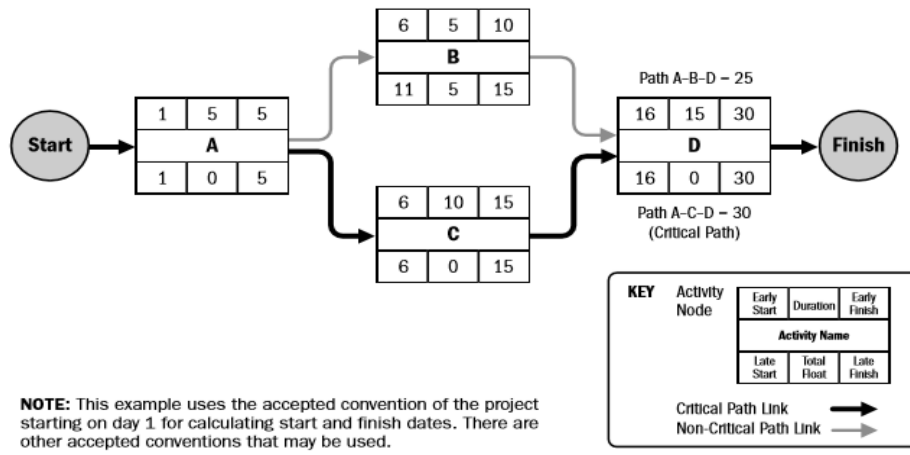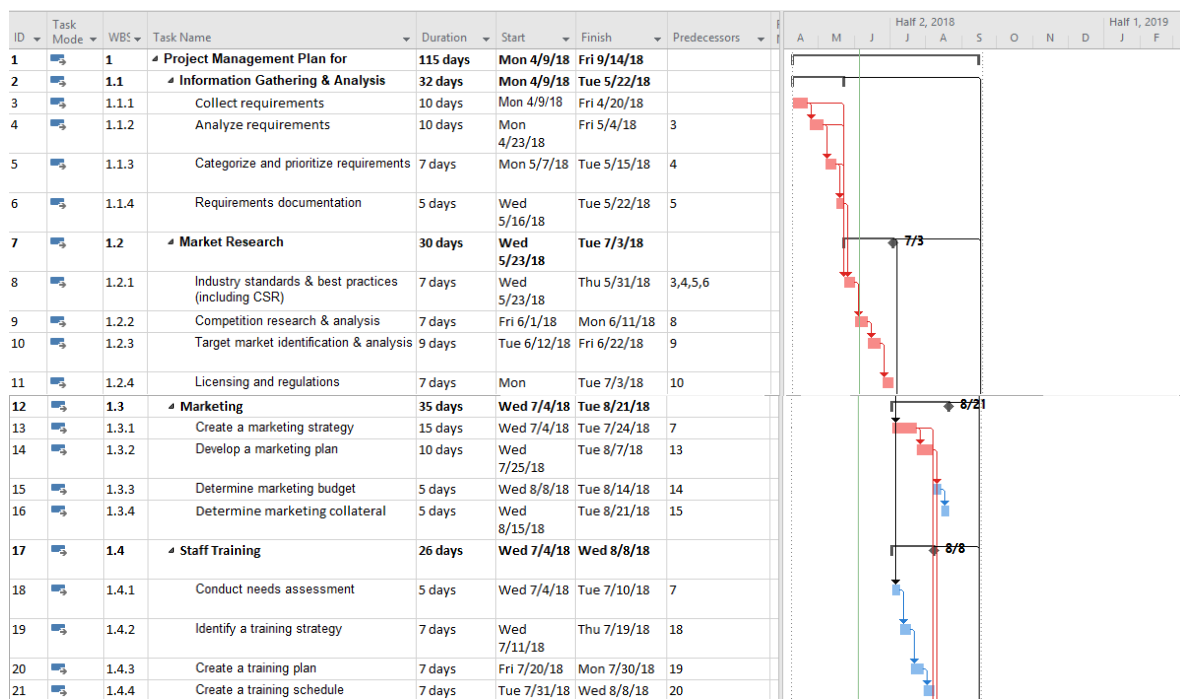
picture of activity duration and the relationship among activities. This process will require utilization of the critical path method. The critical path is a scheduling technique, which is defined by PMI (2013) as "...a sequence of activities that represents the longest path through a project, which determines the shortest possible project duration" (p.175). It allows for the calculation of the early start, early finish, late start, and late finish dates for all activities without regard for any resource limitations by performing a forward and backward pass analysis through the schedule network.

Utilizing this technique will help to ensure that the project does not fall behind. The critical path for this project includes, information gathering and analysis, marketing, market research and staff training. It also helps to manage resources and can be used as a baseline to compare actual results with planned results. Additonally, there will be activities that can be executed at the same time since there are no dependencies. Consideration will also be given to fast tracking. An example of this technique can be found in figure 11.

Chart 19 Program Evaluation and Review Technique (PERT) Template (Source: Wakeyshia Hampson, Author, March 2018)

ID	Description	Predecesor	Optomistic Duration	Most likely duration	Pesimistic duration	Expected duration

Figure 11 Critical Path Method (Source: PMI 2013)

4.2.3.1 Approval of the schedule baseline

The approval of the schedule baseline will be completed by the project sponsor, once it has been drafted and completed by the project manger. Figure 12 shows the proposed project schedule.
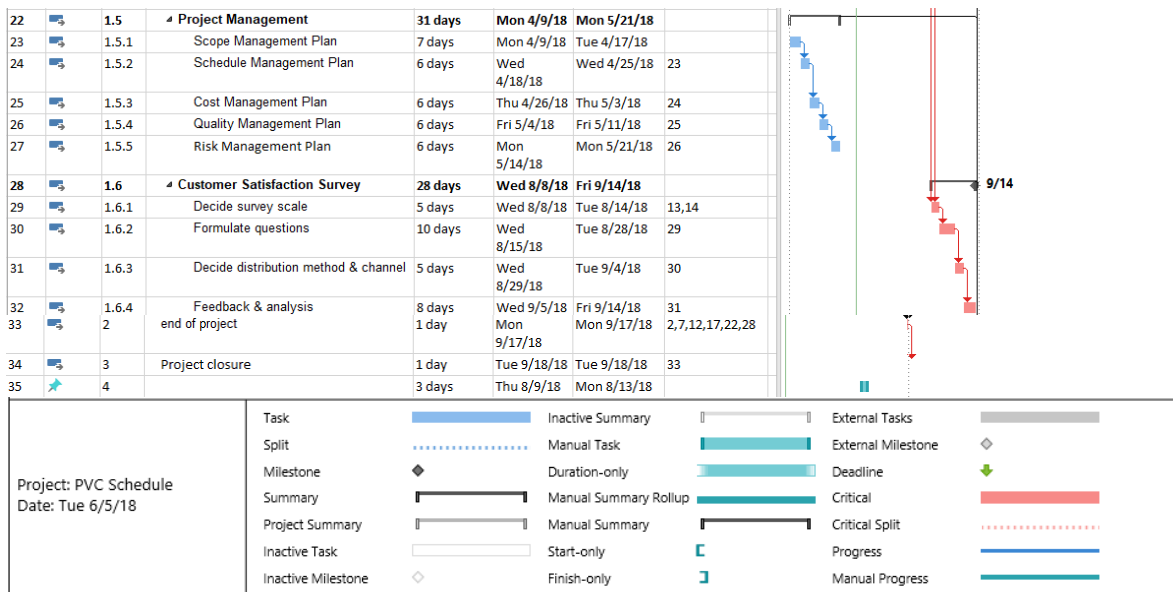

ID	Task Mode	WBS	Task Name	Duration	Start	Finish	Predecessors
1		1	⊿ Project Management Plan for	115 days	Mon 4/9/18	Fri 9/14/18	
2		1.1	⊿ Information Gathering & Analysis	32 days	Mon 4/9/18	Tue 5/22/18	
3		1.1.1	Collect requirements	10 days	Mon 4/9/18	Fri 4/20/18	
4		1.1.2	Analyze requirements	10 days	Mon 4/23/18	Fri 5/4/18	3
5		1.1.3	Categorize and prioritize requirements	7 days	Mon 5/7/18	Tue 5/15/18	4
6		1.1.4	Requirements documentation	5 days	Wed 5/16/18	Tue 5/22/18	5
7		1.2	⊿ Market Research	30 days	Wed 5/23/18	Tue 7/3/18	
8		1.2.1	Industry standards & best practices (including CSR)	7 days	Wed 5/23/18	Thu 5/31/18	3,4,5,6
9		1.2.2	Competition research & analysis	7 days	Fri 6/1/18	Mon 6/11/18	8
10		1.2.3	Target market identification & analysis	9 days	Tue 6/12/18	Fri 6/22/18	9
11		1.2.4	Licensing and regulations	7 days	Mon	Tue 7/3/18	10
12		1.3	⊿ Marketing	35 days	Wed 7/4/18	Tue 8/21/18	
13		1.3.1	Create a marketing strategy	15 days	Wed 7/4/18	Tue 7/24/18	7
14		1.3.2	Develop a marketing plan	10 days	Wed 7/25/18	Tue 8/7/18	13
15		1.3.3	Determine marketing budget	5 days	Wed 8/8/18	Tue 8/14/18	14
16		1.3.4	Determine marketing collateral	5 days	Wed 8/15/18	Tue 8/21/18	15
17		1.4	⊿ Staff Training	26 days	Wed 7/4/18	Wed 8/8/18	
18		1.4.1	Conduct needs assessment	5 days	Wed 7/4/18	Tue 7/10/18	7
19		1.4.2	Identify a training strategy	7 days	Wed 7/11/18	Thu 7/19/18	18
20		1.4.3	Create a training plan	7 days	Fri 7/20/18	Mon 7/30/18	19
21		1.4.4	Create a training schedule	7 days	Tue 7/31/18	Wed 8/8/18	20

22		1.5	◢ Project Management	31 days	Mon 4/9/18	Mon 5/21/18	
23		1.5.1	Scope Management Plan	7 days	Mon 4/9/18	Tue 4/17/18	
24		1.5.2	Schedule Management Plan	6 days	Wed 4/18/18	Wed 4/25/18	23
25		1.5.3	Cost Management Plan	6 days	Thu 4/26/18	Thu 5/3/18	24
26		1.5.4	Quality Management Plan	6 days	Fri 5/4/18	Fri 5/11/18	25
27		1.5.5	Risk Management Plan	6 days	Mon 5/14/18	Mon 5/21/18	26
28		1.6	◢ Customer Satisfaction Survey	28 days	Wed 8/8/18	Fri 9/14/18	
29		1.6.1	Decide survey scale	5 days	Wed 8/8/18	Tue 8/14/18	13,14
30		1.6.2	Formulate questions	10 days	Wed 8/15/18	Tue 8/28/18	29
31		1.6.3	Decide distribution method & channel	5 days	Wed 8/29/18	Tue 9/4/18	30
32		1.6.4	Feedback & analysis	8 days	Wed 9/5/18	Fri 9/14/18	31
33		2	end of project	1 day	Mon 9/17/18	Mon 9/17/18	2,7,12,17,22,28
34		3	Project closure	1 day	Tue 9/18/18	Tue 9/18/18	33
35		4		3 days	Thu 8/9/18	Mon 8/13/18	

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

Project: PVC Schedule
Date: Tue 6/5/18

Figure 12 project Schedule (Source: Wakeyshia Hampson, Author)

4.2.4 Schedule Control

Schedule control is a critical aspect of project management and is focsed on monitoring and controlling of project deliverables and managing changes to the Schedule baseling. More specifically, it allows for baseline planning, measurement of achievements, comparison of planned and actual, deviations to plan, and corrective actions. Special consideration will be given to the critical path, and an activity's actual start and finish dates, percent complete, and the remaining duration for work in progress.

The project schedule will be reviewed and updated as necessary when provided with additional information. It is important to note that the approved schedule baseline can be changed using the change management process depicted in figure 7. However, an assessment of the impact on the project must be conducted before the changes can be approved. The project manager will be responsible for monitoring and controlling the project schedule as well as approving or rejecting any changes requested by the sponsor.

4.2.4.1 Performance Review

Performance review of the project schedule will be conducted on a weekly basis by the project manager, and shared with the project sponsor. The review will compare the schedule baseline with the work in progress. The critical chain method, which is similar to the critical path method- with the difference that it adds buffers that are non-work schedule activities to manage uncertainty-, will be used as the performance review technique.

4.2.4.2 Risk identification and Schedule Contingencies

Risks in projects are inevitable and the project schedule is no exception to this. A plan will be put in place to mitigate, minimize or eliminate risks. These risks will be managed using a contingency reserve. This allows the risks to be absorbed by the reserve and the baseline remains unchanged. For PVC, a contingency reserve will be used for marketing and staff training, as it is likely that challenges will be encountered. For these activities a contingency reserve of 10% of the calculated cost of training and marketing will be set aside as a buffer. This will ensure that the overall objectives of these deliverables are achieved inspite of any unknown challenges that may arise.

4.2.4.3 Schedule Management Plan Approval

By affixing our signatures below, Jamella Fabian and Wakeyshia Hampson are officially approving the schedule management plan.

Approved by:

_____ Date: _____
Project Sponsor

_____ Date: _____
Project Manager

4.3 Cost Management Plan

Project costs are calculated during the planning phase, and must be completed before the project begins. The cost management plan, a component of the project management plan, is a tool used to achieve this. Cost management entails estimating, allocating, and controlling costs identified for a project. The cost management plan is important in establishing the project's cost baseline, and is used as guidance to ensure that funds allocated for project activities are within the budgeted constraint.

4.3.1 Cost Management Approach

This process will take into consideration the sponsor's expectations as it pertains to cost management. Consequently, it is important to note that before the cost of the project can be properly estimated, the resource needs required to complete the activities and achieve the deliverables identified in the project charter must be determined. Project activities must be clearly defined and resources required to perform the actual work identified. Once the resource requirements are identified then the cost of these resources can be determined. The duration of the project activities must be taken into consideration to determine the length of time the resources will be required. Only then can the resource costs for the project be properly estimated. Cost variances must be brought to the sponsor's attention as soon as they are identified. All changes in cost will require the approval of the sponsor. Additionally, costs may be rounded to the nearest dollar and work hours rounded to the nearest whole hour.

4.3.2 Activity Cost Estimate

Activity cost estimation involves determing the amount of funds needed to complete the tasks identified in the activity list shown in chart 18. This process is critical for the successful completion of the project deliverables, while keeping in

mind the triple constraints of scope, time and budget. An analysis of the resources available and their competency must be conducted as this too will affect the cost of completing an acitivity. Consideration will be given to producing the activity at the lowest cost possible, hence trade offs should be considered. For example, should PVC use the services of a graphic designer to produce their flyers, or should they consider a free app such as photo grid.

The availability of information and accuracy of the same will affect the estimates. Therefore, it is important that cost estimates be reviewed throughout the life of the project as new information becomes available and more knowledge regarding progress is revealed. It is anticipated that the accuracy of project estimates will become more accurate as the project progresses. For example, in the early stages a project may have a Rough Order of Magnitude (ROM) of -30% to +80% and this will reduce later as the accuracy increases and could fall within the range of -5%to +10%.

4.3.2.1 Tool and Technique

Activity cost will be estimated using the Program Evaluation and Review Technique (PERT), which, according to PMI (2013), calculates the activity cost using three estimates to define an approximate range for an activity's cost.   The three estimates are:

- Most likely (cM) – The cost of the activity, based on realistic effort assessment for the required work and any predicted expenses.
- Optimistic (cO) – The activity cost based on analysis of the best-case scenario for the activity.
- Pessimistic (cP) – The activity cost based on analysis of the worst-case scenario for the activity.

The following formaula will be used for cost estimation:

$$cE=(C0+4cM+cP)/6$$

4.3.2.2 Reserve Analysis

A contingency reserve of 10% of project cost will be created to facilitate "known-unknowns", and a management reserve of the same amount will be created to facilitate "unknown-unknowns". The management reserve will not be included in the cost baseline, however if it is used then the amound used will be added to the cost baseline, this will trigger an update the cost baseline. The approved change management process must be adhered to. Risks associated with the cost estimates will be documented and included in the risk management database.

Chart 20 Activity List Cost Estimate (Source: Wakeyshia Hampson, Author, March 2018)

WBS ID	Activity Name	Cost (USD)
1.1	**Information Gathering and Analysis**	**600**
1.1.1	Collect requirements	100
1.1.2	Analyze requirements	150
1.1.3	Categorize and prioritize requirements	150
1.1.4	Requirements documentation	200
1.2	**Market Research**	**400**
1.2.1	Industry standards & best practices	100
1.2.2	Competition research & analysis	100
1.2.3	Target market identification & analysis	100
1.2.4	Licensing and regulations	100
1.3	**Marketing**	**700**
1.3.1	Create a marketing strategy	250
1.3.2	Develop marketing plan	200
1.3.3	Determine Marketing budget	150
1.3.4	Determine marketing collateral	100
1.4	**Staff Training**	**650**
1.4.1	Conduct needs assessment	150
1.4.2	Identify a training strategy	200
1.4.3	Create a training plan	200
1.4.4	Create a training schedule	100

1.5	Project management	500
1.5.1	Create Scope Management Plan	100
1.5.2	Develop Schedule management Plan	100
1.5.3	Develop Cost Management plan	100
1.5.4	Develop Quality management plan	100
1.5.5	Create Risk management plan	100
1.6	**Customer Satisfaction**	**450**
1.6.1	Decide survey scale	100
1.6.2	Formulate questions	100
1.6.3	Decide distribution method & channel	100
1.6.4	Feedback & analysis	150
	Total Project Cost for the Planning Phase	6600

4.3.2.3 Project Budget

Once the costs have been estimated for the WBS activitities they will then be aggregated to form the project budget, and the oficial cost baseline. The establishment of the baseline is important as it forms the basis for which project cost will be monitored and control. It also allows for effectively checking current progress against planned progress. Figure 13 illustrates the components making up the project budget.

The project budget was achieved using the following techniques:

- Cost aggregation: this entails summing up the costs for each work package to the control account up to the project level.

- Reserve analysis techniques: takes into account the funds set aside for contingency and management reserve
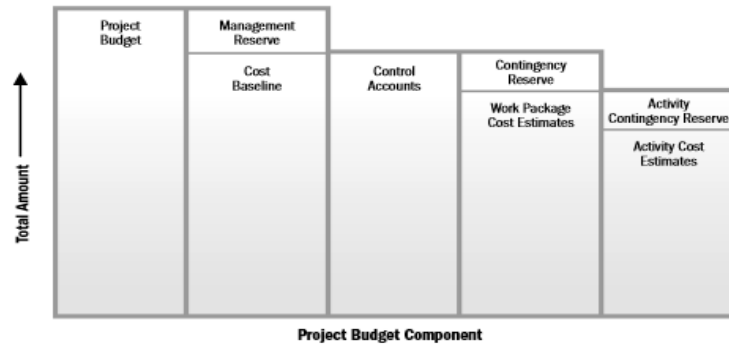
Figure 13 Project budget components (Source: PMI, 2013. p.213)

4.3.2.4 Cost Control

To ensure that cost does not exceed that stipulated in the baseline, monitoring will be conducted to ensure tha actual costs are in line with the cost baseline. Cost control will also allow for the effective monitoring and managing of changes to the cost baseline. These changes will follow the change mangement process previously outlined in this document. To effectively manage cost, control tools and techniques must be employed to acheive results, below are some of the tools and techniques to be used:

- A cumulative project spending paln (S-curve) – this will show the cumulative planned vs the actual project costs over time for the life of the project.

- Spending plan – a run chart showing the actual costs to date against the basline on a montly basis.

In addition to the above techniques the Earned Value Management (EVM) will be used combing scope, schedule and resources to assess project performance. EVM is arguably the most important tool for controlling the project time and cost in an integrated way. It allows for the determination of where the project is and relates that to where the project should be. Chart 21 provides the EVM analysis template that will be used.

The following are the three basic elements that need to be considered for applying the EVM:

- Planned Value (PV): describes the budgeted cost of the work scheduled. It is a baseline against which the project status is evaluated at any given time, and once established it can only change if time and/or cost change (though the perform integrated change control process).

- Earned Value (EV): describes the budgeted cost of the work performed. It reflects the amount of work performed in terms of the planned value for that work.

- Actual Cost (AC): describes the actual cost of the work performed. It indicates the amount of resources spent to produce the amount of work performed.

Variances can be monitored using the following formulas for cost and schedule:

Cost Variance: (EV-AC)

Schedule Variance: (EV-PV)

To measure schedule and cost efficiency of budgeted resources expressed as a ratio of earned value to actual cost, the following formulas can be used:

Schedule Performance Index: SPI = EV/PV

Cost Performance Index: CPI = EV/AC

To-Complete Performance Index (TCPI): is a measure of the cost performance that is required to be achieved with the remaining resources in order to meet the specific management goal, expressed as the ratio of the cost to finish the outstanding work to the remaining budget. The equation that will be used is:

BAC: (BAC – EV) / (BAC – AC)

If it is the case that the BAC (Budget at Completion) is no longer viable, the project manager need to decide if it should replaced with the forecasted Estimate At

Completion (EAC) as follows:

$$\text{EAC: (BAC – EV) / (EAC – AC)}$$

The project manager will need to conduct weekly assesments to keep track of the project budget and variances found must be shared with the sponsor. Attention should be given to chages, inaccurate estimates, resouce challenges and other internal and external factor that migh have affected the project's budget.

Chart 21 Earned Value Analysis template (Source: Wakeyshia Hampson, Author, March 2018)

Activity ID	Activity Name	Cost (USD$)		Month	Month	Month	Month
			PV				
			AC				
			EV				
			PV				
			AC				
			EV				
			PV				
			AC				
			EV				
			PV				
			AC				
			EV				
			PV				
			AC				
			EV				
Total Cost for Planning Phase							

4.3.2.5 Cost Variance Response Process

Cost vairiances that have been identified in the cost control section should be analysed and document. The project manager should present the sponsor with a cost variance corrective plan, detailing the steps needed to bring the project back on track. The project management plan will need to be updated to reflect this plan.

4.3.3 Cost Management Plan Approval

By affixing our signatures below, Jamella Fabian and Wakeyshia Hampson are officially approving the cost management plan.

Approved by:

_____   Date: _____
Project Sponsor

_____   Date: _____
Project Manager

4.4 Project Quality Management

Rose (2014), defines quailty as "… the ability of a set of inherent characteristics of a product, system, or process to fulfill requirements of customers and other interested parties" (p.13). Project quality can be seen as the outcome of the project and its ability to meet or exceed stakeholder's expectations as set out in the scope of the project. Further, it can be measured based on the project manager's ability to manage and implement the project and achieve the stipulated objectives. Moreover, product quality looks at the final end results of the project, whereas project quality looks at the execution of the project. The wheel of quality depicted in figure 14 shows the cycle for achieving quality.

Figure 14 The Wheel of quality (Source: Rose, 2014. P.24)

4.4.1 Purpose of Quality Management

The purpose of the quality management plan, which is a component of the project management plan, is to create the framework for project quality. The creation of the quality management plan ensures that the project manager assures that quality is "planned in and not inspected in" (Rose, 2014, p.50). This ensures that funds allocated for quality are used for the cost of conformance and not for the correction or errors or defects resulting from nonconformance.

4.4.2 Quality Management approach

The services and products offered by PVC must be of high quality standards to ensure that PVC achieves its aim of providing world class eye care services. Quality on a whole will be built on the premise of quality customer care and service. To achieve this, the overall culture of PVC must incorporate quality customer care and service into its daily operations. Therefore, quality becomes the responsiblility of all persons employed by PVC. Futher, the success of PVC achieving quality will depend on its ability to clearly define quality product, quality processes, metrics and key performance indicators (KPIs), as well as ways to continuously improve quality.

Product quality for PVC will be defined based on industry standards and best practices in optometry. The foucs is on customer satisfaction and the degree to which product and services meets customers expectations.

Process quality for PVC will focus on how to achieve project deliverables. Ensuring that activities are geared towards producing quality outcomes. Customer satisfaction will be a huge focus of this, as it is seen as the gateway to providing world class eye care services.

4.4.3 Metrics

Metrics will be defined by the project manager and the project sponsor and will be used to measure quality throughout the life of the project. The results will be

analyzed to ensure that they are inline with pre-determined quality stipulations. Chart 22 illustrates how metrics will be measured and targeted.

Chart 22 Quality metrics (Source: Wakeyshia Hampson, Author, April 2018)

Business objectives	Metrics/KPIs	Measure	Targets
Patient/customer satisfaction	% of satisfied patients	Patient surveys done every 6 months.	Satisfaction rating of 4 or 5, and at least 8 out of 10 questions answered satisfactorily. >=90% or increased by 5%
Customer service	% of satisfied patients %of returning patients/customers	Operational capcity and % repeating patients based on visits/survey	Survey results increase by 5% >=90% or increase in new patients by 5%
Staff competency	# of successful trainings completed	Mandatory staff training conducted once a year	Completion of all objectives set out in the training plan. Minimum of 90% knowledge base
Profit realization	% of customers satisfied Amount of revenue generated	(Gross profit/Revenue) x 100	Between 2% to 5% profit by year two

4.4.4 Balanced Score card

The Balanced Score Card (BSC) is a quality management tool that allows for the quantifying of factors such as employee performance, customer satisfaction and the overall performance of the business. For this project the BSC not only considers the financial aspect of PVC, but will take into account every facet of the business that impacts its ability to achieve its overall objective. Through the use of

a BSC the project manager will be afforded transparency and efficiency allowing for the identification of weaknesses and the implementation of measures to improve them. PVC's BSC will consider the four perspectives listed below. Additionally, it will be used to develop objectives, measures (KPIs), targets, and initiatives inline with each of these points of view:

- **Financial:** this perspective views organizational financial performance and its financial resources.
- **Customer/Stakeholder:** this perspective views organizational performance from the eyes of the customer.
- **Internal Business Processes:** views organizational performance through the lenses of the quality and efficiency related to its product, services or other key business processes.
- **Organizational Capacity/Learning and Growth:** views organizational performance from the aspect of human capital, infrastructure, technology, culture and other capacities that are key to performance.

There is no denying the benifits to be derived from the implementation of a BSC, in light of this the BSC to be used by PVC can be found in appendix 9 below.

4.4.5 Quality Assurance

In order to ensure quality, the iterative process of quality assurance will be employed throughout the life of the project. Quality assurance will be conducted during the project and is continuous and process focused. It is performed to improve the development process in an effort to eliminate defects and errors during this process. Conducting quality assurance is a way to guarantee that the final product meets customer requirements, and thereby eliminating costs associated with rework due to nonconformance.

The project manager will conduct process analysis on a daily basis and audits bi-weekly to ensure that the processes defined in the quality management plan are

fulfilled. Scorecards and metrics will be used to gather information needed to set the baseline for the quality management plan. A quality assurance log, see chart 23 , will be used to record results on a dailly basis. The results of this log will be used to compile a report for submission to the project sponsor detailing the results of the quality assurance process and highlighting discrepancies, if any, and action taken.

The process anlaysis and auditing will provide information on unsatisfactory performance paving the way for process improvement. Process improvements must be shared with the sponsor, documented and form part of the lessons learned. The lessons learned template is provided in Chart 25. The project manager will also incorporate the Shewhart Cycle known as PDCA, into the quality assurance process. This cycle is continuous and consists of the following four steps:

- Plan: Establish objectives and processes required to deliver the desired results.
- Do: Implement the process developed.
- Check: Monitor and evaluate the implemented process by testing the results against the predetermined objectives
- Act: Apply actions necessary for improvement if the results require changes.
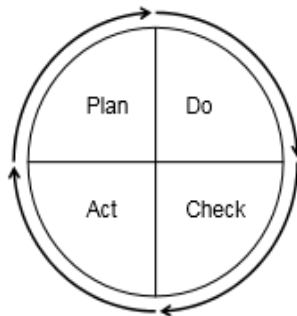
Figure 15 Shewhart Cycle of Quality Assurance (Source: PM4DEV, 2016, p.12)

Chart 23 Quality Assurance Log template (Source: Wakeyshia Hampson, Author, April 2018)

Process Inspected	Date Inspected	Process Measured	Acceptable (Y/N)	Recommendations	Date Resolved

There are seven quality management tools defined by the PMBOK which may be used to confirm quality. These tools are applicable for both the quality assuance and quality control processes. The project manager in her expertise will utilize the best applicable tool. Listed below are the tools:

- **Affinity diagrams:** similar to mind-mapping techniques where ideas are generated and further linked to form organized patterns.
- **Process decision program charts (PDPC):** used to understand the goal in relation to the steps to reach it. Recommended for contingency planning.
- **Interrelationship diagraphs:** creative problem solving in moderate complex scenarios that possess intertwined logical relationships for up to 50 relevant items. Recommended for meetings.
- **Tree diagrams:** used to represent decomposition hierarchies such as the WBS.
- **Prioritization matrices:** used to identify key issues and the suitable alternatives to be prioritized as a set of implementation decisions. Recommended for data analysis.
- **Activity network diagrams:** used with the PERT technique.
- **Matrix diagrams:** used to perform data analysis by seeking the strength of relationships.
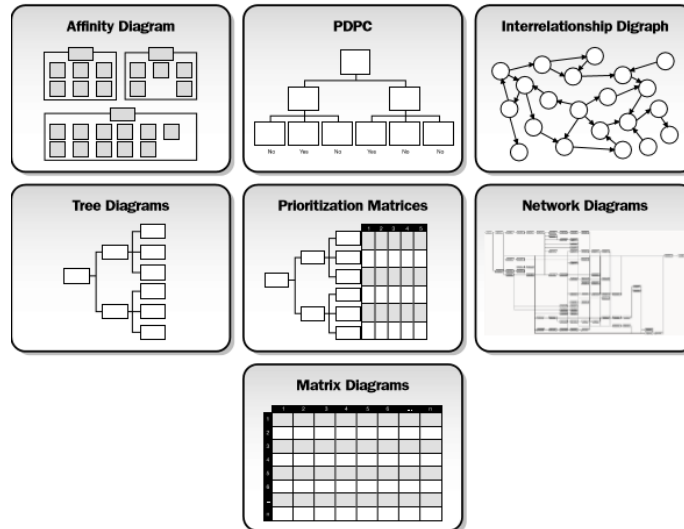
Figure 16 The seven quality management and control tools (Source: PMI, 2013. P.246)

4.4.6 Quality Control

Quality control is the process which inspects the deliverables to ensure that they adhere to the quality standards outlined in the quality management plan. This process involves performing quality control activities such as inspection and use of one or more of the quality management tools shown in figure 16. Quality control will be performed by the project manager in close liason with the project sponsor.

The project manager will collect and document the results of the quality control process using the quality control log shown in chart 24. This information will then be compiled into a report and handed over to the project sponsor. The report will also indicate whether changes are needed in the quality assurance process in order to ensure quality standards are achieved. The data received will also be useful for identifing lessons learned.

Chart 24 Quality Control Log template (Source: Wakeyshia Hampson, Author, April 2018)

Process Inspected	Date Inspected	Process Measured	Acceptable (Y/N)	Recommendations	Date Resolved

Chart 25 Lessons Learned Template (Source: Wakeyshia Hampson, Author, April 2018)

Project Name:				
Project Manager:				
Project Sponsor:				
Scheduled Start Date:		**Actual Start:**		
Schedule Finish Date:		**Actual Finish:**		
Knowledge Area	**Process**	**Error Encountered**	**Resolution**	**Comments**
Scope	1.	1.	1.	1.
	2.	2.	2.	2.
	3.	3.	3.	3.
Schedule	1.	1.	1.	1.
	2.	2.	2.	2.
	3.	3.	3.	3.
Cost	1.	1.	1.	1.
	2.	2.	2.	2.
	3.	3.	3.	3.
Quality	1.	1.	1.	1.
	2.	2.	2.	2.

	3.	3.	3.	3.
Risk Management	1.	1.	1.	1.
	2.	2.	2.	2.
	3.	3.	3.	3.

4.4.7 Quality Management Plan Approval

By affixing our signatures below, Jamella Fabian and Wakeyshia Hampson are officially approving the quality management plan.

Approved by:

_____ Date: _____
Project Sponsor

_____ Date: _____
Project Manager

4.5 Project Risk Management

According to PMI (2013), project risk is defined as "an uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives..."(p.310). All projects are faced with risks -some known and others unknown- these risks should be identified and analyzed during the project initiation and an adequate plan implemented during the planning phase to manage them. For the purpose of this project, a risk management plan will be created for the proactive and consistent handling of project risks.

PMBOK® fifth edition suggests that businesses perceive risks differently, and the varying degree to which they are willing to accept risk is dependent on their risk attitude. PVC can be classified as having a high risk appetite, which is the degree

of uncertainty they will be willing to take on in anticipation of a reward.The risk management plan will be created on the premise of this. The plan will include a Risk Breakdown Structure (RBS), risk register, probability and impact scale, probability scale, impact matrix, and PxI scale. The identify risk process, which is the process of determining wich risks may affect the project and documenting them, is an iterative process, because new risks may evolve or unknow risks can become know as the project progresses through the life cycle. The frequency of iteration will vary according to the situation but it will be consistent during the project life cycle.

Once the risks have been identified, the project manager will categorize and prioritize them. A combination of risk impact and probability will be used to determine which ones are most likely to have the biggest impact on the project. The project manager will then be able to plan an appropriate response to the risks.

4.5.1 Risk Breakdown Structure

The RBS is defined by Hilson (2002), as "a source-oriented grouping of project risks that organizes and defines the total risk exposure of the project". Therfore, it provides a hierarchical structure of potential risk sources. The PVC risk management plan will utilize the RBS as a tool to identify, and assess the overall risk exposure on the project. The RBS is illustrated in Figure 17.

Figure 17 PVC Risk Breakdown Structure (Source: Wakeyshia Hampson, Author, April, 2018)

4.5.2 Probability and Impact Scale

All risks, whether negative or positive, share two characteristics: the probability that it might happen and the impact it would cause if it happens. The probability and impact scales below in figures 26 and 27, respectively, will be used to assess risk events for their probability and impact using a five-point scale ranging from very low to very high. The assessment will consider assumptions in order to justify the range of impact or probability assigned. The results of this assessment will be used to prioritize the risks and determine the most critical or least critical in terms of ranking. In turn, this ranking will afford the project manager insight on action needed to manage or mitigate the probability of these risks affecting the project scope, schedule, budget, and by extension the project's success.

Chart 26 Probability Scale (Source: Wakeyshia Hampson, Author, April, 2018)

Probability Scale	Event Occurrence Probability
1- Very low	< 5% chance of occurrence
2- Low	5 – 10% chance of occurrence
3- Moderate	10- 20 % chance of occurrence
4- High	20 – 30 % chance of occurrence
5- Very high	30% or more chance of occurrence

Chart 27 Impact Scale (Source: Wakeyshia Hampson, Author, April, 2018)

Impact Scale	Event Occurrence Impact
1- Very low	Risk occurrence will have Impact of <5% on the overall cost/time/quality of the project
2- Low	Risk occurrence will have Impact of 5 - 10% on the overall cost/time/quality of the project
3- Moderate	Risk occurrence will have Impact of 10 – 20 % on the overall cost/time/quality of the project
4- High	Risk occurrence will have Impact of 20 – 30% on the overall cost/time/qulity of the project
5- Very high	Risk occurrence will have Impact of >30% on the overall cost/time/quality of the project

4.5.3 Probability and Impact Matrix

The probability impact matrix will provide a snapshot of the project risk rating and ranking from very low to very high. The matrix allows the project manager the opportunity to use the risk rating to prioritize risks on the basis of the impact they will have on the project and the probability of their occurrence.

Figure 18 shows the color-coded probability impact matrix for this project. The cells highlighted in red are considered high risk therefore, the project manager will ensure the creation of a risk response, which will be documented using the risk register. The yellow cells are considered moderate risks and can be addressed as they occur. The low risks are highlighted in green and these risks, although low priority, must not be ignored. Steps should be taken continuously monitor these risks, thereby preventing any negative impact they can have on the project as it progresses.

		Impact Rating				
		1 Very Low	2 Low	3 Moderate	4 High	5 Very High
Probability	5 Very High	5	10	15	20	25
	4 High	4	8	12	16	20
	3 Moderate	3	6	9	12	15
	2 Low	2	4	6	8	10
	1 Very Low	1	2	3	4	5

Figure 18 Probability Impact Matrix (Source: Wakeyshia Hampson, Author, April, 2018)

4.5.4 Risk Register

The risk register is a document used to record the details of all risks identified throughout the life of the project. The ranking of the risks were determined from the qualitative analysis performed by the project manager and the project sponsor.

Figure 19 provides information on the initial risk register for the PVC project. For the purpose of this project the project manager will be responsible for all risks.

Qualitative risk analysis is a proccess associated with risk management and is used to determine the probability of a risk event occurring and the impact the risk will have if it does occur. The probability and impact assessment will be conducted taking into consideration the probability and impact matrix. The process will be performed by the project manager in collaboration with the sponsor, and involves the assessment of individual risk by assigning a numeric ranking of probability and impact. The ranking scale is depicted in figure 18. During this process it is important that both parties agree on the ranking of probability and impact.

The risk register will include:

- **Risk ID:** This is a unique ID given to each identified risk.
- **Risk Description:** Provides information about the the risk identified.
- **Risk Cause:** A brief description of what caused or may trigger the risk.
- **Risk Consequence:** The possible effects if the risk will happen.
- **Risk Probability:** The probability of a particular risk happening. Will be ranked from 1 to 5.
- **Risk Impact:** A rating from 1 to 5, where 1 is considered the lowest impact and 5 is the highest impact.
- **Risk Value (PxI):** This is calculated based on the values entered for the risk probability and risk impact (risk probability X risk impact).
- **Risk Response:** This will state how the risk will be treated. The options being: for negative risks, avoid, mitigate, transfer and accept; for positive risks, the options are exploit, share, enhance and accept).

Risk ID	Cause	Description	Consequence	Probability	Impact	PxI	Response
1.1	Schedule	Cost estimates are inaccurate due to rough estimation at early stage of the project.	Funds unavailable resulting in schedule delays	3	5	15	**Mitigate:** Review and gather historical financial information based on local Industry Standards.
1.2	Scope	Poorly defined project scope	Continuous growth in project scope, leading to scope creep.	2	4	8	**Mitigate:** Implement a change management process- that considers impact analysis, schedule and cost implications- to track each change and control its implementation.
2.1	Regulations	Changes/amendments to local regulations	Delays in project schedule to address compliance	2	4	8	**Mitigate**: conduct indept research to ensure that information on the latest government laws and regulations as it pertains to the industry is known.
2.2	Market	High barriers to entry exist	Unable to access target market due to high start up cost	2	5	10	**Mitigate**: Aggressive market research is conducted to evaluate realistic competitors and understand the finances needed to enter the market and reach the target market.
3.1	Quality	Poorly developed standards and guidelines	Inability to produce quality eyecare services	2	4	8	**Transfer:** Outsource the development of quality standards and guidelines to a third party.
3.2	Service	Lack of professionalism and competency in the services offered	Patients are no longer interested in the services offered by PVC	3	5	15	**Mitigate:** The use of an independent consultant to provide indept customer service training to all staff members
3.3	Sustainability	Lack of commitment by patients	PVC unable to achieve growth in patients and by extension market share	2	4	8	**Mitigate**: Ensure quality standrards and professionalism is maintained by all members of staff, along with rewarding sales promotions to keep customers coming back.
4.1	Funding	Project exceeds allocated budget	Project is unable to achieve its overall objective	3	4	12	**Mitigate:** the implementation of a cost control technique- such as EVM- to effectively monitor and control project costs. Cost control will be a continuous process through out the life of the project.
4.2	Human Resource	Insufficient or inadequate resources	Poor quality of project deliverables	3	4	12	**Mitigate**: Resource planning will be implemented to acquire, monitor and control project resources. This will include the use of resource calendars and the creation of a resource breakdown

4.3	Procurement	Unacceptable contract terms	Inability to negotiate aceptable contract terms	2	3	6	structure. **Mitigate**: The establishment of a procurement management plan, which stipulates PVC's acceptable terms and conditions of purchase

Figure 19 Risk Register (Source: Wakeyshia Hampson, Author, April, 2018

The risk register depicted above in figure 19, indicates that the initial risk identification process revealed that the project has four risks that have a high probability and impact on the project. The PxI scores for these are highlighted in red. While there are six risks identified to have a moderate probability and impact on the project. The PxI scores for these are highlighted in yellow. These risks, as indicated in the risk register, have been analysed and a response strategy implicated. However, in addition to the response starategy, contingency planning will be done as well to ensure that risks do not escalate and negatively affects the overall success of the project.

In light of the above, it is important that the responses documented are frequently reviewed in an effort to monitor progress. This is a continuous process and should continue throughout the life of the project. The project manager will be responsible for monitoring the risks and will share all findings with the sponsor. For identified issues an issue log will be used to collect information. The issue log is an important project document that will be used to help identify project risks. Any findings will be analysed and all project plans will be updated accordingly.

As the project progresses, and in accordance with the control risks process new risk identification will occur, this will result in the risk register being updated. These updates may include assessment of probabililty and impact of risk, assement of probabililty and impact of risk, risk ranking scores (PxI), risk categorization and prioritization. The updates may also include low probability risks or risks that require further assessment/analysis.

4.5.5 Risk Response Plan and Risk Control

In the risk response process, the project manager will develop a potential strategy for each risk. In addition to this a contingency plan will be developed as a back up just in case the original plan is not effective. The overall aim of risk response and contingency planning is based on increasing the likelihood of the occurrence of

positive risk events and decreasing the likelihood of the occurrence of negative risk events.

The project manager will also be responsible for the contingency reserve to accommodate risks which are identified after the initial risk management activities. Reserve analysis technique will be used in this regard, and will focus on effectively mitigating the negative effects of these risks on the project's schedule and budget, by checking to see if the amount of contingency and management reserve available is enough to effectively address risks.

Risk monitoring and controlling is a continuous process which is conducted to ensure that identified risks are being properly managed throughout the project's life. This process involves the project manager undertaking activities such as risk identification, risk response, monitoring of residual risks, and the implemetnation and execution of the response plan. During the execution of this process, re-assessment of risks or re-examining risk response measures will take place.

4.5.6 Risk Management Plan Approval

By affixing our signatures below, Jamella Fabian and Wakeyshia Hampson are officially approving the risk management plan.

Approved by:

_____ Date: _____
Project Sponsor

_____ Date: _____
Project Manager

5 CONCLUSION

The general objective of this project focused on the creation of a project management plan for PVC to be used as a guideline for the establishment of a world class eyecare service center. This objective was achieved using PMI best practices as outlined in the PMBOK® fifth edition. This was also the main source of knowledge and guidance during this process. Additionally, qualitative and analytical research methods were used to gather information needed for the achievement of this objective.

1. The project charter was developed as a reference to guide the project. It provided information on the objectives of the project, how they would be achieved, the main stakeholders, milestones, delineation of roles and responsibilities and the identification and authority of the project manager.

2. The scope of the project was defined through the creation of the scope management plan, which outlined the work that was needed in order to achieve the overall project objective. This specific objective was achieved by utilizing scope management best practices that includes a requirements management plan, requirements traceability matrix, WBS, and WBS dictionary. These documents were created based on information gathered from the project sponsor.

3. The time management plan was created to manage project schedule and resources in an effort to ensure timely delivery of project deliverables. This specific objective includes an activity list, estimated activity resources, estimated activity duration and the schedule baseline. The scheduling software used and measurement guidelines i.e. days and hours, were also specified. Time management techniques such as PERT, critical path method and critical chain method were employed.

4. The cost management plan was developed to describe how project funds will be sourced, managed and controlled, to ensure that the project is completed within the specified budget. This specific objective was achieved by capturing costs associated with deliverables, the creation of the cost baseline and the use of cost control techniques such as EVM. Cost variance techniques were also employed.

5. The quality management plan was created to describe the activities that will be undertaken to ensure delivery of quality project outputs and to ensure stakeholders expectations are met. Quality standards, metrics and approach was defined. Procedures for quality assurance and control were also put in place to ensure conformance.

6. Project risks were handled with the creation of the risk management plan. This specific objective focuses on identifying, managing, monitoring and controlling project risks to ensure successful delivery of project objectives within budget, scope and schedule. To achieve this specific objective the following were created: RBS, risk register, probability and impact matrix. Response strategies were generated to effectively monitor and control risks identified.

7. The BSC will be one of the key sources for PVC as it aims to achieve its strategic objectives. The BSC allows for transparency and ensures that the strategic path taken aligns with the overall objective of PVC.

6 RECOMMENDATIONS

1. It is recommended that the project manager frequently reviews cost estimates throughtout the life of the project to ensure project deliverables are within the project's budget.

2. The project manager should frequently monitor the project's schedule to ensure deliverables are on time.

3. The project manager should conduct weekly performance reviews to ensure that the project is progressing as per scope, budget, and schedule.

4. It is recommended that the project manager continuously reviews and monitors risks.

5. The Project manager and sponsor should ensure that quality standards mentioned in this plan are enforced.

6. The project manager should enforce and utilize the change management control procedure throughout the life of the project to gurad against scope creep.

7. The project manager and project sponsor should ensure there is an effective communication method in place and information is shared regularly and in a timely manner.

8. The project manger should empower the project sponsor with the knowledge needed to effectively and efficient incorporate CSR in the culture of PVC.

9. It is recommended that the project sponsor invest in an innovative and continuous marketing campaign, to ensure that PVC's brand is advertised and the targeted market share is attained.

10. The project sponsor and project manager should utilize the metrics/KPIs listed in this document. The utilization of the BSC will be key to this.

11. The Project manager and Project sponsor should familiarize themselves with the templates mentioned in this plan. This will ensure that the right information is being captured and shared in a timely manner.

12. It is strongly recommended that the contents of the Project management plan is adhered to, in order to aide PVC in achieving its objective of creating world class eyecare service.

13. The project sponsor should follow the customer service training plan and strategy suggested. Training should be at the core of PVC's operating culture.

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8 APPENDICES

Appendix 1: FGP Charter

<div align="center">

PROJECT CHARTER

</div>

PROJECT CHARTER	
Formalizes the project start and confers the project manager with the authority to assign company resources to the project activities. Benefits: it provides a clear start and well defined project boundaries.	
Date	**Project Name:**
November 19, 2017	Project management plan for Paradise Vision Centre – St. John's, Antigua
Knowledge Areas / Processes	**Applicacion Area (Sector / Activity)**
Knowledge areas: Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Risk Management **Process groups:** Initiate, Plan	Health/ Commercial
Start date	**Finish date**
February 19, 2018	July 2, 2018
Project Objectives (general and specific)	
General objective: To develop a project management plan for Paradise Vision Centre located in St. John's, Antigua, to be used as a guideline for the establishment of a world class eyecare service center. **Specific objectives:** 1. To create a scope management plan to explicilty outline the work that will be undertaken to achieve the overall project objective. 2. To develop a time management plan to create and manage project schedule and resources to ensure timely delivery of project deliverables. 3. To create a cost management plan to describe how project funds will be sourced, managed and controlled, to ensure that the project is completed within the specified budget. 4. To produce a quality management plan to describe the activities that will be undertaken to ensure delivery of quality project outputs and to ensure stakeholders expectations are met. 5. To develop a risk management plan to identify, manage, monitor and control project risks to ensure successful delivery of project objectives within budget, scope and schedule.	
Project purpose or justification (merit and expected results)	
The purpose of this project is to create a project management plan, using PMI best practices to guide Paradise Vision Centre with the proper planning needed to achieve a venture of this magnitude. In Antigua there has always been the need for quality eye care services. To this end, the government, in an effort to meet the eye care needs of its citizens, entered into visiting partnership agreements with countries such as Cuba and Venezuela, who would, for a period of time, perform optometry and ophthalmologist services. It is hoped that through the successful completion of the project management plan that Paradise Vision Centre, once implemented, will provide world class eye care services rivaling that of any developed country in the world. The benefits to the people of Antigua that can be derived from this project include efficient, affordable and quality optometrist services utilizing the efficiency of resources, new technology and innovative strategies. Added to these benefits is the inspiration that a project of this scale, undertaken by a young Antiguan female, could have on the youths. This inspiration can be used to motivate them to pursue tertiary education, leading to entrepreneurship opportunities and thereby boosting the economic value of Antigua.	

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

The final delivery of the Final Graduation Project (FGP) is the project management plan which includes the scope management plan, time management plan, cost management plan, quality management plan, and risk management plan.

Assumptions

- It is assumed that he FGP can be completed in the time alloted.
- It is assumed that the project charter will be used as a reference of authority for the future FGP .
- It is assumed that stakeholders support and engagement will be sustained.
- It is assumed that the student will have the guidance of the UCI professor during the life of the FGP.
- It is assumed that the FGP quality will meet stakeholders expectations.
- It is assumed that the FGP will be executed using PMI best practices.
- It is assumed that there are no large costs needed to complete the FGP .
- It is assumed that the FGP will be delivered within quality, scope and schedule.
- It is assumed that the FGP scope, schedule and quality will not change.
- It is assumed that the FGP will be successful.

Constraints

- Time to complete FGP.
- Uncertainty regarding cost needed to complete FGP.
- Limited knowledge/ expertise of student.
- Time zone difference between student and University for International Cooperation (UCI) professor.
- Resource of one person.
- Availability of UCI representatives on the weekends.

Preliminary risks

Cause	Effect	Impact
If FGP requirements are not understood and incorrectly gathered	Delay in FGP deliverable	This will affect FGP scope, time and quality.
If poor communication exists between student and professor	Creates misunderstanding and affects the timely completion of FGP objectives	FGP delivery is compromised. This impacts scope, time and quality .
If information is not being shared	The effective utilisation of FGP resources is compromised.	This impacts FGP scope, time and quality.
If stakeholders are not identified and managed.	Stakeholders expectations will not be met.	This impacts the overall quality of the final product.
If funds associated with FGP are unknown	FGP might be delayed or cancelled.	Unable to complete FGP requirments.

Budget
Cost associated with the FGP are estimated at USD 3,482.86.

Milestone	Start date	End date
Graduation Seminar	November 13, 2017	December 17, 2017
FGP deliverables	November 13, 2017	December 17, 2017

Graduation Seminar approval	December 18, 2017	December 22, 2017
Tutoring Process	February 19, 2018	May 18, 2018
FGP submission to reviewers	June 28, 2018	June 28, 2018
Presentation to board of examiners	August 10, 2018	August 16, 2018
Final review by board	August 10, 2018	August 13, 2018
FGP grade report	August 14, 2018	August 16, 2018

Relevant historical information

Paradise Vision Center is the brain child of Antiguan entrepreneur Ms. Jamella Fabian. Ms. Fabian is a vibrant young female who is passionate about life and health, especially eye care. She completed optometry studies in Cuba and upon her return to Antigua, she further enhanced her knowledge and skills by working alongside Antigua's best ophthalmologist and optometrists. It was this that motivated her to embark upon the journey of creating Paradise Vision Center. Ms. Fabian believes in symbiotic and mutual relationships by giving the patient the best care possible.

This is the first venture of its kind that Ms. Fabian has embarked on. The business has the full support of her family with one family member assisting with financial support, Ms. Fabian refers to this individual as her business partner.

Paradise Vision Center, under the auspices of Ms. Fabian will specialize in:

- Comprehensive eye exams
- Glaucoma screening
- Refractions
- Diabetic retinopathy screening
- Cataract screening
- Pterygium

Stakeholders

Direct stakeholders:
Ms. Jamella Fabian
Alonzo Jack
Credit Union
Wakeyshia Hampson
UCI

Indirect stakeholders:
Government of Antigua and Barbuda,
Citizens of Antigua

Project Manager: Wakeyshia Hampson	**Signature:**

Authorized by: Jamella Fabian	Signature:

Appendix 2: FGP WBS

	1	Final Graduation Project
	2	◢ Graduation Seminar
	2.1	◢ FGP deliverables
	2.1.1	Charter
	2.1.2	WBS
	2.1.3	Chpater I. Introduction
	2.1.4	Chapter II. Theoretical framework
	2.1.5	Chapter III. Methodological framework
	2.1.6	◢ Annexes
	2.1.6.1	Bibliography
	2.1.6.2	Schedule
	2.2	Graduation Seminar approval
	3	◢ Tutoring Process
	3.1	▷ Tutor
	3.2	Assignments of Previous Chapters (if needed)
	3.3	Chater IV. Development (Results)
	3.4	Chapter V. Conclusions
	3.5	Chapter VI. Recommendations
	4	◢ Reading by reviewers
	4.1	◢ Reviewers assingmnet request
	4.1.1	Assingnment of two reviewers
	4.1.2	Communication
	4.1.3	FGP submission to reviewers
	4.2	◢ Reviewers work
	4.2.1	◢ Reviewer 1
	4.2.1.1	FGP Reading
	4.2.1.2	Reader 1 report
	4.2.2	◢ Reviewer 2
	4.2.2.1	FGP Reading
	4.2.2.2	Reader 2 report
	5	◢ Adjustments
	5.1	Report for reviewers
	5.2	FGP update
	5.3	Second review by reviewers
	6	◢ Presentation to board of examiners
	6.1	Final review by board
	6.2	FGP grade report

Appendix 3: FGP Schedule

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		**Final Graduation Project**	199 days	Mon 11/13/17	Thu 8/16/18	
2		FGP Start	0 days	Mon 11/13/17	Mon 11/13/17	
3		**1,Graduation Seminar**	25 days	Mon 11/13/17	Fri 12/15/17	
4		**1.1,FGP deliverables**	25 days	Mon 11/13/17	Fri 12/15/17	
13		1.2,Graduation Seminar approval	5 days	Mon 12/18/17	Fri 12/22/17	9,11
14		**2,Tutoring Process**	65 days	Mon 2/19/18	Fri 5/18/18	
15		**2.1,Tutor**	3 days	Mon 2/19/18	Wed 2/21/18	
16		2.1.1,Tutor assignment	1 day	Mon 2/19/18	Mon 2/19/18	13
17		2.1.2,Communication	2 days	Tue 2/20/18	Wed 2/21/18	16
18		2.2,Adjustments of Previous Chapters (if needed)	5 days	Thu 2/22/18	Wed 2/28/18	16,17
19		2.3,Chater IV. Development (Results)	47 days	Thu 3/1/18	Fri 5/4/18	18
20		2.4,Chapter V. Conclusions	5 days	Mon 5/7/18	Fri 5/11/18	19
21		2.5,Chapter VI. Recommendations	5 days	Mon 5/14/18	Fri 5/18/18	20
22		Tutor approval	0 days	Fri 6/22/18	Fri 6/22/18	
23		**3,Reading by reviewers**	15 days	Fri 6/22/18	Thu 7/12/18	21
24		**3.1,Reviewers assingment request**	5 days	Fri 6/22/18	Thu 6/28/18	
25		3.1.1,Assingnment of two reviewers	2 days	Fri 6/22/18	Mon 6/25/18	22
26		3.1.2,Communication	2 days	Tue 6/26/18	Wed 6/27/18	25
27		3.1.3,FGP submission to reviewers	1 day	Thu 6/28/18	Thu 6/28/18	26
28		**3.2,Reviewers work**	10 days	Fri 6/29/18	Thu 7/12/18	
29		**3.2.1,Reviewer 1**	10 days	Fri 6/29/18	Thu 7/12/18	
30		3.2.1.1,FGP Reading	9 days	Fri 6/29/18	Wed 7/11/18	27
31		3.2.1.2,Reader 1 report	1 day	Thu 7/12/18	Thu 7/12/18	30
32		**3.2.2,Reviewer 2**	10 days	Fri 6/29/18	Thu 7/12/18	
33		3.2.2.1,FGP Reading	9 days	Fri 6/29/18	Wed 7/11/18	27
34		3.2.2.2,Reader 2 report	1 day	Thu 7/12/18	Thu 7/12/18	33
35		**4,Adjustments**	20 days	Fri 7/13/18	Thu 8/9/18	
36		4.1,Report for reviewers	9 days	Fri 7/13/18	Wed 7/25/18	34
37		4.2,FGP update	1 day	Thu 7/26/18	Thu 7/26/18	36
38		4.3,Second review by reviewers	10 days	Fri 7/27/18	Thu 8/9/18	36,37
39		**5,Presentation to board of examiners**	5 days	Fri 8/10/18	Thu 8/16/18	
40		5.1,Final review by board	2 days	Fri 8/10/18	Mon 8/13/18	38
41		5.2,FGP grade report	3 days	Tue 8/14/18	Thu 8/16/18	40
42		FGP Finish	0 days	Thu 8/16/18	Thu 8/16/18	41

Project: WBS
Date: Sat 12/2/17

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

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Appendix 4: Employee Customer Service Training Plan

Organizations Name: Pariadise Vision Center	Number of training days:3
Trainer: Express Consultancy	Time: 9:00 am – 4:00 pm

Objectives: This training plan will focus on harnessing and developing PVC's employees customer service skills so that they can consistently provide exceptional customer service.

Intended outcomes:

- Understanding the work environment
- Explaining what quality customer service means to the business
- Understanding how attitude affects quality
- Explain how to connect with customers
- How to deal with difficult customers
- Customer escalation process

Day 1:
- Who is PVC
- Who are customers
- What is customer Service
- Understanding the customer's problem
- Meeting Customers Needs

Day 2:

- Power of Appearance
- The power of the smile
- Staying positive
- Going the extra mile
- Following up

Day 3:
- Turning difficult customers around
- Addressing complaints
- Tips and Tricks
- Telephone etiquette
- Office etiquette

Appendix 5: Customer Satisfaction Survey

Objective:

This survey is intended to capture the satisfaction of PVC customers and patients, to help us provide the best quality vision care and service and to identify how to improve our customer service and maintain customer satisfaction.

Ratings

Please give your assessment of our services, by circling one of the numbers below, ranging from 1(**very dissatisfied**) to 5 (**very satisfied**), and selecting the best response for the remaining questions.

Questions	**Rating**
1.Satisfaction with the quality of services offered at PVC	1 2 3 4 5
2. Satisfaction with the quality of products offered at PVC	1 2 3 4 5
3. Your concern for privacy and transparency	1 2 3 4 5
4. Professionalism of staff	1 2 3 4 5
5. Satisfaction with the accessibility of PVC	1 2 3 4 5
6. Satisfaction with the professionalism of Ms Fabian	1 2 3 4 5

7.Would you visit us again   yes   no
(b)If no, why?_____

8.Would you recommend us   yes   no

9.What do we need to improve on?
_____
_____

10.What did we do well?
_____
_____

Thank You For Your Time!

Appendix 6: Customer Satisfaction Survey Scorecard

Date sent	Number of Patients	Number of respon-dents	Closed date	Overall satisfaction (>=90%)	Staff	Service	security	Referral

Appendix 7: Customer Satisfaction Plan

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PVC Customer Satisfaction Plan

Objective

To maintain a high level of customer satisfaction by consistently offering patients quality services, care and products.

Purpose

The purpose of this plan is for it to be used as a framework for customer satisfaction at PVC. It is hoped that this plan will be updated yearly as the organization grows, and to align itself with the changes in industry standards and best practices as it relates to achieving customer satisfaction.

Description

PVC employees will receive customer service training on a yearly basis and it is anticipated that this training will provide them with the skills, tools and techniques needed to provide patients with quality care, services and products. To achieve this, the training will focus on:

- Understanding the work environment
- Explaining what quality customer service means to the business

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- Understanding how attitude affects quality
- Explain how to connect with customers
- How to deal with difficult customers
- Customer escalation process

Appendix 8: Marketing Plan

PVC Marketing Plan

Objective:

To own a large market share in the Optometry industry, to position PVC as the leading provider of quality eye care services.

Purpose:

This marketing plan will beused to guide PVC on how to strategically enter the market, gain market presence, retain market presence and to continuously expand its presence.

Description:

PVC will focus on positioning the company's brand on gaining a competitive advantage by employing sales promotion. It will promote its business by using advertisement on social media; more specifically Facebook and Instagram. This allows for mass communication that is affordable and current. 4"x 6" flyers will be used to advertise the business as well.

The front of the flyer will contain generic information about PVC while the back will elaborate on the products and services offered by PVC. There will also be radio and TV appearances. The main pricing strategy that will be employed is competitive pricing; this simply means that prices will be similar to that of competitors but made more attractive to gain a competitive advantage over rivals.

Appendix 9: Balance Score Card

Mission	Paradise Vision Center prides itself on providing quality vision care to all patients in need. Detecting vision defects and correcting them is our priority; while providing the patients with unique style and fashion that stands out from our competitors.
Vision	Our vision is to be the best in providing optical care to our patients, by improving their vision, providing high quality unique eyewear and polarized sunglasses.
General Objective	To develop a project management plan for Paradise Vision Centre located in St. John's, Antigua, to be used as a guideline for the establishment of a world class eye care service center.

	Objectives	Measures	Targets	Initiatives
Financial	Generate a profit	• Operating costs • Revenue • Profit margin	• -2 % to -5% by year 2 • 2 % to 5% by year 2 • 2 % to 5% by year 2	• Improve Marketing Strategy / Campaign. • Improve Customer Service.
Customer	Patient satisfaction	• % of Patients satisfied (based on survey results). • # of New and returning patients (based on patients records).	• >=90% or more positive survey results • >=90% or increase in new patients by 5%.	• Improve Customer Service. • Improve Staff Competency.
Internal Business Processes	Quality customer service	• % of new and returning patients (based on patients records). • % of Patients satisfied (based on survey results).	• >=90% or increase in new patients by 5% • Survey results increase by 5%	• Improve Staff Training. • Improve Customer Service.
Learning & Growth	Staff training / capacity building	# of successful trainings completed.	Completion of training objectives set out in the training plan. 90% knowledge base at end of training.	• Perform Review of Staff Skill Set. • Implement Staff Reward System.

Appendix 10: English Language Professional Revision Dictum

Desryn Collins
P. O. Box W180 Woods Centre
St John's
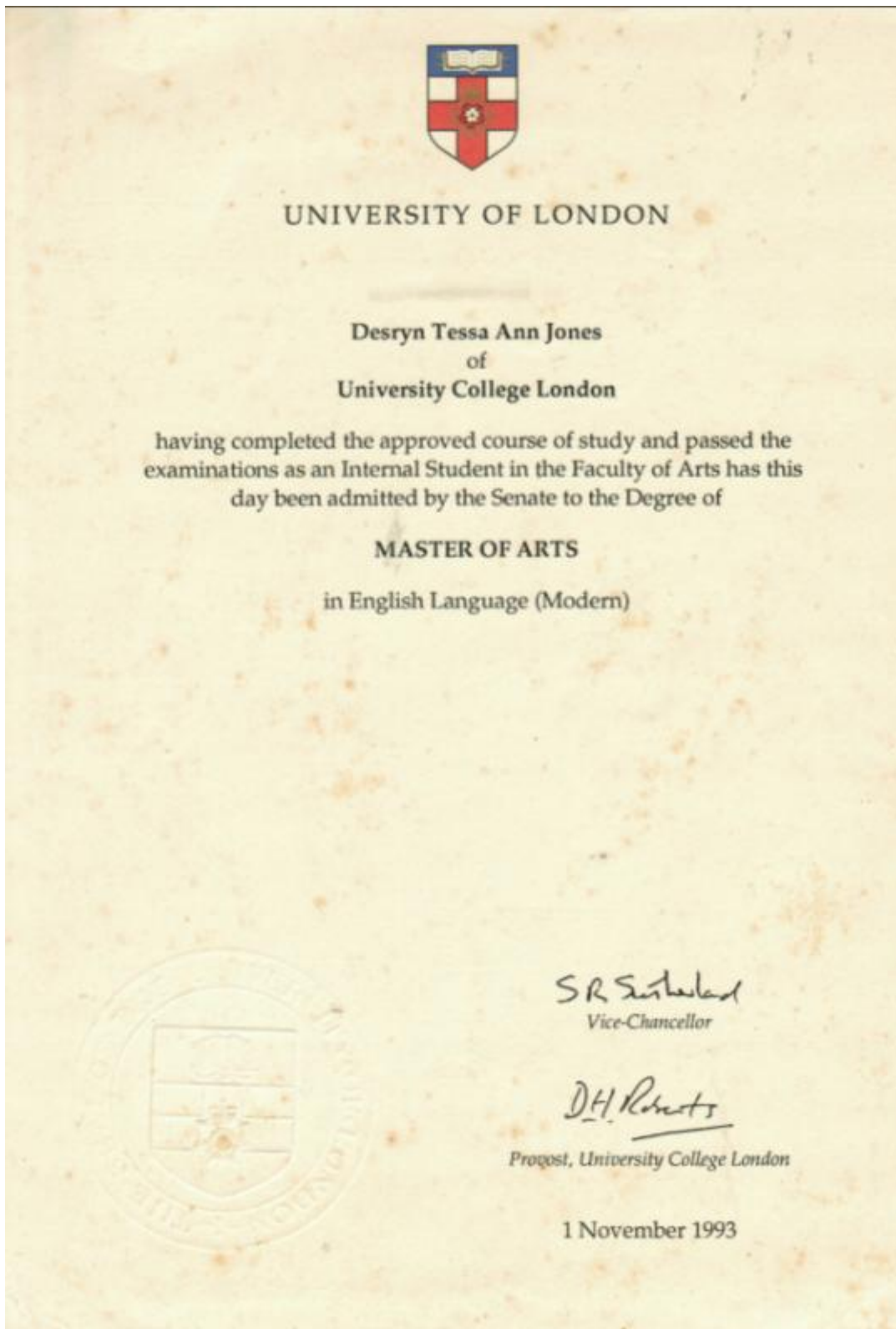Antigua

8 May, 2018

To Whom It may Concern

Re: **Review of Final Graduation Project Submitted by
Wakeyshia Hampson in Partial Fulfillment of the
Requirements for the Master in Project Management (MPM) Degree**

I hereby confirm that I have read the contents of the Final Graduation Project submitted by Wakeyshia Hampson, and have advised the student to make grammatical and typographical corrections. It is my opinion that the document now meets the literacy standards of a Masters level student.

Warm regards,

…………………………….
Desryn Collins (Mrs)
MA, Modern English Language
UCL, University of London

Appendix 11: English Language Professional Credentials

UNIVERSITY OF LONDON

Desryn Tessa Ann Jones
of
University College London

having completed the approved course of study and passed the
examinations as an Internal Student in the Faculty of Arts has this
day been admitted by the Senate to the Degree of

MASTER OF ARTS

in English Language (Modern)

Vice-Chancellor

Provost, University College London

1 November 1993

Appendix 12: English Language Professional Marriage Certificate