UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)

FINAL GRADUATION PROJECT

The development of a Project Management Methodology for Caribbean Bottling Company

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

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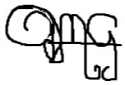
TUTOR´S FGP APPROVAL REPORT
TO COMMENCE READERSHIP STAGE

Student: Shawnell Newry 

Topic for Final Graduation Project: The development of a Project Management Methodology for Caribbean Bottling Company

Tutor: Osvaldo Martinez **Signature:**  **Date: 6/4/2019**

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SUMMARY TABLE FOR FULFILLMENT OF MINIMUM FGP REQUIREMENTS

FGP Requirements	Fulfills requirements YES or NO
Introductory section	
Page numbering lowercase Roman numerals on bottom border, 2 space from the last line	**YES**
Spacing 1 ½	YES
Coversheet	YES
Approval sheet	YES
Dedication	YES
Awards	YES
Table of Contents	YES
Table of Illustrations	YES
Index of Tables	YES
Index of Abbreviations	YES
Executive Summary	**YES**
Summarized Background	YES
Summarized Objectives	YES
Summarized Methodology	YES
Summarized Results and Recommendations	YES
No more than 2pages long	YES
Prioritization of Results and Conclusions	YES
Summary Parts in separate paragraphs	YES
Single spacing	YES

1) FGP Introduction	**YES**
Written in prose format	YES
From 3 to 6 pages maximun	YES
Background	YES
Problem	YES
Justification for the Project	YES
General Objective	YES
Specific Objectives	YES
Begin objectives with an infinitive verb	YES
The What and Why of the Objectives	YES
Complete sentences for the Objectives	YES
2) Theoretical Framework	**YES**
Elements and variables to consider during the study	YES
Relation between variables and theorizing	YES
Referential or Institutional Framework	YES
Theory of Project Management	YES
3) FGP Methodological Framework	**YES**
Relation with the FGP´s EDT	YES
Identification and description of the methods, techniques, procedures and tools	YES
Identification of Research Methods	YES
Identification of Application Techniques	YES
Identification of Information Processing and Analysis	YES
4) Content Development	**YES**
The entire document, right margin 2.5 cm and left margin 3.5 cm, superior margin 3.5 cm and inferior margin 3 cm	YES
Page numbering in Arabic numbering in the superior right area 5 spaces	YES
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Font type Arial 12 or similar	YES
Title in uppercase and bold	YES
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Title and numbering above the table throughout the document	YES
Title and numbering below the figures (Graphs, Diagrams, Photographs, Flow charts, etc.) throughout the document	YES
Contribution to knowledge, innovation.	**YES**
5) Conclusions	**YES**
6) Recommendations	**YES**
7) FGP Bibliography	YES
Bibliographical references according to standard format	YES
Alphabetical order according to author	YES
Quantity and quality of citations	YES
8) Annexes	**YES**
FGP Charter	YES
Description of FGP (EDT)	YES
Timeline	YES
Secondary information	YES
	YES

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

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DEDICATION

I dedicate this project to God, for giving me the energy to complete it.

ACKNOWLEDGMENTS

I wish to express my gratitude to my CEO who has always supported me on my path to becoming a more proficient professional and additionally, for persistently pushing me to be more resilient. I am also grateful to my husband for the help, happiness and hope he has shared during this experience.

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ABBREVIATIONS AND ACRONYMS

ADDIE	Assess Design Develop Implement Evaluate
CBC	Caribbean Bottling Company
CO2	Carbon Dioxide
CPM	Critical Path Method
CCPM	Critical Chain Project Management
FM	Functional Manager
IPM	Integrated Project Management
ISO	International Organization for Standardization
KSA	Knowledge, skills and abilities
OPM3®	Organizational Project Management Maturity Model
OPM Methodology	Organizational Project Management Methodology
PDCA Cycle	Plan-Do-Check-Act Cycle
PET	Polyethylene terephthalate
PMM	Project Management Methodology
PMI	Project Management Institute, Inc.
PMBOK® Guide	Project Management Body of Knowledge
Prince2	PRiSM, version 2
PMTT	Project Management Tools and Techniques
PM	Project Manager
PMP	Project Management Plan
RACI Chart	Responsible, Accountable, Consulted, Informed Chart
WBS	Work Breakdown Structure

EXECUTIVE SUMMARY (ABSTRACT)

This document describes the development of a project management methodology for Caribbean Bottling Company (Bahamas) Ltd (CBC), which is a beverage manufacturing company located in Nassau, Bahamas. The aim is to improve project management capabilities by forming a formal project management methodology.

The company has been constantly expanding because of an increased staff, an amplified product portfolio, an intensifying scope of compliance and expanding processes. The burgeoning complexity of tasks has driven a need for a systematic method of management, amidst the constraints of time, budget and quality. As each of these constraints has presented itself, the company has chosen to take a proactive approach to compete with changes by seeking a project management methodology. This will increase the capacity to manage the varying dynamics in the beverage manufacturing business.

This graduation project was an empirical quest to determine the degree to which a project management methodology is already incorporated. It also served to discover how best to improve the current state of operations through the lens of a system-wide project management methodology. The overall goal was to develop a project management methodology for Caribbean Bottling Company in order to improve project performance through standardization.

The general objective was to develop a proposal for the creation of a project management methodology to control the projects launched in beverage manufacturing at Caribbean Bottling Company (Bahamas) Ltd, to build business capacity, to better organize projects driven toward company growth, and to increase customer satisfaction. This was done by completing four specific objectives. The first objective was to analyze current project management practices in the training and development program at Caribbean Bottling Company to determine system gaps, for which, the methodology will be utilized. Subsequently, project management procedures in the five process groups and ten knowledge areas were devised in order to provide structure within the program. Next, project management templates and forms associated with the project management procedures were produced for use in the management of future projects. Finally, the methodology was applied to a typical project structure in the initiating and planning process groups in order to identify additional program needs.

With this aim, a research strategy was initiated by utilizing methods of qualitative research to facilitate the project management maturity continuum. Semi-structured interviews were conducted to determine the extent to which project management concepts were perceived and competently integrated by the company. The interviews were also carried out to engage stakeholders about the developed methodology. The analytical research method was used to make a critical evaluation of facts or information that was already available within the company. These include data such as existing reports, templates, including company literature, documentation and verbal accounts.

The results obtained from semi-structured interviews indicated that Caribbean Bottling Company has an existing process to execute projects but does not implement the highest standard of project management practices as established by the Project Management Body of Knowledge. Evidence of a dysfunctional system included poor planning, communication, knowledge management, process control, management of change and reporting capabilities. These were all observed as deficiencies that needed to be rectified through the developed methodology. Caribbean Bottling Company project management methodology was designed to address identified inadequacies and provide a professional approach to projects. Methodological parameters were intended to align departmental activities with the ideals stated in corporate strategy and create a synergy in operations.

A report with main findings was generated, in order to identify the needs of the training and development program and to identify where the methodology could be applied. This report stated the results of the gap analysis study. Subsequent to this, a list of procedures for initiating, planning, monitoring and controlling process groups was developed. In order to streamline program documentation, templates and forms for initiation, planning, monitoring and control process groups were materialized. Lastly, to substantiate the veracity of the methodology, a report was produced with main findings on the application of the methodology for the sample project structue. This report revealed opportunities for growth in the methodological system.

To improve the operations at Caribbean Bottling Company, it was recommended that the methodology be integrated consistently throughout the organization. This will support a cultural shift toward systems thinking and increase the appreciation for project management standards. Another important recommendation for Caribbean Bottling Company was to organize trainings for its personnel to acquaint and equip employees with good project management practices. Additionally, it was recommended that audits and management reviews should be implemented to ensure that the systems were functioning in compliance with standards. Finally, it was suggested that, with the expansive growth of the company, and through proper project management consultation, system-wide documentation should be adapted and updated to fulfill the needs of the enterprise in the years to come.

1 INTRODUCTION

1.1 Background

Caribbean Bottling Company (Bahamas) Ltd. is a beverage manufacturing company that engages in the manufacture of carbonated and non-carbonated soft drinks in Polyethylene terephthalate (PET) bottles and cans, post-Mix syrups in PET bottles and bag-in-box, and purified packaged water in PET bottles; the filling of CO2 cylinders for fountain service; the distribution and merchandising of carbonated and non-carbonated soft drinks and juices; and the servicing of fountain equipment. It is established in Nassau, the capital city of the Bahamas. Caribbean Bottling Company (Bahamas) Ltd. (CBC) and its predecessor companies have serviced the Bahamas with Coca-Cola products for over 75 years. In addition to the distribution of the Coca-Cola product line, CBC also offers Schweppes, Fanta, Sprite, Barq's Root Beer, Dr. Pepper, Goombay Punch, Barritt's Ginger Beer, Canada Dry, Vitamin Water, Dasani, Powerade, Minute Maid and Flavorful juices. CBC was originally located at the Thompson Boulevard plant until 2011 when the current site became operational on Sir Milo Butler Highway. The employee count has expanded from 58 staff members to 201 staff members. The human resource (HR) department still consists of only one HR manager and there is decentralized training and evaluations among individual departments. There are thirteen departments including: Production, Quality Control, Maintenance, Fleet and Facilities, Sales and Customer Service, Marketing, Technical Department, Warehouse, Logistics, Finance, IT, Quality Management Systems and Human Resources. No formal training department exists. The company primarily uses on-the-job training schemes to develop skills and increase information awareness. Many failures and losses are being repeated with each successive generation of employees. The documentation of

company training programs is still in the development phase. Few training targets are being met and most of them are inconsistent.

1.2 Statement of the problem

This company lacks a methodology for project development and as a result, the creation of programs is deficient of a formal and comprehensive approach. As a small company, it struggles to meet international standards required by Coca Cola for sustainable program development. Thus, the company has experienced difficulties in achieving ISO (International Organization for Standardization) certification. It also lacks critical developmental frameworks to develop and retain new staff. Poor training leads to poor employee performance, and poses a risk to business continuity for departmental operations. In light of poor staff performance, employees are either terminated or quit out of frustration, as a consequence, this creates an unsustainable operation. In view of the balanced score card, this challenge contributes to four burgeoning weaknesses at the company:

1. Financial perspective- There is a poor return of investment from human resources due to high turn over. The financial investment to hire and develop staff is lost when employees leave the company prematurely. Due to ignorance, untrained staff make more mistakes which lead to financial damages (for example, damaged equipment, misused raw materials, wasted resources). There is a high cost of non-conformance which is causing the company financial loss due to unproductivity and poor product quality.
2. Customer- Dissatisfied external customers receiving poor customer service inevitably result in loss of business and dissatisfied internal customers lead to an underperforming workforce and a poor work culture.

3. Internal Business Processes- Lack of training results in inefficient and ineffective execution of tasks. Poor communication of procedures lead to leads to chaos and inconsistency in performance.
4. Organizational Capacity-learning and growth

The team is not equipped with competencies to contribute to the mission and aspirations of the company. Uneducated workforce detracts from the achievement of the vision and strategy. The capabilities of the organization is limited because the operation's team members lack the knowledge required to execute tasks effectively nor are they prepared to ascend to positions of higher authority due to a lack of competencies. This stunts effective succession planning and business continuity.

The proposed solution is the use of a project management methodology that addresses the specific needs of an effective training and development program. This will create a scheme for project development, increase competencies among staff and help the company become more progressive and compliant with standards.

The current management framework for projects is very limited, and project methodology is not established in the beverage manufacturing system causing project failure, frustration and financial loss. The current training and development program at Caribbean Bottling Company has been ineffective, poorly structured and needs a methodical approach for guiding a formal operational system. Staff training needs have not been met, and according to Coca Cola requirements and ISO audits, a formal training program must be implemented.

Project management practices and procedures are not integrated and the staff members do not know about them. This capability could help CBC to reach the goals of project development and to cope with the demands of an expanding workforce. The project management methodology will catapult the training and development program into a sustainable and well-coordinated

system. To resolve the inconsistencies in program management and challenges due to decentralization, CBC has decided to introduce the ideals of the project management methodology.

1.3 Purpose

The study will investigate the current training program at Caribbean Bottling Company and analyze the organizational components, which will lead to gaps in competencies, procedures and documentation. It will investigate the needs of the training and development program, particularly training tools, structure, assets and modules critical to the program. It will also investigate current and requisite tools to monitor and evaluate the effectiveness of the program. To rectify the systemic issues within the organization, the company seeks to adopt a methodology that will produce an effective and competent workforce and in turn drive business continuity. A project management methodology must be applied to the training and development program at Caribbean Bottling Company to formalize the program, fulfill training needs and implement effective measures to enable project success.

The intention of the project management methodology is to create a strategy to plan, and also to design, control and implement a structured approach toward project development. The project methodology will coordinate the systemic development of programs and projects, provide a framework for new initiatives to be developed, set standards for project creation, and create a sustainable approach to re-structure existing projects and increase business capacity. Typical projects in the beverage manufacturing system include the creation of a training and development program and an equipment calibration program. This methodology can also be recommended for implementation in marketing projects as well as in engineering and infrastructural expansions.

Expected benefits include the following:

1. Increased efficacy of the projects deliverables.
2. The creation of a platform to better educate the staff members.
3. A better coordination of team efforts.
4. Significant reduction in risks and loss.
5. An increase in customer and stakeholder satisfaction.

1.4 General objective

To develop a proposal for the creation of a project management methodology to have control of projects launched in beverage manufacturing at Caribbean Bottling Company (Bahamas) Ltd., and to build business capacity, better organize projects driven toward company growth, and increase customer satisfaction.

1.5 Specific objectives

1. To analyze current project management practices in the training and development program at Caribbean Bottling Company to determine system gaps in which the methodology will be utilized.
2. To develop project management procedures in the five process groups and the ten Knowledge Areas in order to provide structure in the training program.
3. To create project management templates and forms associated with the project management procedures in order to better organize the management information in future projects.
4. To apply the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs.

2. THEORETICAL FRAMEWORK

2.1 Company/Enterprise framework

Bottlers operating on behalf of the Coca Cola Company, must develop programs that fulfill the requirements of the ISO 9001:2015 Quality Management Systems Standards (Quality Management Systems, 2015). In the Bahamas, departments must follow the Plan-Do-Check-Act (PDCA) system of operation. Caribbean Bottling Company (Bahamas) Ltd. is part of the Coca Cola Latin Business Center Unit, under which it must demonstrate compliance with Coca Cola International requirements.

2.1.1 Company/Enterprise background

Mission and vision statements

The company is currently developing its mission and vision statements.

It aims to be the Bahamas' premier beverage manufacturer and distributor by offering top quality products, providing consumers with the most extensive beverage offerings and responsive customer service. Caribbean Bottling Company (Bahamas) Ltd. believes that quality products and customer satisfaction is the hallmark of its operation.

The company jointly operates under the mission and vision of the Coca Cola Company:

2.1.2 The Coca Cola Company Mission (Coca Cola, 2018)

Our mission is:

To refresh the world in mind, body and spirit.

To inspire moments of optimism and happiness through our brands and actions.

To create value and make a difference.

2.1.3 The Coca Cola Company Vision (Coca Cola, 2018)

To achieve our mission, we have developed a set of goals, which we will work with our bottlers to deliver.

People: Inspiring each other to be the best we can be by providing a great place to work.

Portfolio: Offering the world a portfolio of drinks brands that anticipate and satisfy people's desires and needs.

Partners: Nurturing a winning network of partners and building mutual loyalty.

Planet: Being a responsible global citizen that makes a difference by helping to build and support sustainable communities.

Profit: Maximizing long-term return to shareholders, while being mindful of our overall responsibilities.

Productivity: Being a highly effective, lean and fast-moving organization.

Adopting a project management methodology allows Caribbean Bottling Company to improve its institutional components, increase efficacy, facilitate compliance by the organization, and improve the project management capacities for the programs it develops. These will in turn build capacity, and help to fulfill its vision and mission. It will introduce and enhance the standard of operational excellence while building components for the sustainable execution of projects.

Organizational structure

The current organizational structure of Caribbean Bottling Company reflects its operational expansion. The structure illustrated in Figure 1 comprises of the following positions and sections.

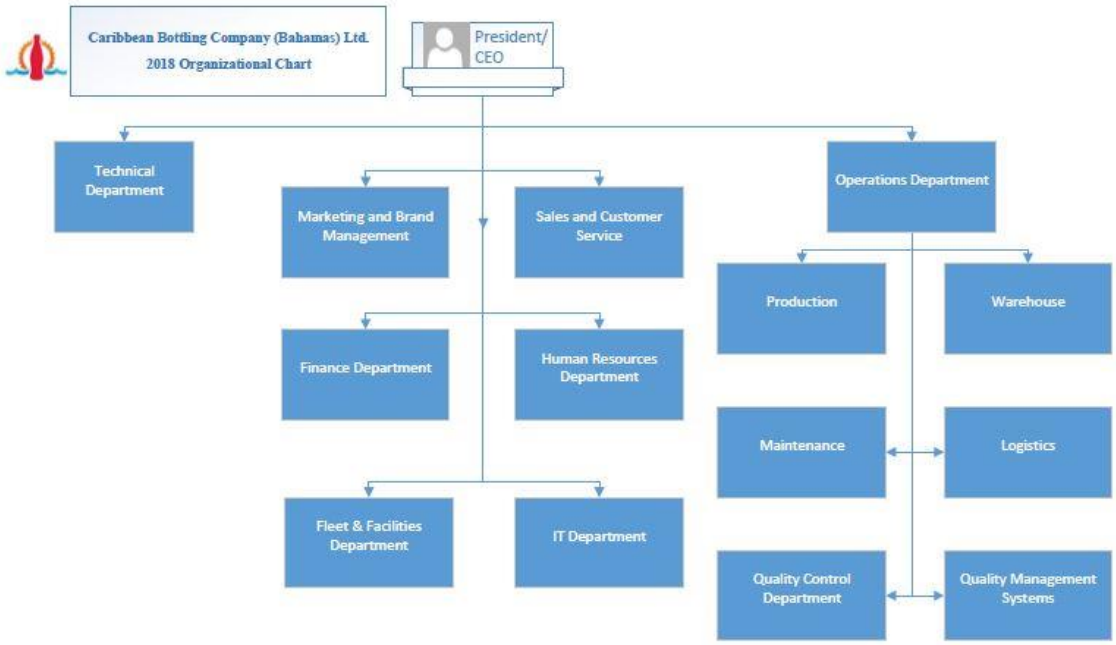

Figure 1 Organizational structure (Source: Compiled by Author)

The President/Chief Executive Officer (CEO) charts the vision and course for the company. The CEO projects the company's long and short term plans. The CEO has ultimate responsibility for creating, planning, implementing, and integrating the strategic direction of this organization. This entails responsibility for all components and departments of the business. The CEO acts as a direct liaison between the board and management of the company and communicates to the board on behalf of management.

The Technical department is responsible for the managing, maintaining, testing, and sanitation of all fountain and vending equipment in the company as well as for all

clients that utilize the fountain and vending equipment such as hotels, restaurants, and stores.

The Marketing and Brand Management department is responsible for coordinating all promotional events, displays and communication of the company brand. It is also responsible for initiating innovation projects that will spur the launch of new products.

The Finance department is responsible for managing the financial portfolio of the company including accounting, payroll, budgeting and reporting the financial position of the company. They support the activities of other departments.

The Fleet and Facilities department maintains and services company assets including all company vehicles and property maintenance. This department controls the upkeep of the buildings and premises.

The Sales and Customer Service department drives sales to increase the customer base and market share. It facilitates the growth of customers and seek to increase the presence of the product throughout the country.

The Human Resources department manages the portfolio of succession planning, compensation and benefits, discipline and discharge, onboarding, recruitment, transfers, training and development and the employee incentive program.

The IT department provides support through the coordination of IT and system related programs. This enables the departments to have the capabilities of communication, information management systems and controls of the technological assets in the company.

The Operations department facilitates all activities in production, maintenance, quality control and assurance, warehouse, logistics and quality management systems. They execute all deliverables regarding the manufacture, testing, storing and delivery of the final product, thereby driving the core operations of the business.

2.1.4 Products offered

Caribbean Bottling Company (Bahamas) Ltd. is a beverage manufacturing company that engages in the manufacture of carbonated and non- carbonated soft drinks in Polyethylene terephthalate (PET bottles) and cans, post-mix syrups in PET bottles and bag-in-box, and purified packaged water in PET bottles; the filling of Carbon Dioxide (CO2) cylinders for fountain service; the distribution and merchandising of carbonated and non-carbonated soft drinks and juices; and the servicing of fountain equipment.

It seeks to have a diverse product portfolio that launches new and different beverage choices. Caribbean Bottling Company is the only manufacturer of Coca Cola products in the Bahamas and has a wide market –share. This allows the company to enjoy the monopoly in the beverage manufacturing business.

Figure 2 illustrates the core and support activities, which include the following.

1. Provide the services of fleet management.
2. Provide budget control and financial management services.
3. Provide the services of mixing and blending and packaging of the final product.
4. Provide IT, administrative services as well as training and development.
5. Provide analysis of raw materials, work in progress and the final product to determine the quality of products produced.
6. Provide warehousing, delivery and inventory control.

7. Service fountain and vending equipment.
8. Provide Marketing and brand management.
9. Provide merchandising, sales, and customer service.

All tasks are process driven and will need a comprehensive approach as provided by a project management methodology.

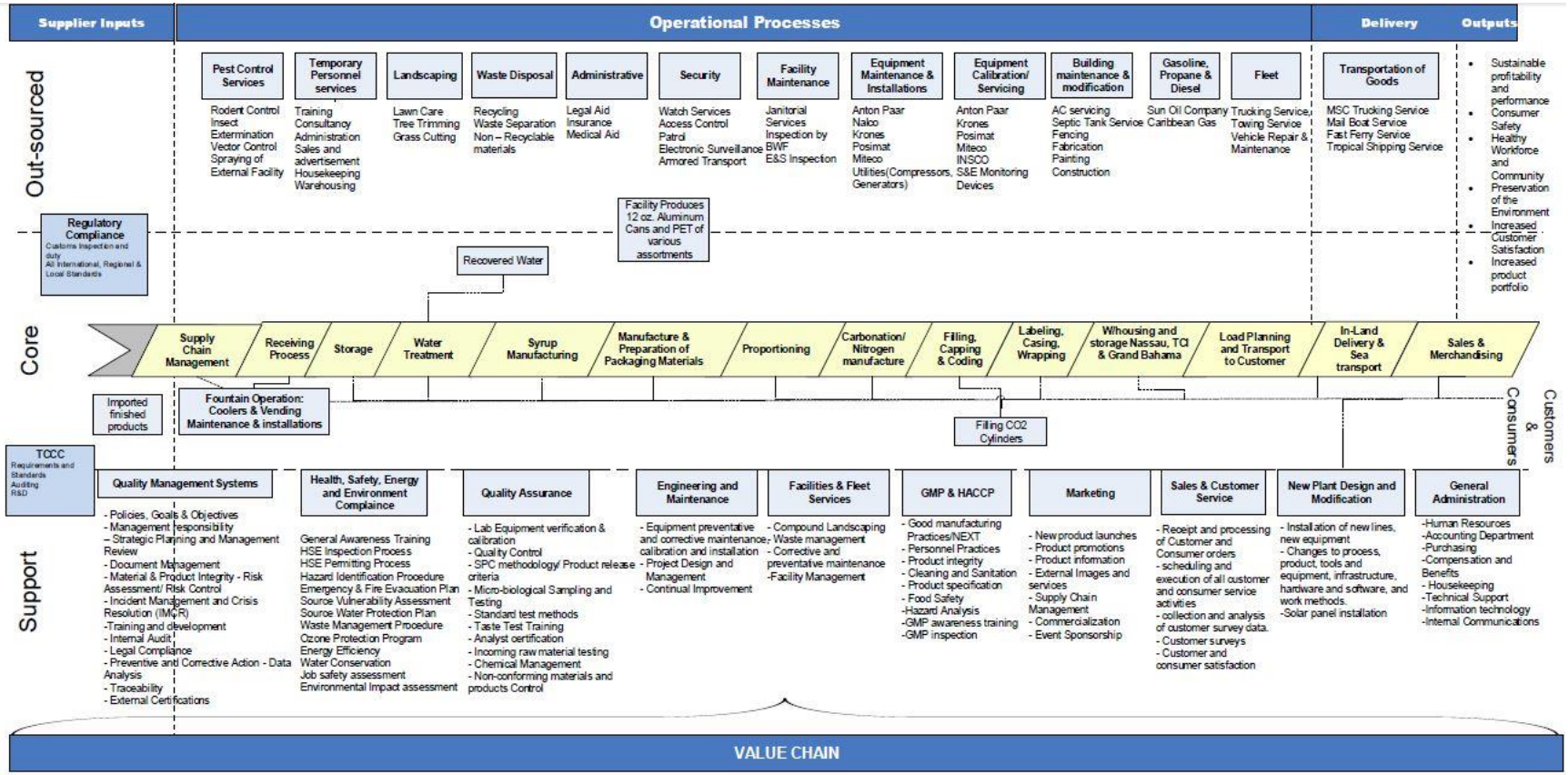

Figure 2 Value Chain (Source: Compiled by author)

Within this scope, processes must be well-coordinated and strategically planned. All employees responsible for tasks within these areas are required to demonstrate adequate training and proficiency. This aligns with the final graduation project objectives by establishing the pillars of an effective training and development program as well as a structure for approaching company projects. This will enhance operations and help to sustainably produce products such as Schweppes, Fanta, Sprite, Barq's Root Beer, Dr. Pepper, Goombay Punch, Barritt's Ginger Beer, Canada Dry, Vitamin Water, Dasani, Powerade, Minute Maid and Flavorful Juice brands.

2.2 Project Management Concepts

2.2.1 Project

The Project Management Body of Knowledge defines a project as "a temporary endeavor undertaken to create a unique product, service, or result" (Project Management Institute, 2017 p. 1). The temporary aspect of this project demands that it functions in a time-bound and time-sensitive manner. Moreover, the duration of the project is limited, and therefore, it is based on time and schedule constraints. The quality of being unique implies that the project is not common, habitual, or routine within the operations, thus it is a distinguished endeavor apart from regular business functions. It is fashioned to meet a specific enterprise need in the area of learning and development. A sense of direction and an established parameter of best practices for projects will help to sharpen the professional skills and capabilities of human resources provided. The platform of project management provides a standard of excellence to abide by.

According to Kerzner (2013), this project characterizes the following.

- It has a specific goal, which a project manager can execute within certain specifications.
- It exists through a life cycle with a time limitation, beginning and end.
- It has cost constraints.
- It utilizes resources in order to be carried out.
- It is cross-sectional.

Caribbean Bottling Company distinguishes projects from its traditional operations. CBC seeks to support the execution of projects by providing resources, establishing

timeframes, and sharpening an understanding of the requirements. These are necessary to harness the positive impacts of the projects. Caribbean Bottling Company repeatedly pursues new projects while conducting normal business operations. For example, it has embarked on a solar panel installation project to drive energy conservation efforts while it also conducts daily manufacture of beverages in its operation. This project it has embarked on, however, needs a proper management methodology to make it profitable, successful and sustainable. It will serve to bridge the gap between the global standard and the traditional system operations. It will provide practical ways in which the operation can incorporate global requirements. It will create a pathway on how to do projects the proper way. This graduation project will provide the structure, guidelines and criteria to manage the planning and the standardization of processes and procedures to curb performance and personnel practices. Unfortunately, efforts designed to restructure or standardize existing operations processes are not very popular or highly-favored. They are met with trepidation and resistance, for example, it is perceived that this formalized methodology will inevitably result in imposing more tasks or more “paperwork” in the operation, which in fact lacks information management systems software. Nonetheless, the operational design of the training and development program desperately needs attention.

2.2.2 Project management

Project Management Institute, Inc. (PMI) defines project management as "the application of knowledge, skills, tools and techniques to a broad range of activities in order to meet the requirements of a particular project." (Project Management Institute, 2017).

2.2.3 Project life cycle

Projects are commonly organized into phases. PMBOK defines project life cycle as “the series of phases that a project passes through from its initiation to its closure” (Project Management Institute, 2017). A project phase is a collection of sequential and at times inter-correlated project activities. The project management life cycle has five phases: Initiation, Planning, Execution, Monitoring and Controlling, and Closure. Figure 3 below depicts each of the project life cycle phases. A phase can entail all or some of the process groups.

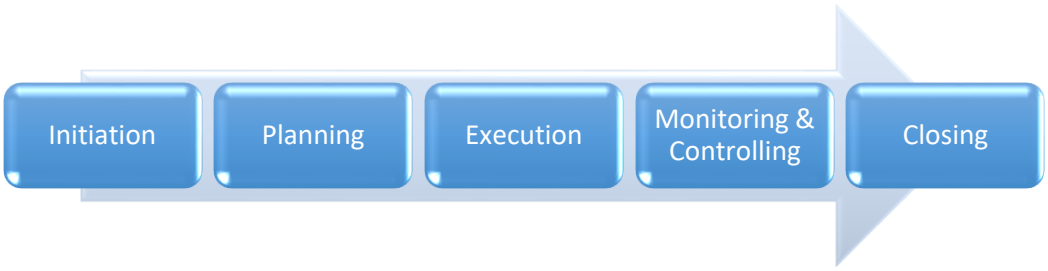

Figure 3. Project Life Cycle (Source: Compiled by Author)

2.2.4 Project management processes

According to the Project Management Institute (2017), project management occurs through several project management processes which are apparent in five process groups referred to in figure 4.

2.2.4.1 Initiation Process Group

These are activities that will define the new project.

- Business case
- Authorization of the project
- Assignment of project manager
- Identification of stakeholders
- Project charter
- Determine project feasibility
- Progressive elaboration of estimates and product scope
- High level planning including risk identification and work breakdown structure
- Creation of project charter and stakeholder register

2.2.4.2 Planning Process Group

These are strategic activities of planning geared toward establishing the project scope and identifying processes. This is done in order to set the activity plan so as to accomplish the fulfillment of project requirements. This includes sharing the chain of events with stakeholders in relation to how the project will be coordinated (Project Management Institute, 2017). The following list presents these activities.

- Collecting requirements.
- Preparing a scope statement.
- Creating a work breakdown structure.
- Defining activities, sequencing activities, estimating activity resources, estimating activity durations.
- Developing a schedule.
- Risk planning.
- Estimating costs.
- Creating a budget.
- Planning quality.
- Developing a human resource plan.
- Planning communications.
- Acquiring formal approval.

2.2.4.3 Project execution process group

This entails all of the activities to carry out the deliverables. These activities include the aspects presented below.

- Executing according to plan.
- Delivering product scope.
- Integrating approved changes.
- Supervising and coordinating team activities.
- Managing people.
- Performing quality audits and quality assurance activities.
- Building team.

- Communicating.
- Procuring.

2.2.4.4 Monitoring and Controlling Process Group

This entails the activities that are needed to verify aspects necessary for producing effective deliverables. These include the following activities.

- Monitoring and controlling project work and progress.
- Performing integrated change control.
- Verifying scope.
- Controlling scope and adjustments to the budget, timeline, or the desired end-product.
- Controlling schedule.
- Controlling costs and tracking budget performance.
- Quantifying and reporting quality control issues.
- Collecting and reporting performance information.
- Tracking and controlling risks.
- Administering procurements.
- Requesting, approving or rejecting changes.

2.2.4.5 Project closure

The key activities of project closure include:

- Closure of the contracts.
- Final submission of all documentation.
- Verification of the completion of work.

2.2.5 The project life cycle and process group iterations

Projects are structured into phases. A project life cycle is a successive chain of phases that a project engages from its initiation to its closing (Project Management Institute, 2017).

A project phase is an assemblage of interrelated project undertakings. Within the phase, the process groups iterate and at times reiterate. A phase can entail all or some of the

process groups. Figure 4 below depicts how the various process groups interface throughout the project (GPM Global, 2013). Project planning at CBC is unregulated, unstandardized, and it is generally disorganized. Strategic planning and documentation are often retroactively performed. Management of projects is not formally documented and lessons learned could not be accounted for.

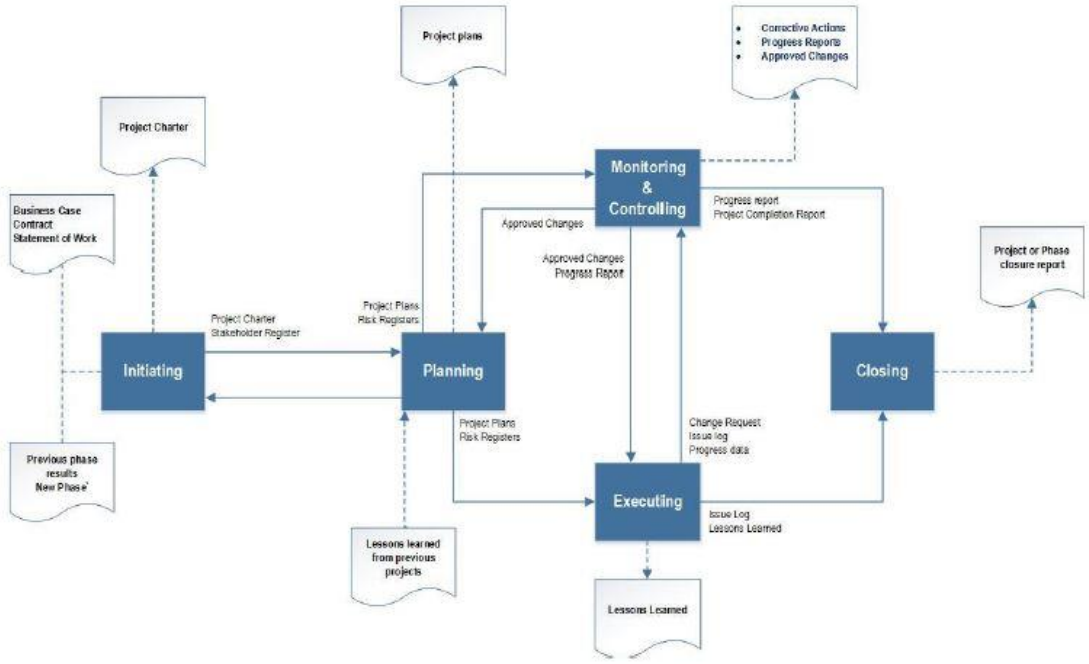

Figure 4 Process Groups (GPM Global, 2013)

2.2.6 Project management knowledge areas

There are ten Knowledge Areas & forty-nine processes. A Knowledge Area represents a set of concepts, terms, and activities in the project management arena. The identified Knowledge Areas are reflected alongside their constituent inputs, tools and techniques, and outputs. They are presented in figures 6 to15.

Figure 5 references the ten Knowledge Areas.

- Integration Management

  This institutes the best practices to consolidate and incorporate activities and their sequenced timelines.

- Scope Management

This aims to state clearly, the boundaries of aspects within the scope of the project.

- Schedule Management

This is the process necessary to carry out the project within a dictated timeframe.

- Cost Management

This is the process required to plan, estimate, and allocate finances and control expenses in order to finish the project within the sanctioned budget.

- Quality Management

This is the process to define, perform and control quality policies, as well as goals and duties in order to attain the level of quality which will add value to the organization.

- Human Resource Management

This encompasses the processes to outline, assign, and coordinate individuals actively involved.

- Communications Management

This covers the processes required to enable arrangement, assembly, conception, distribution, storage, retrieval, administration, control, monitoring, and protection of project information.

- Risk Management

This includes the process to conduct risk forecasting, documentation, assessment, prioritization, scrutiny, mitigation measures and risk reduction on a project.

- Procurement Management

This indulges in the processes to buy or acquire products, instruments or services required as inputs to the project.

- Stakeholder Management

This consists of the processes necessary to classify and manage individuals, groups, or organizations that could influence or could be impacted by the efforts of the project.

Figure 5 Project Management Knowledge Areas (Source: Created by Author)

According to the Project Management Body of Knowledge, a Knowledge Area represents a comprehensive set of concepts, terms, and activities that make up project management facets (Project Management Institute, 2017). There are ten knowledge areas.

1. The figure 6 below depicts Project Integration Management. Concentrations include: project charter, project management plan, direct and manage project work, monitor and control project work, perform integrated change control, and close project or phase.

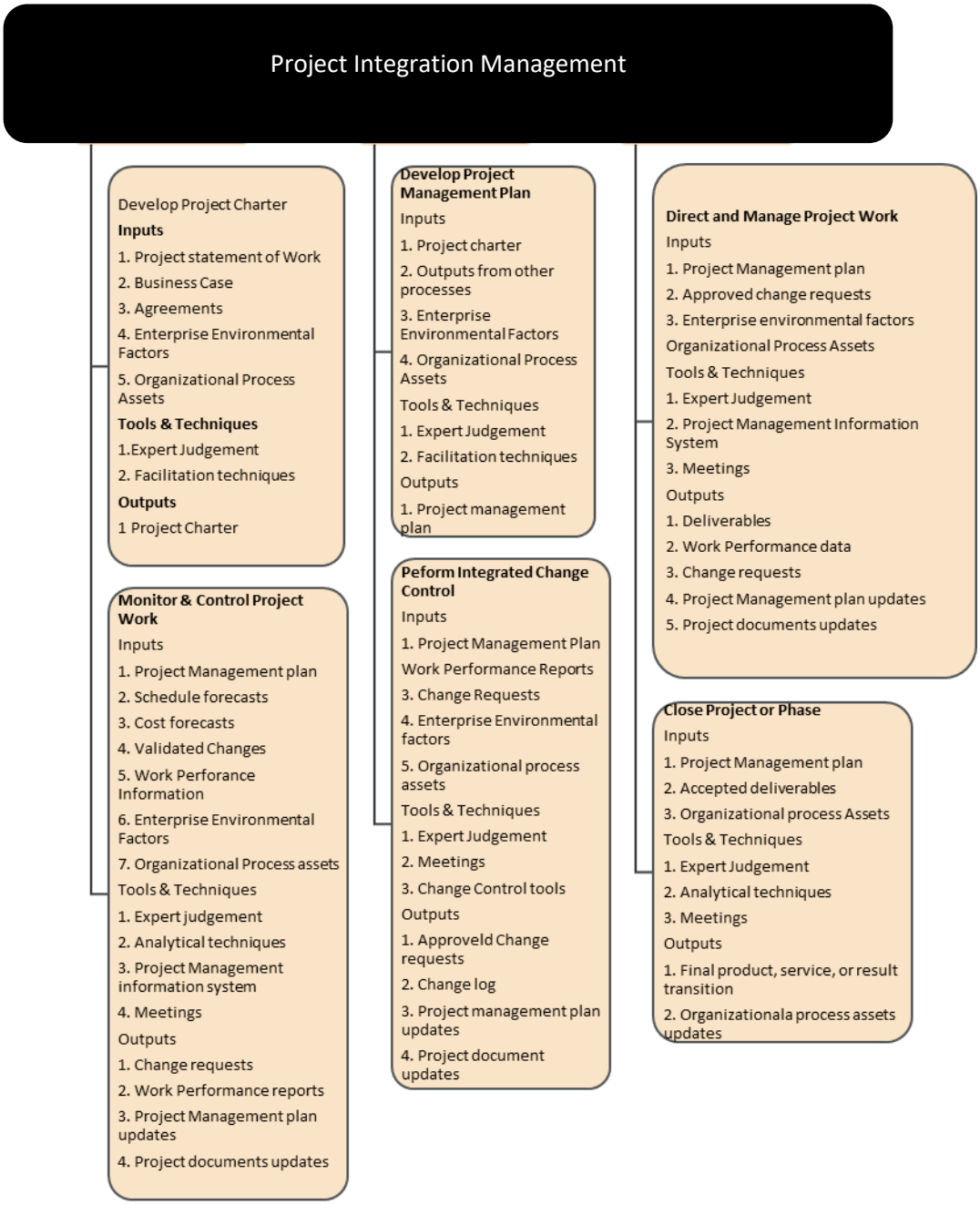

Figure 6. Project Integration Management Overview (Source: Compiled by Author)

2. Figure 7 below depicts Project Scope Management. It includes the project scope controls within the project. It is very important that the boundaries of the project

be well-defined from the inception and examined meticulously. This requires activities such as plan scope management, collect requirements, define scope, create WBS, endorse scope, and control scope.

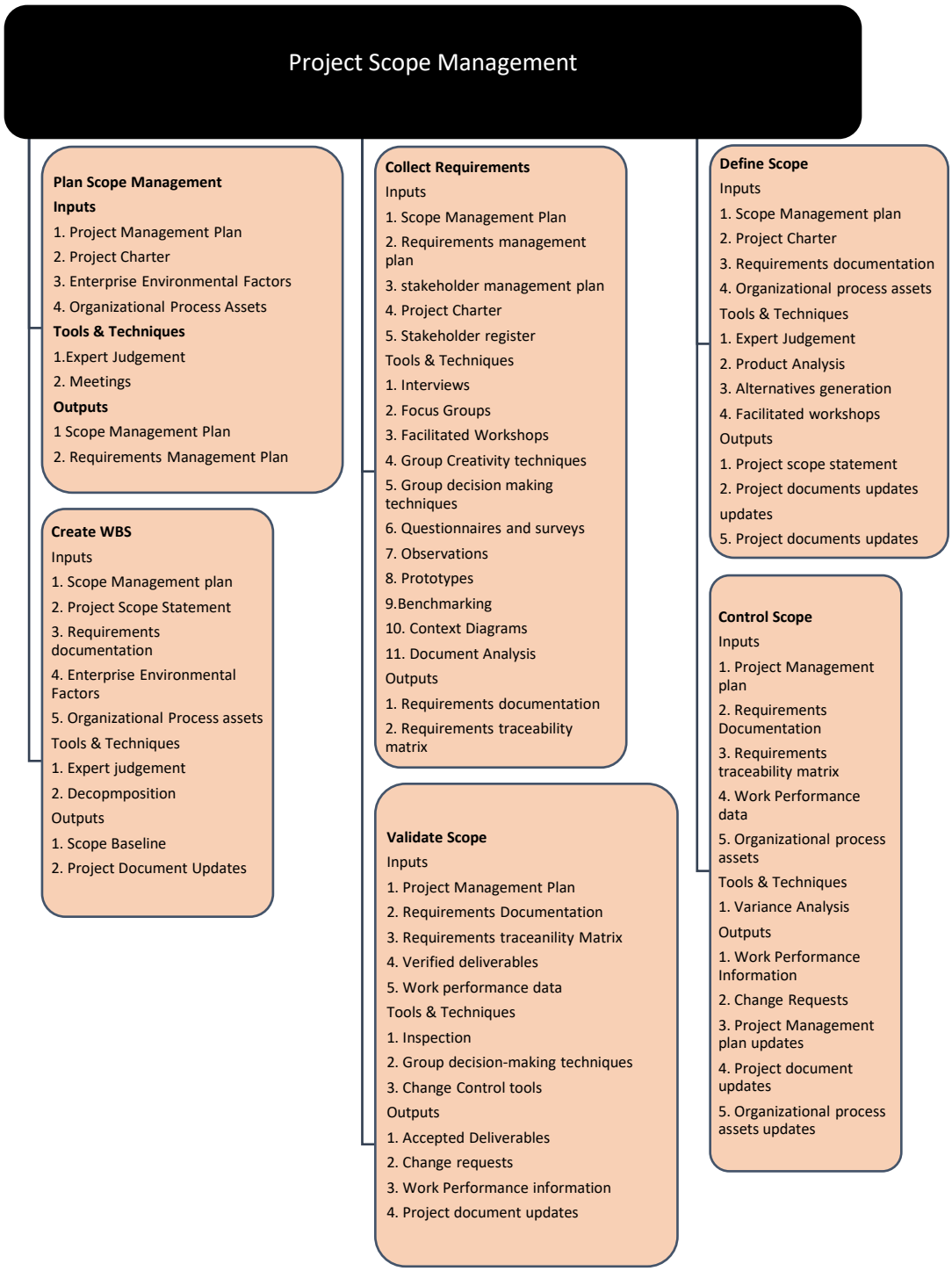

Figure 7. Project Scope Management Overview (Source: Compiled by Author)

3. Figure 8 below depicts Project Time Management. Activities are extensive and include: plan schedule management, delineate activities, sequence activities, estimate activity resources, estimate activity durations, develop schedule, and control schedule.

Figure 8. Project Schedule Management Overview (Source: Compiled by Author)

4. Figure 9 below depicts Project Cost Management. It seeks to interface cost management, estimate costs, ascertain budget, and control costs.

Figure 9. Project Cost Management Overview (Source: Compiled by Author)

5. Figure 10 below depicts Project Quality Management. Components of this knowledge area include planning quality management, performing quality assurance, and controlling quality throughout the project.

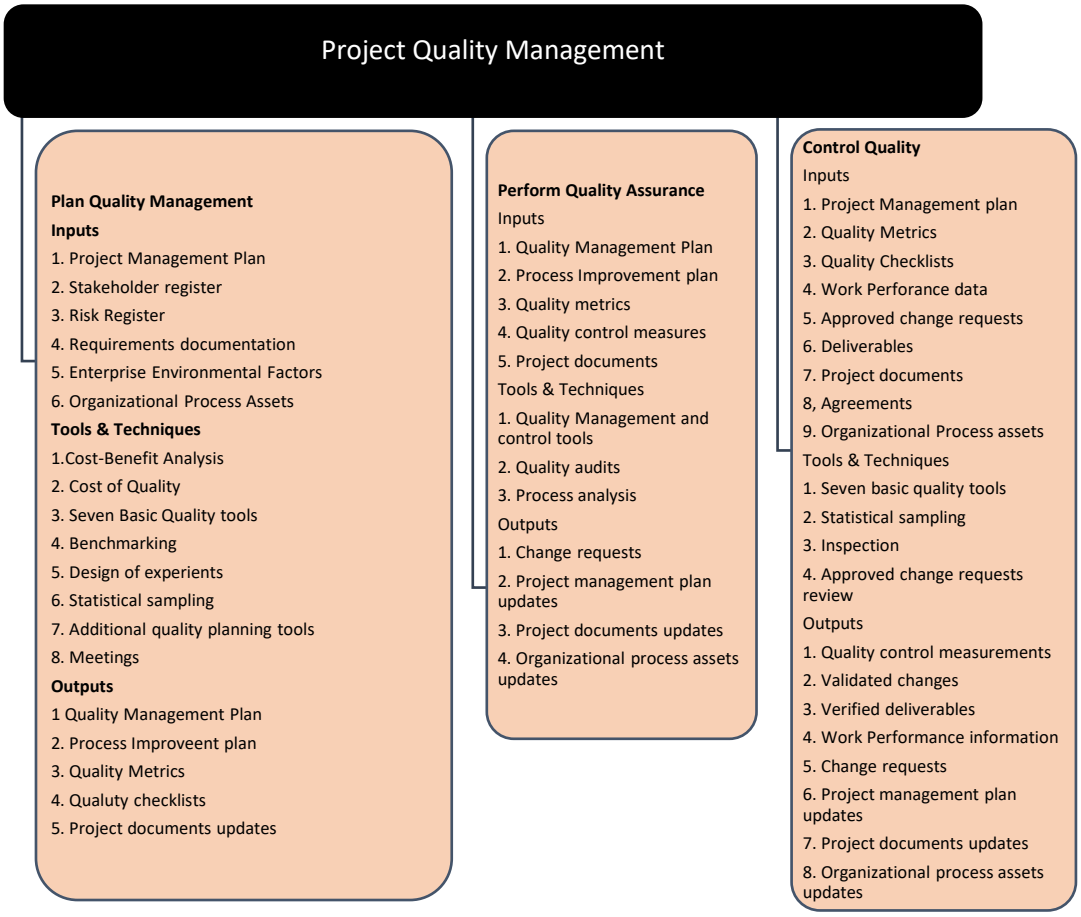

Figure 10. Project Quality Management Overview (Source: Compiled by Author)

6. Figure 11 below depicts Project Resources Management. Activities in this Knowledge Area include: plan human resource management, secure project team, cultivate project team, and manage project team.

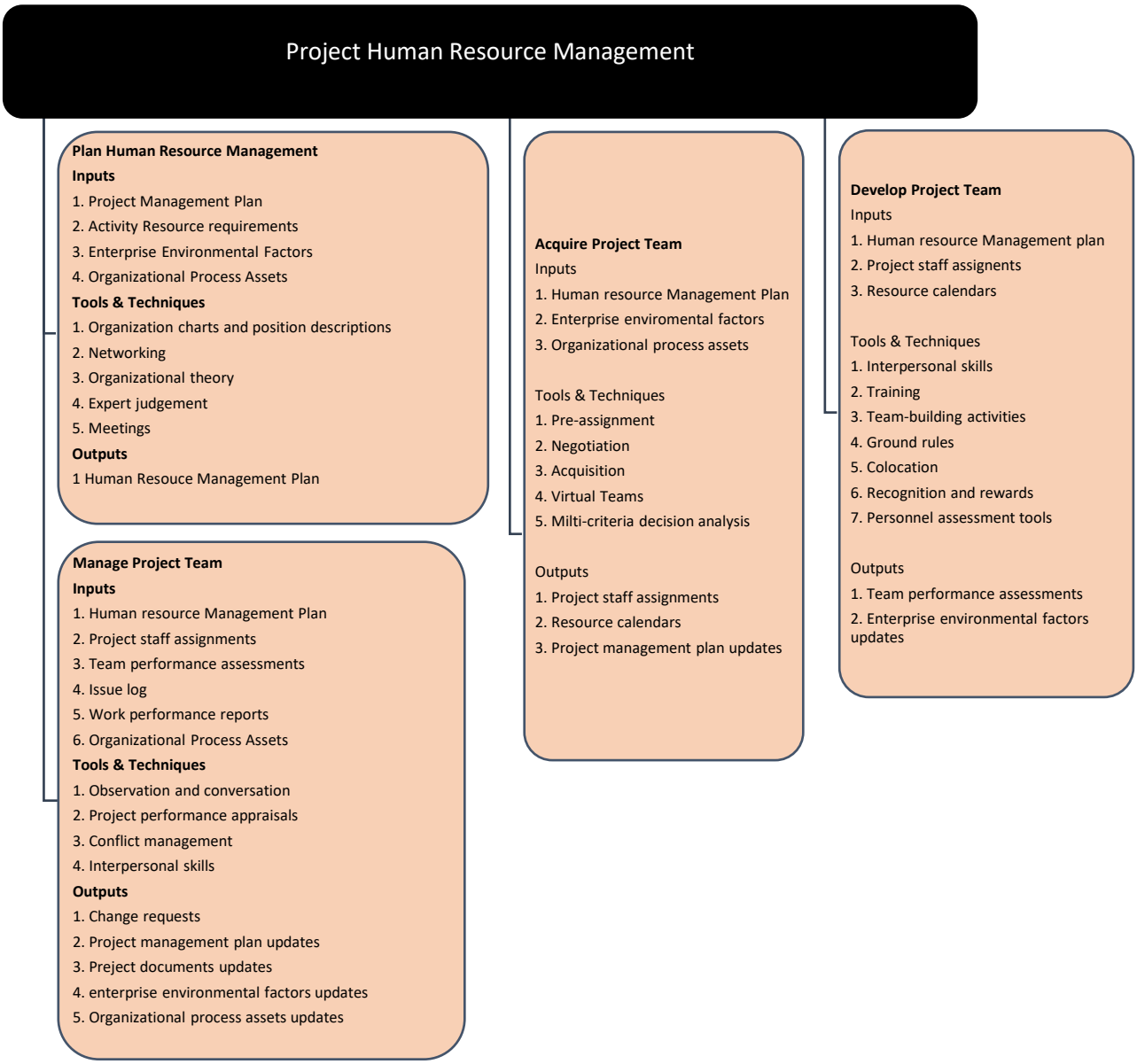

Figure 11. Project Human Resource Management Overview (Source: Compiled by Author)

7. Figure 12 below depicts Project Communications Management. This seeks to provide a communications plan, communication management, and communication controls.

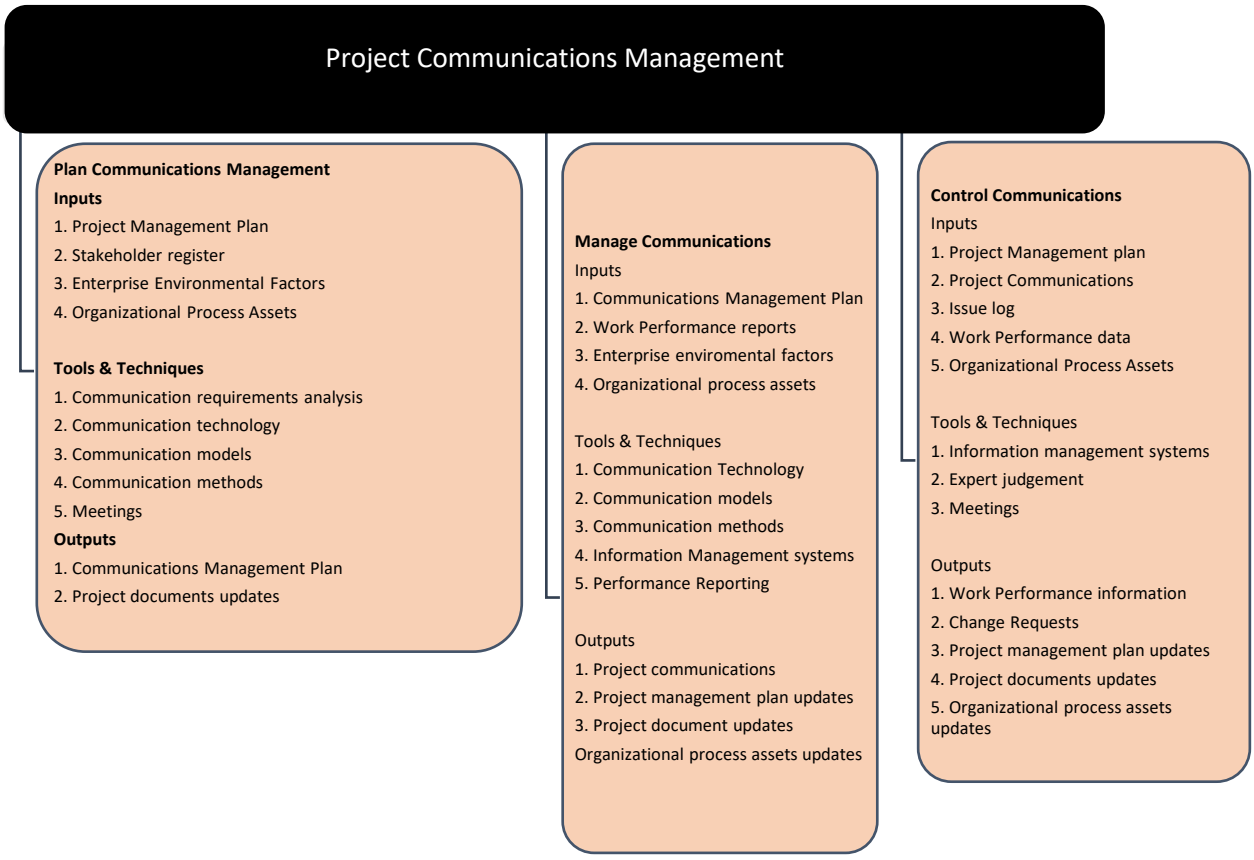

Figure 12 Project Communications Management Overview (Compiled by Author)

8. Figure 13 below depicts Project Procurement Management. Undertakings involved in this Knowledge Area include plan procurement management, executing procurements, controlling procurements, and finalizing procurements.

Figure 13. Project Procurement Management Overview (Source: Compiled by Author)

9. Figure 14 below depicts Project Risk Management. It requires tasks to be performed such as: planning risk management, identifying risks, performing risk analysis, planning risk responses, and executing strategic risk control.

Figure 14. Project Risk Management Overview (Source: Compiled by Author)

10. Figure 15 below depicts Project Stakeholders Management. It requires the classification of stakeholders, planning stakeholder management, managing stakeholders, and controlling stakeholder engagement.

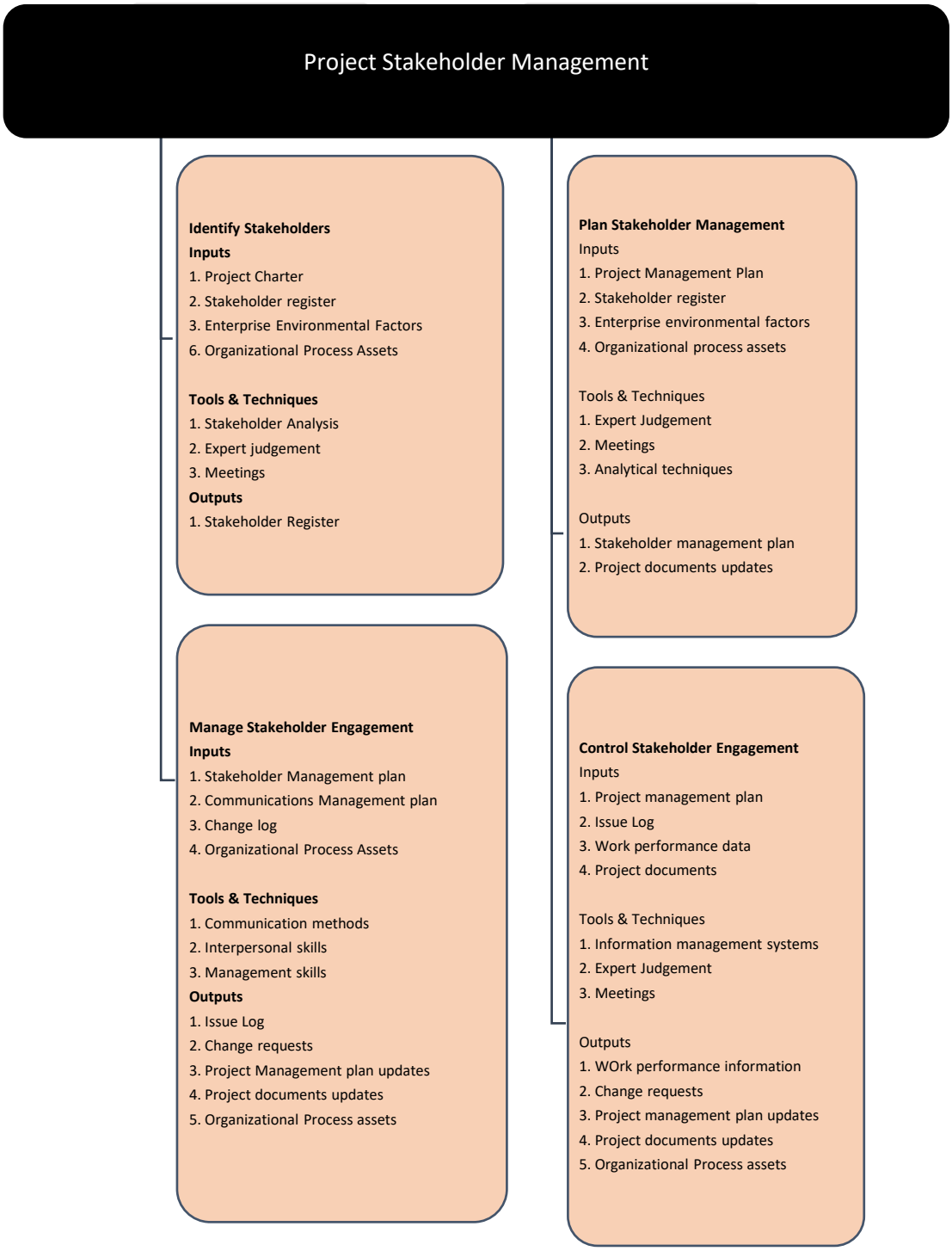

Figure 15. Project Stakeholder Management Overview **(Source: Compiled by Author)**

Figure 16 below depicts the forty-seven project management processes within the five project management process groups and the ten Knowledge Areas.

Knowledge Areas	**Project Management Process Groups**				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
Project Integration Management	-Develop Project charter	-Develop Project Management plan	-Direct and Manage project work	-Monitor and Control Project work -Perform Integrated Change Control	- Close Project of Phase
Project Scope Management		-Plan Scope Management -Collect requirements -Define Scope -Create WBS		-Validate Scope -Control Scope	
Project Schedule Management		-Plan schedule management -Define activities -Sequence activities -Estimate Activity Resources -Estimate activity durations -Develop schedule		-Control Schedule	
Project Cost Management		-Plan Cost Management		-Control Costs	

		-Estimate costs -Determine budget			
Project Quality Management		-Plan quality Management	-Perform Quality Assurance	-Control Quality	
Project Human Resource Management		-Plan Human Resource Management	-Acquire Project team -Develop project team -Manage Project Team		
Project Communications Management		Plan Communication Management	Manage Communications	Control Communications	
Project Risk Management		-Plan Risk Management -Identify Risks -Perform qualitative risk analysis -Perform quantitative Risk Analysis -Plan Risk responses		Control Risks	
Project Procurement Management		Plan Procurement Management	Conduct Procurements	Control Procurements	Close Procurements
Project Stakeholder Management	Identify Stakeholders	Plan Stakeholder Management	Manage stakeholder engagement	Control Stakeholder engagement	

Figure 16. Project Management Process Group and Knowledge Area Mapping (Source: Compiled by Author)

2.3 Project Management Methodology

2.3.1 Terminology and correlation with project performance

Project Management Institute (2017) defines project management methodology as a set of established methods and rules adhered to in project management. The PMBOK® Guide and Organizational Project Management Maturity Model (OPM3®) drive project management principles. They provide a sense of direction through a management framework. The outputs of methodologies are project charter, plans, schedule, templates, procedures, training materials, checklists, reports, among others. (Project Management Institute, 2014). Agile, Hybrid, Scrum, Critical Path Method (CPM), Critical Chain Project Management (CCPM), Integrated Project Management (IPM), Critical Chain Project Management (CCPM), PRiSM, version 2 (Prince2), and Organizational Project Management Methodology (OPM Methodology) are all samples of methodologies.

Agile methodology is designed for projects that are iterative and incremental. Figure 17 contains a diagram depicting the process.

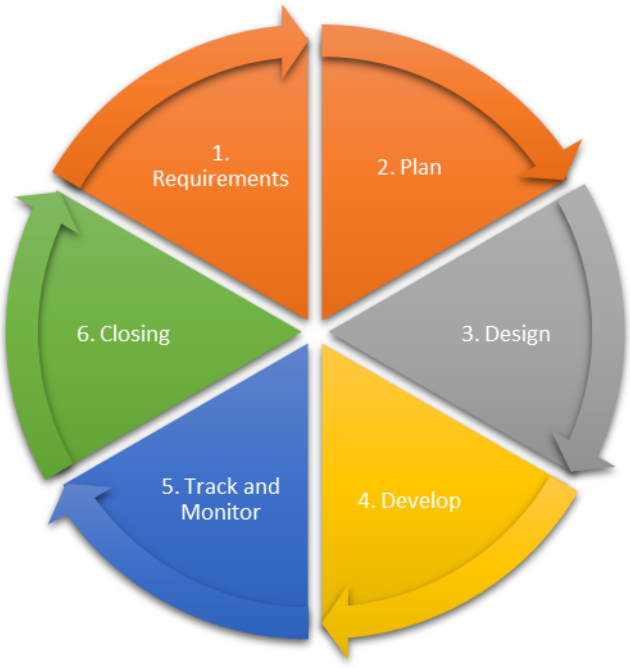

Figure 17. Agile development cycle (Source: Compiled by Author)

Critical chain project management (CCPM) was developed by Eliyahu M. Goldratt and it is a systematic way of planning and managing projects that focus on the resources (people, equipment, physical space) essential to executing all project tasks.

Methodologies provide a tactical, and distinguished format that follows a logical manner and standardizes the development of a project. They allow the projects to increase efficacy and modify programs in a way that is globally acceptable. This promotes organizational maturity.

Organizational project management is the systematic organization of structures, proficiencies, and practices managed to progressively improve performance of processes that are temporary (projects, programs and portfolios).

The benefits of a methodology include the following.

- Streamlined process.
- Decreased time and cost.
- Increased stakeholder and customer satisfaction.
- Greater accountability through reporting and formal communication.

Following established methodologies can help projects at Caribbean Bottling Company to align processes in fundamentally sound ways. It can guide and help to chart the program toward success, according to international standards. Adopting a methodology is easier than creating a new method to approach projects and has proven to be an effective tool.

2.3.2 Creating a methodology

Project management methodology can be molded to integrate industry standards such as those from the International Organization of Standardization. This framework can help to design a methodology to fulfill compliance needs and cultural needs and foster synergy toward organizational development. Therefore, the expanse of programs intended to suit the needs of the enterprise can be developed. It provides a framework to build templates and system drivers that help with CBC learning and development initiatives, internal business processes and customer driven initiatives. This can help to build a food safety culture. Based on the PMBOK guide, methodology will be created to fulfill the current needs of training and development as projected in the five process groups. Methodology is condensed in five central groupings: inputs, system development, outputs,

improvements, and project closure featuring the results of the project. A more detailed view of the entire process is depicted in Figure 18 below.

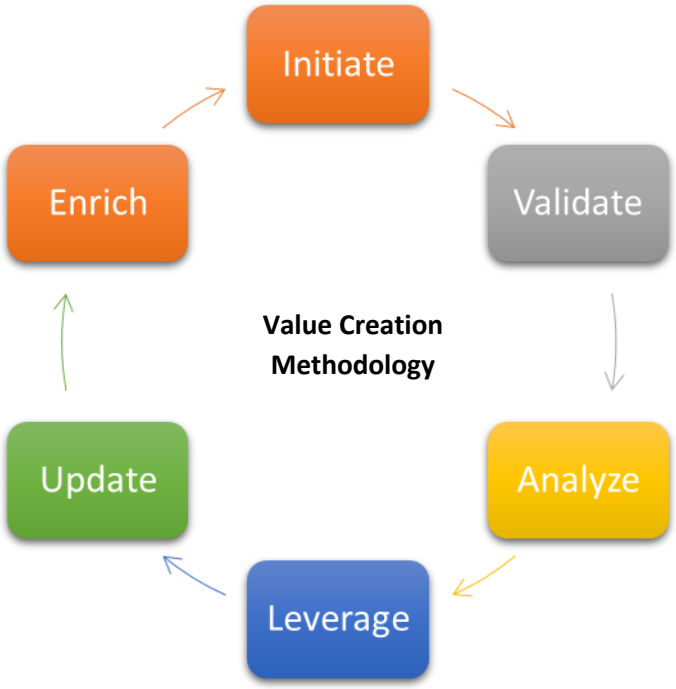

Figure 18. Value Creation Methodology cycle (Source: Created by Author)

Methodology focuses on five central aspects: inputs, system development, outputs, improvements, and project closure featuring the results of the project.

The elaborations below detail the aspects utilized to develop such a methodology.

Inputs identified include the following.

- Organizational process assets which constitute the portfolio of existing learning modules and evaluation models, process flows, requirements, documents of existing organizational structure, procedures, templates, checklists, surveys and other organizational information.
- Constraints (such as time, cost and quality) required to critically analyze, plan, execute, monitor and improve the program.
- Resources include individuals, technology, infrastructure, and materials.
- Baseline assessment to benchmark the level of organizational maturity.

System development process

A systematic process requires several steps. The logical flow of development entails the next aspects.

1. System Concept Proposal

It is related to assessing organization and department training as well as development necessities. This is a baseline assessment of Caribbean Bottling Company based on the inputs above. The proposal for the project will introduce the concept of the methodology and its justification. The proposal for the methodology seeks to improve the operational system.

2. Design the methodology through a strategic process approach.

The ten Knowledge Areas will be incorporated in the design of the methodology as the strategic approach. These ten pillars will address the central concerns of program development including: people affected, processes involved, resources required, risks attributed, timelines for which activities need to be accomplished, and budget allocation, among others.

3. Construct and document the methodology.

The scheme of the entire methodology will be written and collated. This prescribes how the methodology should be followed chronologically and systematically.

4. Scope development

Detailing the scope of the project helps to limit the amount of work undertaken. This will detail the scope boundaries and areas that require priority and development.

5. Establish a plan encompassing the life cycle of the project

The work breakdown structure helps to outline the activities engaged in the project.

6. Configure processes to satisfy standards and requirements.
7. Design: Construct each phase to accomplish preferred capabilities.
8. Detail sub-processes under each phase with actionable items and responsibilities for handling each stage.
9. Determine adjustments and integration schemes that are essential.
10. Develop mechanisms to use, test and integrate (working documents).
11. Document the methodology.

12. Document each of the processes and how they fit within existing organizational processes, standards and requirements.
13. Create templates that document the necessary steps.

This process and sequence is iterative. The activities above will be reflected through the application of the ten project management Knowledge Areas.

Derive Output

The output is a customized methodology and templates that fit for organizational use. The methodology will transform the training and development program into a standardized system.

Improve and monitor.

It requires responsible parties to perform continuous improvement, measure, verify, validate, and track key performance outcomes. Since the process is iterative and progressive, the processes will be framed to align the system with requirements, ensure congruence with stakeholders, ensure the veracity and integrity of program development and epitomize organizational growth.

Results

The output includes a viable training and development program structure, increased competencies and management capabilities as a result of the applied methodology.

Each of these five components help to shape the structure of the project as dictated by PBOK® Project Management Body of Knowledge. Next, a methodological framework was followed to firstly, gain insight into the CBC operation, and secondly, to strategically construct the methodology.

Proposed CBC Project Management Methodology process approach for training and development program

A project management methodology is developed to establish guidelines and protocols for effective design and delivery of a formal training and development program. It is based on the Project Management body of knowledge and industry standards. Pivotal drivers of this proposed methodology include collaboration, creativity, communication, competency-based and customer focused training. The system depicted in figure 19 follows the Deming PDCA cycle and entails the next aspects.

- Comprehensive planning and design of the learning and development arm of the company based on requirements.
- Standardization of proper methods of execution (procedures, programs, templates, among others.) for all parameters of training.
- Development of legitimate strategies of monitoring and verification for the program to document progress, deviations and opportunities for improvement.
- Design avenues to maintain and reinvigorate the training program as modelled by the Project Management body of knowledge.

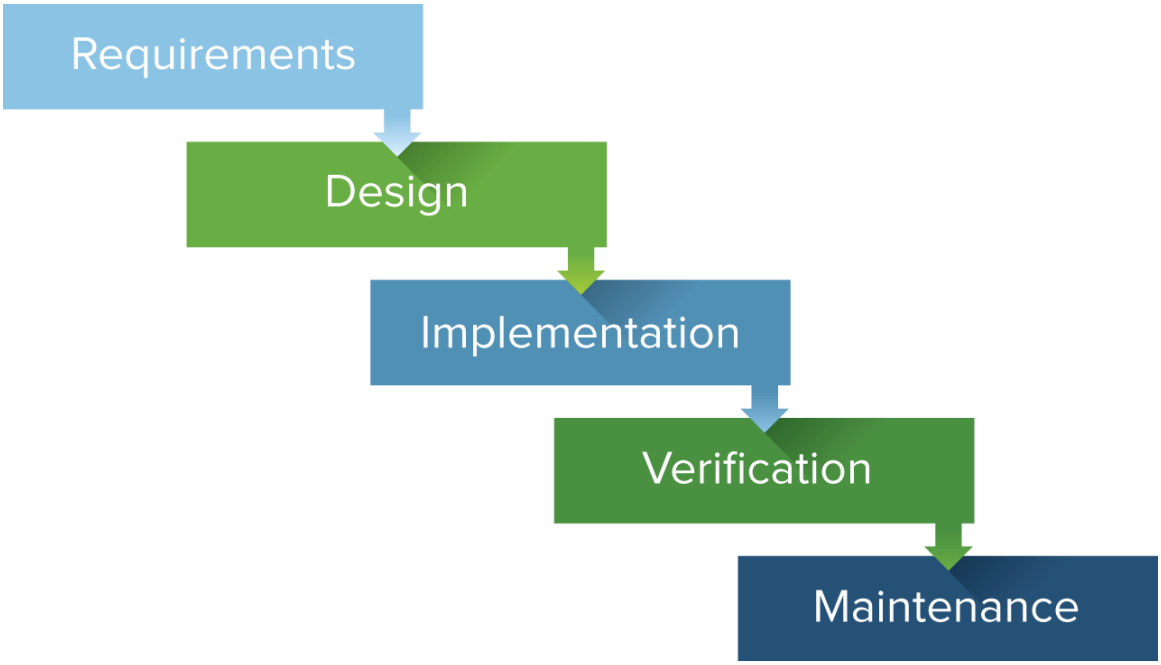

Figure 19. Project development process flow (Source: Compiled by author)

2.4.0 Stipulations for Project management plans and procedures at CBC

2.4.1 Knowledge Areas of Project Management

According to PMBOK, a Knowledge Area represents a complete set of concepts, terms, and activities that make a project management field (Project Management Institute, 2017). As stated above are ten Knowledge Areas, in which, procedures prescribe the protocols for initiation, design, implementation, evaluation and delivery of the training program. These shape the project's methodology and are implemented on projects using an integrated five-phased project management approach referenced in figure 3. A guide for project management planning is provided in appendix 14. Once the training requirements are determined, the goals and objectives (scope) of the training are developed. During this phase, all of the work needed to create the training program is determined, along with the personnel needed to work on the training program. Costs, schedules, deliverables, communications, instruction methodology, and evaluation methods are consequently determined. The elaborations below describe the progressive planning required.

2.4.1.1 Integration Management Plan

Introduction

Integration Management includes all of the processes required to unify, coordinate and manage all project elements to completion. It coordinates all of the work processes and Knowledge Area interdependencies simultaneously. Integration Management transcends all phases of projects and includes change management, execution, control, and close out. Identifying, defining, combining, unifying, and coordinating the many processes and activities within the project management process groups are key to successful integration management.

The criteria for Integration Management include the following aspects.

1. Develop Project Charter

   Develop project charter is the process of developing a document that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities. The project charter symbolizes the authority to initiate the project. Moreover, a project charter has the preliminary roles and responsibilities of the project, including the goals and objectives, and the assignment of a project manager.

2. Create Project Management Plan

   Create project management plan is the process of defining, preparing, and coordinating all plan components and consolidating them into an integrated project management plan.

3. Direct and Manage Project Work

   Direct and manage project work is the process of leading and performing the work defined in the project management plan and implementing approved changes to achieve the project's objectives.

4. Manage Project Knowledge

   Manage project knowledge is the process of using existing knowledge and creating new knowledge to achieve the project's objectives and contribute to organizational learning.

5. Monitor and Control Project Work

   Monitor and control project work is the process of tracking, reviewing, and reporting overall progress to meet the performance objectives defined in the project management plan.

6. Perform Integrated Change Control

   Perform integrated change control is the process of reviewing all change requests, approving changes and managing changes to deliverables,
   approving organizational process assets, project documents, and the project management plan as well as communicating the decisions.

7. Close Project or Phase

   Close project or phase is the process of finalizing all activities for the project, phase, or the contract.

2.4.1.2 Scope Management Plan

Scope Management entails a process approach to establish the boundaries of the project. It encompasses all work required to complete the project as required and nothing further to avoid gold plating. No change is integrated until it has been vetted and authorized, hence this aids to control the scope. The scope management plan defines the scope, strategy for development and methods of verification in achieving the intended outcome. It specifies responsible parties for managing aspects of the scope and serves as a major directive for scope governance. In scope management, a series of processes are followed and they are explained below.

It requires collecting requirements, defining scope, creating work breakdown structure, and verifying scope and controlling scope.

1. Collect requirements

   This process involves a requirements analysis. It seeks to ascertain the requirements documentation, requirements management plan, stakeholder register and requirements traceability matrix. These are all used to produce an intelligent project scope statement and inform about project document updates. Some techniques used to collect requirements are questionnaires and surveys, interviews, and observation. Requirements are documented to

increase accountability and, manage and satisfy the needs of all affected parties.

2. Define scope

   This process undergoes progressive elaboration and requires several inputs namely: project charter, stakeholder register, organizational process assets, and requirements documentation. It specifies the extent of the project describing deliverables, constraints and assumptions. It defines the reach of the project work. The statement of the work template is provided in appendix 12. Tools used include expert judgement and, product analysis and alternatives identification such as group brainstorming.

3. Design work breakdown structure

   This process decompartmentalizes or deconstructs the scope of work of the project into more manageable project tasks known as work packages. It allows the team to systematically achieve complex objectives in a structured way to later allocate resources and monitor activities through micromanagement.

4. Verify scope

   This is a process of formally accepting the completed project deliverables, in which the approved scope had been endorsed by the sponsor.

5. Control scope

   This is the process of monitoring the project scope to ensure that scope creep does not jeopardize the project. It seeks to manage changes to the baseline and project activities to ensure it aligns with the agreed scope. It monitors project status and deliverable suitability.

2.4.1.2.1 Scope Management Approach

The Scope Management Plan provides the overall scope framework for this project. This plan details the scope management approach, roles, authorities and responsibilities, scope definition (e.g., Scope Statement, WBS, WBS Dictionary, Statement of Work, among others), and verification and control measures (e.g., scope

baseline, work performance measurements, scope change process control, and the project's work breakdown structure).

For this project, scope management will be the sole responsibility of the project manager. The scope for this project is documented by the scope statement, work breakdown structure (WBS) and WBS dictionary. The project manager, sponsor and stakeholders will introduce and ratify documentation for measuring project scope. The project manager, stakeholders or any member of the project team may suggest scope changes. All change requests will be forwarded to the attention of the project manager who will then appraise the requested scope change. The project manager will submit the accepted scope change request to the change control board and project sponsor for review. If the changes are approved by the change control board and project sponsor, the project manager will in turn update all project documents and inform all stakeholders of the scope change. The project sponsor is responsible for the acceptance of the final project deliverables and project scope, pending input from the project manager and stakeholders.

2.4.3.2 Roles and Responsibilities

All roles and responsibilities for scope management must be clearly defined in the Scope Management Plan to delegate authority and have clear line of accountability. This aspect of the template outlines the role of the project manager, project team, stakeholders and other fundamental roles who are involved in managing the scope of the project. It establishes those responsible for scope management and those responsible for accepting the deliverables of the project as defined by the projects' scope.

The project manager, sponsor and team will all play key roles in managing the scope of this project. Therefore, the project sponsor, manager, and team members responsibilities are categorized in order to ensure that tasks are allocated, assigned, and accomplished strategically. Chart 1 below defines the roles and responsibilities for the scope management of this project.

Chart 1 Roles and Responsibilities [Source: S. Newry, April 2019]

Name	Role	Responsibility
CEO & technical director.	Sponsor.	Approve or deny scope change requests as appropriate. Evaluate need for scope change requests. Accept project deliverables.
Shawnell Newry.	Project manager.	– Measure and verify project scope. – Facilitate scope change requests. – Facilitate impact assessments of scope change requests. – Organize and facilitate scheduled change control meetings. – Communicate outcomes of scope change requests. – Update project documents upon approval of all scope changes. – Participate in impact assessments of scope change requests.
Janice Fountain. Nathaniel Adams.	Managers	– Participate in defining change resolutions. – Evaluate the need for scope changes and communicate them to the project manager as necessary.

Raquel Lorez, Technical operations manager, Coca Cola Latin Center Business Unit	Stakeholder.	– Evaluate the need for scope changes and communicate them to the project manager as necessary.

The scope definition section of this Scope Management Plan template details the process of developing a detailed description of the project and its deliverables.

The project scope description and deliverables were developed based on a robust requirements collection process and input from subject matter experts in training program design, technical support and business implementation. Expert judgment offered by the consultancy firm (Victor and Associates) provided guidance on the most effective ways to meet the original requirements for providing training capacities to support beverage-manufacturing operations and support services. These notes are provided in appendix 29 and have been thoughtfully integrated in many of the directives in the training program. During the requirements collection process, a needs analysis was performed and program analysis was done on the company's current program based on employee interviews and compliance audits. An example of the needs assessment performed is provided in appendix 34. Training needs analysis informs about the development of training objectives, helps to tailor the design of the training delivery methods, and aids in strategic training evaluation schemes to monitor training progress. Additional brainstorming was done to identify alternative solutions to the existing needs. From this information, the project team developed the project requirements documentation, the requirements management plan, and the requirements traceability matrix (appendix 35) and customer focused training activities. Unfortunately, specific external compliance audit records were not permitted for release in this project due to information sensitivity. Despite this hinderance, during conversations, staff

liberally shared information about existing program needs that were revealed from past audits. These were integrated into the program needs assessment.

2.4.3.3 The Project Scope Statement

The Project scope statement identifies the project deliverables and the tasks required to execute them. It encapsulates the following components.

•Product scope description. It describes what the project will accomplish.

•Product acceptance Criteria. It describes what requirements must be met in order for the project to be accepted as complete.

•Project deliverables. They provide a detailed list of deliverables the project will result in.

•Project exclusions. This is a description of work that is not included in the project and is outside of the scope.

•Project constraints. This lists limits on resources such as time, money, manpower, or equipment (capital).

•Project assumptions. They describe the list of assumptions that project team and stakeholders are working under to complete the project.

This project includes the design of a formal methodology for Caribbean Bottling Company. Under this scope, the deliverables for this project have been defined as the following.

1. A report stating the gap analysis study on the identified needs of the training and development program that helped to identify where the methodology can be applied.
2. A list of procedures for the five process groups (initiating, planning, executing, monitoring & controlling and closing) depicted in figure 20 below.
3. Templates and forms for the five process groups.
4. A report with main findings of the application of methodology for a sample project structure.

This project will be accepted once the new methodology has been successfully piloted and has been shown to be compatible with the company's current requirements. Only internal personnel and resources may be used for this project. Assumptions for this project are that the support will be provided by the project sponsor and all department managers. It is also assumed that adequate internal resources are available for the successful completion of this project.

Figure 20. Project process groups for development of Training Program (Source: Compiled by author)

Figure 21, featured below, depicts the Scope Management plan work breakdown structure which is a deliverable-oriented and, hierarchical decomposition of the work to be executed by the project team. It outlines the tasks associated with each process group. This categorizes and deconstructs the work load into manageable components. The WBS Dictionary is utilized in order to clarify the work necessary for project completion. The WBS Dictionary comprises of an entry for each WBS element. The WBS Dictionary depicted in chart 2 has a description of the work for each component and the deliverables, budget and resource needs for that portion. The project team will use these in order to effectively manage the work required to complete this project. In addition, it will be subdivided into individual work packages. This will allow the project manager to more effectively manage the project's scope as the project team works on the tasks necessary for project completion. The project is broken down into several phases: design phase, initiation phase, implementation, monitoring and controlling phase, and closure. These will require 40 hours of work per week. The project team will use the WBS Dictionary as a statement of work for each WBS element.

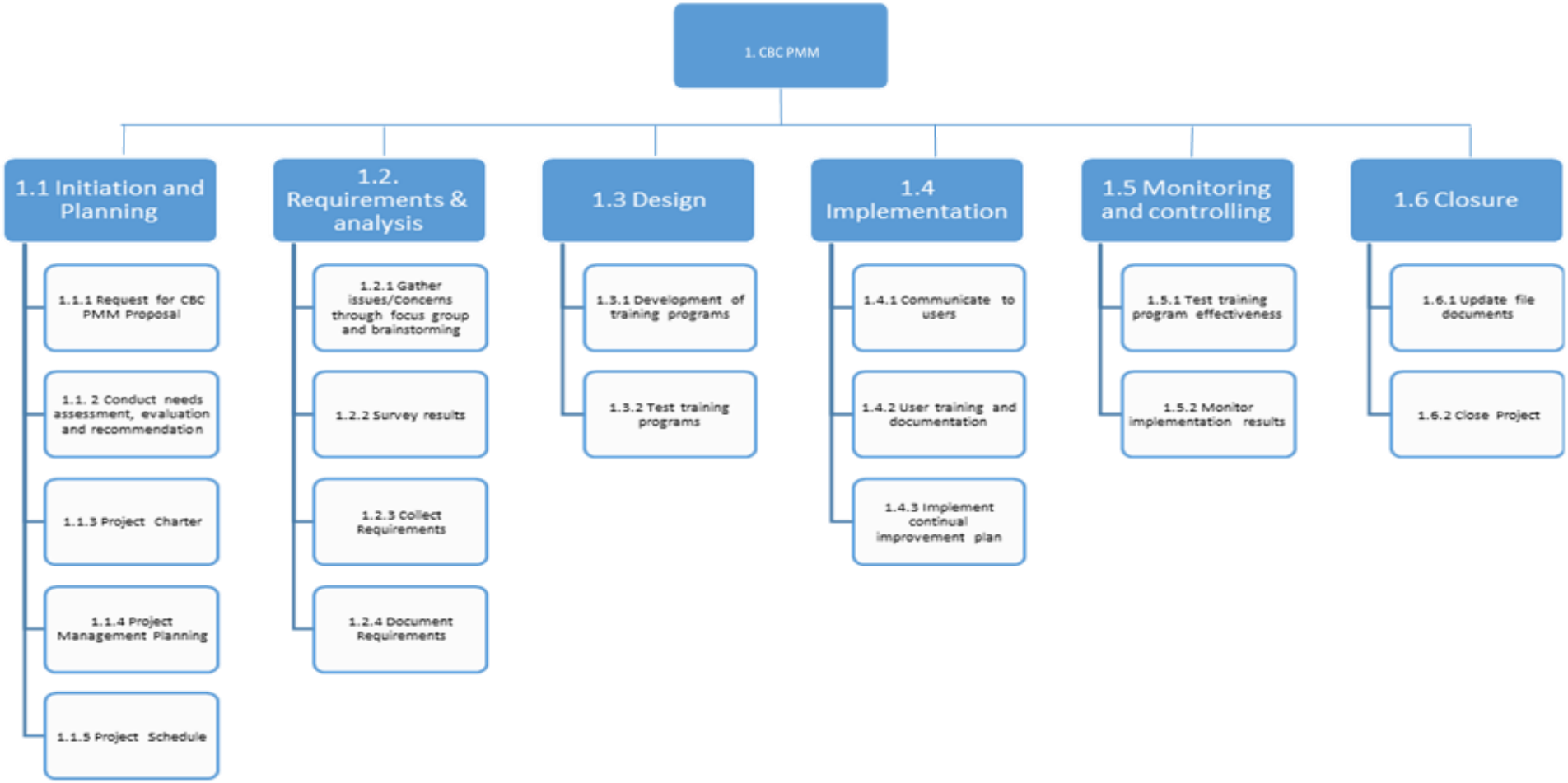

Figure 21. Scope management plan work breakdown structure

Chart 2. Work Breakdown structure (WBS) dictionary [Source: S. Newry, April 2019]

Level	Element Name	Description of work	Deliverables	Bud-get	Resources
1	Initiation and Planning				
1.1	Initiation and Planning Phase	Request for proposal	Proposal, Project Approval	$0	MS Project
1.1.2	Conduct needs assessment, evaluation and recommendation	Needs analysis	Summary of program needs	$0	MS Word
1.1.3	Project Charter	Development and documentation of project charter.	Project Charter	$0	MS Word
1.1.4	Project management planning.	Planning and updating project activities throughout project lifecycle.	Project management plan, project statement of work, stakeholder management strategy	$0	MS Project

1.1.5	Project scheduling.	Planning of project activities, assigning timeline and dates to determine, and control project duration.	Schedule – Gantt chart	$0	MS Word MS Project
1.2	Requirements and Analysis				
1.2	Requirements and analysis.	Initial requirements documentation and stakeholder analysis.	List of requirements. Stakeholder management matrix.	$0	MS Word
1.2.1	Gather issues or concerns through focus groups and brainstorming	Meet with team to garner information.	Meeting minutes.	$0	MS Word
1.2.2	Survey results		Survey report	$0	MS Word
1.2.3	Collect requirements	Meet with key stakeholders to gather project's needs.	Meeting minutes.	$0	MS Word
1.2.4	Document requirements.	Compile a list of project requirements.	Revised requirement listing.	$0	MS Word

1.3	Design				
1.3	Design Training Program.	Design phase to include all the required interests and changes.		$0	MS Word MS Excel
1.3.1	Development of training programs.	Works related to develop a training program.	Training material and schedule	$0	MS Word
1.3.2	Test training programs.			$0	MS Power Point
1.4	Implementation				
1.4	Implementation.	Implement methodology.		$0	MS Power Point
1.4.1	Communicate program and methodology to users.	Inform users of program features.		$0	MS Word
1.4.2	User training and documentation.	Training execution to chosen personnel.	Training Records.	$0	MS Word

1.4.3	Implement continual improvement plan.	Integrate new requirements relevant to training program via change management protocols. Investigate new training pedagogy or strategies.	Continual improvement register.	$0	MS Word
1.5	Monitoring and Controlling				
1.5	Monitoring and controlling.	Monitoring project activities, preparing reports and presenting to the appropriate stakeholders.	Project progress report.	$0	MS Word
1.5.1	Test training program effectiveness.	Interview staff and, assess performance metrics.	Training program evaluation and, interview reports	$0	MS Word
1.5.2	Monitor implementation results.	Review competency scores.		$0	MS Word

1.6	Closure				
1.6.1	Update file documents.	Document amendments to training program.		$0	MS Word
1.6.2	Close project.	Hand over project to management.	Project Closure report, files, Lessons Learned,	$0	MS Word Microsoft Outlook

2.4.3.4 Scope Verification

As this project progresses, the project manager will compare project deliverables against the original scope as defined in the scope statement, WBS and WBS Dictionary. Once the project manager confirms that the scope meets the requirements as per the project plan, the project manager will present the deliverable to the project sponsor in a meeting for formal acceptance. The project sponsor will either require ammendments or signify acceptance of the deliverable by signing a project deliverable acceptance document as depicted below. Then the project manager will update the revision history as outlined in appendix 44.

2.4.3.5 Sponsor Acceptance

Approved by the Project Sponsor:

_____ Date:_____

<Project Sponsor>
<Project Sponsor Title>

2.4.3.6 Scope Control

The project manager and the project team will collaborate to control of the scope of the project. The Project Manager will utilize the WBS Dictionary as a statement of work for each WBS element in order that only the work described in the WBS dictionary is performed. The Project Manager will oversee the project to ensure that this scope control process is adhered to.

If a change to the project scope is sought, then the formal process for recommending changes to the scope must be utilized. Anyone can request changes to the project scope. However, all change requests must be documented, dated and submitted to the project manager in a project change request document.

The project manager will then do a preliminary review of the suggested change to the scope of the project. The project manager will then either dismiss it or host a change control meeting between the project team and sponsor to review the change request further. The project manager and team will determine the impact of the change on the schedule, cost, resources, scope, and risks. If it is determined that the impacts will exceed the boundary conditions then the change will be forwarded to the Project Sponsor for review and approval. If approved by the project manager and sponsor, the project manager will then formally accept the change with a signature from the sponsor. If the change is approved by the project sponsor then it will be implemented by the project manager who will update the schedule and all project documentation in accordance with the change control process and brief all project team members and stakeholders of it.

2.4.1.3 Schedule Management Plan

Introduction

The project schedule is the pathway for how the project will be executed. Schedules hold accountable participants such as the project team, sponsor, and stakeholders according to the amount of work required to meet time constraints. The purpose of the schedule management plan is to establish the method that the project team will use in creating the project schedule. This plan is a directive to monitor the project timeframe and manage changes after the baseline schedule has been ratified. This pertains to the identifying,

analyzing, documenting, prioritizing, approving or rejecting, and publishing of all schedule-related changes.

2.4.1.3.1 Schedule Approach

Project schedules will be created using MS Project 2013 starting with the deliverables identified in the project's work breakdown structure (WBS). Activity definition will identify the specific work packages which must be performed to complete each deliverable. Activity sequencing will be used to determine the order of work packages and assign relationships between project activities. Activity duration estimating will be used to calculate the number of work periods required to complete work packages. Resource estimating will be used to assign resources to work packages in order to complete schedule development.

Once a preliminary schedule has been developed, it will be reviewed by the project team and any resources will be tentatively assigned to project tasks. The project team and resources must agree to the proposed work package assignments, durations, and schedule. Once this is achieved, the project sponsor will review and approve the schedule and it will then be baselined.

The following will be designated as milestones for the project schedule.

•Completion of scope statement and WBS/WBS Dictionary
•Baselined project schedule
•Approval of final project budget
•Project kick-off
•Approval of roles and responsibilities
•Requirements definition approval
•Project implementation
•Acceptance of final deliverables

Roles and responsibilities for schedule development are as follows:
The project manager will be responsible for facilitating work package definition, sequencing, and estimating duration and resources with the project team. The project manager will also create the project schedule using MS Project 2013 and validate the schedule with the project team, stakeholders, and the project sponsor. The project manager will obtain schedule approval from the project sponsor and baseline the schedule.

The project team is responsible for participating in work package definition, sequencing, and duration and resource estimating. The project team will also review and validate the proposed schedule and perform assigned activities once the schedule is approved.

The project sponsor will participate in reviews of the proposed schedule and approve the final schedule before it is baselined.

The project stakeholders will participate in reviews of the proposed schedule and assist in its validation.

2.4.1.3.2 Schedule Control

The project schedule will be reviewed and updated as necessary on a bi-weekly basis with actual start, actual finish, and completion percentages which will be provided by task owners.

The project manager is responsible for holding bi-weekly schedule updates or reviews, determining impacts of schedule variances, submitting schedule change requests, and reporting schedule status in accordance with the project's communications plan.

Moreover, the project team is responsible for participating in bi-weekly schedule updates or reviews, communicating any changes to actual start or finish dates to the project manager, and participating in schedule variance resolution activities as needed.

The project sponsor will maintain awareness of the project schedule status and will review or approve any schedule change requests submitted by the project manager.

2.4.1.3.3 Schedule Changes and Thresholds

If any member of the project team determines that a change to the schedule is necessary, the project manager and team will meet to review and evaluate the change. The project manager and project team must determine which tasks will be impacted, the variance as a result of the potential change, and any alternatives or variance resolution activities that they may employ to see how they would affect the scope, schedule, and resources. If, after this evaluation is complete, the project manager determines that any change will exceed the established boundary conditions, then a schedule change request must be submitted. Submission of a schedule change request to the project sponsor for approval is required if either of the two following conditions is true:

• The proposed change is estimated to reduce the duration of an individual work package by 15% or more or increase the duration of an individual work package by 15% or more.

•The change is estimated to reduce the duration of the overall baseline schedule by 15% or more or increase the duration of the overall baseline schedule by 15% or more.

Any change requests that do not meet these thresholds may be submitted to the project manager for approval.

Once the change request has been reviewed and approved, the project manager is responsible for adjusting the schedule and communicating all changes and impacts to the project team, project sponsor, and stakeholders. The project manager must also ensure that all change requests are archived in the project records repository.

2.4.1.3.4 Scope Change

If the project manager determines that the scope change will significantly affect the current project schedule, the schedule may be re-baselined in consideration of any changes which need to be made as part of the new project scope. The project sponsor must review and approve this request before the schedule can be re-baselined.

2.4.1.3.5 Activities Definition, Sequence and Duration

Based on the WBS previously developed, a list of activities was defined in alignment with the three-month period expected to execute the project. This provided a basis for the time estimation, sequencing, performance, monitoring, and evaluation of project work. Furthermore, the interaction between project activities was specified while relationships were identified, documented, and logically sequenced.

Chart 3. Project Activities [Source: S. Newry, April 2019]

Level	Element Name	Description of work	Deliverables	Duration
1.0	Initiation and Planning			
1.1	Initiation and planning phase.	Request for proposal.	Proposal, Project approval	4 days
1.1.2	Conduct needs assessment, evaluation, and recommendation.	Needs analysis.	Summary of program and learner needs	4 days
1.1.3	Project Charter	Development and documentation of project charter.	Project Charter	4 Days
1.1.4	Project management planning	Planning and updating project activities throughout project lifecycle.	Project management plan, project statement of work, and stakeholder management strategy.	4 Days

1.1.5	Project scheduling	Planning of project activities, assigning timeline and dates to determine, and control project duration.	Schedule – Gantt chart.	4 Days
1.2	Requirements and Analysis			
1.2	Requirements and analysis.	Initial requirements documentation and stakeholder analysis.	List of requirements. Stakeholder management matrix.	4 Days
1.2.1	Gather issues or concerns through focus group and brainstorming.	Meet with team to garner information.	Meeting Minutes.	4 Days
1.2.2	Survey results.		Survey report.	2 Days
1.2.3	Collect requirements.	Meet with project key stakeholders to gather project's needs.	Meeting minutes.	4 Days

1.2.4	Document requirements.	Compile a list of project requirements.	Revised requirement listing.	4 Days
	Design			
1.3	Design training program.	Design phase to include all the required changes.		10 Days
1.3.1	Development of training programs.	Works related to develop a training program.	Training material and schedule.	14 Days
1.3.2	Test training programs.			4 days
1.4	Implementation			
1.4.1	Communicate program and methodology to users.	Inform users of program features.		4 Days
1.4.2	User training and documentation.	Training execution to chosen personnel.	Training records.	4 Days

1.4.3	Implement continual improvement plan.	Integrate new requirements relevant to training program via change management protocols. Investigate new training pedagogy or strategies.	Continual improvement register.	4 Days
1.5	Monitoring and Controlling			
1.5	Monitoring and controlling	Monitoring project activities, preparing reports and presenting to the appropriate stakeholders.	Project progress report	4 Days
1.5.1	Test training program effectiveness.	Interview staff, and, assess performance metrics,	Training program evaluation, interview reports.	2 Days
1.5.2	Monitor implementation results.	Review competency scores.		4 Days

1.6	Closure			
1.6.1	Update file documents	Document training program amendments		1 Day
1.6.2	Close Project.	Hand over project to management.	Project closure report, lessons learned, project files.	1 Day

2.4.1.3.6 Develop Schedule

In this section, all processes will be integrated to reflect the project schedule. The sequenced activity list and duration estimated will be approved for the timely execution of project tasks over time.

Refer to appendix # 4 to see project schedule.

2.4.1.4 Cost Management Plan

The project manager will be responsible for managing and reporting on the project's cost throughout the duration of the project. During the monthly project status meeting, the project manager will meet with management to present and review the project's cost performance for the preceding month. Performance will be measured using earned value. The project manager is responsible for accounting for cost deviations and presenting the project sponsor with options to get the project back on budget.

The project sponsor has the authority to make changes to the project to bring it back within budget.

2.4.1.4.1 Reporting Format

Reporting for cost management will be included in the monthly project status report. Appendix 19 depicts a project status breakdown template. The monthly project status report will include a section labeled “Cost Management”.

All cost variances outside of the thresholds identified in this Cost Management Plan will be reported including any corrective actions that have been planned. Moreover, change requests which are triggered based upon project cost overruns, will be identified and tracked in this report.

The cost change control process will follow the established project change request process. Approvals for project budget or cost changes must be approved by the project sponsor.

2.4.1.4.2 Project Budget

The budget for this project is detailed below. Costs for this project are presented in various categories.

Fixed Costs: $0

Material Costs: $0

Contractor Costs: $0

Total Project Cost: $0.00

Management Reserve: $0

(The $7,000 USD preliminary spent on project management training service and consultancy by Victor and Associates occurs within because the company used an outsourced service provider before this project was engaged, thus it remains outside the scope of the project budget).

2.4.1.5 Quality Management Plan

The Quality Management Plan for the CBC project management methodology will establish the activities, processes, and procedures for ensuring an impactful result upon the conclusion of the project. The list below exemplifies the purpose of this plan.

•Ensure quality is planned.

•Define how quality will be managed.

•Define quality assurance activities.
•Define quality control activities.
•Define acceptable quality standards.

The quality management approach for the CBC PMM project will ensure that quality is planned for both the program and processes. In order to be successful, this project will meet its quality objectives by utilizing an integrated quality approach to define quality standards, measure quality and continuously improve quality.

Quality for the CBC PMM project will be defined by both, the standards to which the Company subscribes and criteria for its operating performance. The focus is on the project's deliverable, hence the standards and criteria being used will ensure that the product meets established quality standards and customer satisfaction.

Establishing process quality standards will ensure that all activities conform to an organizational standard which results in the successful delivery of the training program. Metrics will be established and used to measure quality throughout the project life cycle for the program. The quality management systems coordinator will be responsible for working with the project team to define these metrics, conduct measurements, and analyze results. These performance measurements will be used as criteria in determining the success of the project and must be reviewed by the project sponsor. Metrics will include the following details.

•Schedule adherence.
•Increased process performance.
•100% training program compliance.
•Improved customer satisfaction (as a result of training).

2.4.1.5.1 Quality Management Tools

- Flowchart: a flowchart will be used to provide a visual aid depicting the standardized sequence of events. All misaligned practices will have to adhere to a formal process flow in order to rectify unsustainable organizational behaviors.
- Benchmarking: This will offer a useful vantage point to compare similar projects to deduce best practices for this project, to prioritize actions, and to provide the basis for improving performance.

- Check sheets: They will include activity, process owner, timeframe for completion, activity location and method of execution, revealing specifications, assurance activity, quality metrics, and the purpose for mutual understanding, thus employees grasp the damage magnitude of deviations. These will be primarily used as a data collection tool.
- Requirements matrix: a requirements matrix will itemize each compliance obligation. This will include the requirements for each stakeholder or supplier and activities to satisfy the requirements along with topics necessary for inclusion in the training scheme. A sample is provided in appendix 35.
- Audits: frequent audits will verify that all requirements are satisfied. A checklist will systematically check each aspect of compliance criteria. A sample template is provided in appendix 38.

Opportunities for improvement will be identified and communicated by any person affiliated with the project. Each recommendation will be reviewed to determine the cost-benefit impact of implementing the improvement and how the improvement will impact the program. If an improvement is approved, the project manager will proceed to revise all project documentation to include the newly found idea and the project manager will update the organizational documentation affected by its integration.

The project manager will host project, management, and document review sessions. In these reviews, an agenda item will include a progress report of the training program, any issues or audit findings, and any innovations propelling the project.

The quality management systems coordinator will provide day-to-day quality management and conduct weekly process audits, monitor process performance metrics, and affirm all processes abide within the project as well as organizational requirements. If inconsistencies are found, the project manager will review and rectify the issue with the project team.

2.4.1.6 Human Resources Management Plan

Human resources management is an important part of the CBC PMM. The Human Resources Management plan is a mechanism which will enable the control of the chain of human resource activities throughout the project until closure. The Human Resources Management plan includes the aspects presented below.

•Designated roles and responsibilities of team members throughout the project

•Project charts

The staffing management plan to include the following aspects.

•Where resources will be attained.

•Timeline for resources or skill sets.

•Training required to develop skills.

•How performance reviews will be conducted.

•Recognition and rewards system.

Team members may have varying degrees of authority and responsibility. When listing roles and responsibilities the following aspects are included:

•Role. It refers to the description of the portion of the project for which the member is accountable.

•Authority. It refers to the level at which the member may make decisions, apply project resources, or make approvals.

•Responsibility. In regard to responsibility, it refers to the work a team member must perform to complete assigned work activities.

•Competency. It is about the skill(s) required to complete assigned project activities.

2.4.1.6.1 Roles and Responsibilities

The project manager (PM) is responsible for the overall success of the project. The PM must authorize and approve all project expenditures. The PM is also responsible for approving that work activities meet established acceptability criteria and fall within acceptable variances. The PM will be responsible for reporting project status in

accordance with the communications management plan. In addition, the PM will evaluate the performance of all project team members and communicate their performance during meetings. The PM is also responsible for acquiring human resources for the project through coordination with functional managers. The PM must possess the following skills to enable cohesive efforts: leadership and management, budgeting, scheduling, and effective communication.

In regard to functional managers (FM), they are part of the project team, and they are responsible for providing resources for the project in accordance with the project staffing plan. Moreover, functional managers are responsible for working with the PM to complete assignments and to support an environment of synergy as the project proceeds. Functional managers are also responsible for conducting trainings, performance appraisals, and for adjusting trainings based on the PM's feedback regarding project performance. They must have the competencies of project management as well as coordination skills, multi-tasking skills, interpersonal skills, and communication skills.

The Human resources manager is responsible for the distribution, implementation, and monitoring of the new methodology. The HR manager is responsible for working with the department managers to ensure that the program conforms with organizational requirements. The HR manager is responsible for coordination with each department to facilitate the rollout of the training program with minimal or no disturbance to operations. The HR manager will report status to the PM in accordance with the project's Communications Management plan. The HR manager's performance will be evaluated by the PM and communicated to the project sponsor. The HR manager must be proficient in learning management and talent management and a baseline assessment will be done to determine the competency needed for this role using the HR competency gap assessment template provided in appendix 21. HR manager must also have the competencies of project management and have coordination skills, multi-tasking skills, interpersonal skills and communication skills.

The RACI chart template provided in appendix 18 will be completed to signify the relationship between project tasks and team members. Any proposed changes to project

responsibilities must be reviewed and approved by the project manager and they will be proposed in accordance with the project's change control process. As changes are made, all project documents will be updated and redistributed accordingly.

In regard to staff acquisition, the project staff will consist entirely of internal resources. There will be no outsourcing or contracting performed within the scope of this project. Consultant training services will serve as a precursor to the project. The project manager will negotiate with functional and department managers in order to identify and assign resources in accordance with the project organizational structure. All forms of participation such as interviews must be permitted by the appropriate functional or department manager before the resource may appear in any aspect.

In relation to training, preliminary project management training will be scheduled since the organization has limited competencies and staff with required skill sets. Training requirements which are identified will be coordinated by the project manager. Appendix 9 depicts the Employee development matrix, which can be used as a guide to developing training schemes based on the competency needs assessment. Appendix 7 is a template provided for employee training needs assessment. The process flow for understanding the needs of employees is depicted in the training needs analysis model in appendix 8. For all newly recruited employees, the flow chart for the induction process will be adhered to as depicted in appendix 5.

In regard to performance reviews, the project manager will review each team member's assigned work activities at the onset of the project and communicate all expectations of work to be performed. The project manager will then evaluate each team member throughout the project to review their performance and how effectively they are completing their assigned work. Prior to releasing project resources, the project manager will meet with the appropriate functional manager and provide feedback on project performance. The functional managers will then perform a formal performance review

on each departmental team member using the performance evaluation form (appendix 22).

Regarding recognition and rewards, due to budgetary constraints, there are several planned recognition and reward items for project team members, which are not of monetary value.

Upon successful completion of the project, any team member who satisfactorily completed all assigned work packages on time will receive a certificate of appreciation from the CEO, a preferred parking space and three complimentary cases of soda.

Team members who successfully complete all of their assigned tasks will have their photo taken for inclusion in the company newsletter to honor their efforts.

2.4.1.7 Communications Management Plan

The Communications Management Plan sets the communications framework for this project. It will serve as a guide for communications throughout the life of the project and will be updated as communication needs change. This plan identifies and defines the roles of people involved in this project. It also includes a communications matrix which maps the communication requirements of this project. An in-depth guide for conducting meetings details both the communications rules and how the meetings will be conducted, thus ensuring successful meetings. A project team directory is included to provide contact information for all stakeholders directly involved in the project. Any current and foreseeable issues surrounding training are included in the issue log Template provided in appendix 17.

The project manager will take a proactive role in ensuring effective communications on this project. The communication requirements are documented in the communications matrix. The communications matrix presented in this document will be used as the guide for what information to communicate, who is to do the communication, when to communicate it and to who to communicate with. Changes or updates may be required due to changes in personnel, scope, budget, or other reasons. If approved, the project manager will update the plan and supporting documentation and will distribute the updates to the project team and all stakeholders. This methodology is consistent with the

project's change management plan and ensures that all project stakeholders remain aware and informed of any changes to communications management.

There may also be new legislative, regulatory, technologically, or organizational policy requirements which must be shared as part of communications management. These constraints must be clearly understood and communicated to all stakeholders, both internal and external. Communication activities will occur in accordance with the frequencies detailed in the communication plan in order to ensure that the project adheres to schedule constraints. Appendix 16 features a Communications Management log template for company use.

Chart 4. Communications Plan [Source: S. Newry, April 2019]

Communication Type	Deliverable	Description	Delivery Method	Frequency	Owner	Audience
Project Initiation/launch	Project updates	Regular communication.	Telephone Calls E-mail	Needs basis	Project Manager	Project Sponsor, Consultant
	Project updates	Regular communication.	Telephone Calls E-mail Meetings	Biweekly	Project Manager	Project Team
	Project updates	Regular communication.	Telephone Calls E-mail	Needs basis	Project Manager	Stakeholders
	Change request form	Change Request	E-mail	Needs basis	Stakeholder	Project Manager
	Integration update	Update on status of new requirements, technology or organizational shifts relative to training	E-mail Conversation Web conference	Weekly	Human Resources Manager	Project Manager

Reports	Project status report (Project Process)	Regular update on critical project issues.	E-mail	Weekly	Project Manager	Project Sponsor Project Team
	Quality audit report	Regular updates on project quality performance.	E-mail	Weekly	Functional Manager	Project Manager Project Team
	Financial report	Regular updates on project finances.	E-mail	Weekly	Project Manager	Project Sponsor
	Compliance report	Regular updates on pending legislations, requirements, request for information (RFI), and compliance.	E-mail	Weekly	Project Manager	Project Sponsor
	Task report	Regular updates on critical project issues pertaining to the project team.	E-mail	Weekly	Project Manager	Functional Managers
Presentations	Project review	Project status updates.	Meeting	Weekly	Project Manager	Project Sponsor Project Team
	Final account	A complete audit of project done at the end of the project. In addition to projections.	Meeting	Once	Project Manager	Project Sponsor Project Team

Project Announcements	Task reminders	Task owner schedule reminders.	E-mail	Daily	Project Manager	Project Team
	Change Request or Orders	Request to add or remove scope from the project.	Written (Standard Form)	Needs basis	Project Manager	Project Sponsor Project Team
	Project updates	Project updates for community members.	Written	Needs basis	Project Manager	Community Members
Reviews and Meetings	Team meeting	Meeting to review project status.	Planning Meeting	Weekly	Project Manager	Project Sponsor Project Team
	Risk report	Regular updates on project risks.	Progress Meeting	Bi-weekly	Project Manager	Project Sponsor; Technical Director
	Stakeholder report	Regular updates on stakeholder concerns.	Planning Meeting	Weekly	Project Manager	Project Sponsor Project Team
	Project status meetings (Project Process)	Regular updates on critical project issues.	Progress Meeting	Weekly	Project Manager	Project Sponsor Project Team
	Planning	Regular updates and project planning.	Progress and Planning Meeting	Daily	Project Manager	Project Team

As part of identifying all project stakeholders, the project manager will communicate with each stakeholder in order to determine their preferred frequency and method of communication. This feedback will be maintained by the project manager in the project's stakeholder management. Standard project communications will occur in accordance with the communication matrix and plan; however, depending on the identified stakeholder communication requirements, unprescribed communication is acceptable among parties involved when they occur within the constraints outlined for this project.

In addition to identifying communication preferences, stakeholder communication requirements must identify the project's communication channels and ensure that stakeholders have access to these channels. If project information is communicated via secure means or through internal company resources, all stakeholders, internal and external, must have the necessary access to receive project communications. Once all stakeholders have been identified and communication requirements are established, the project team will maintain this information in the project's stakeholder register and use this, along with the project communication matrix as the basis for all communications. Communication log in appendix 42 will be used to capture and record the aspects shared. A log of communications will be recorded to consolidate all communication activity for transparency and to facilitate business continuity.

Chart 5 presents contact information for all people identified in this communications management plan. The email addresses and phone numbers in this chart will be used to communicate with these people.

Chart 5. Contact Directory [Source: S. Newry, April 2019]

Role	Name	Title	Department	Email	Phone
Project sponsor	W. Wells	CEO	Executive office	w.wells@cbcbahamas.com	1-242-397-4200
Project manager	S. McNeil	Quality management systems coordinator	Quality management systems	smcneil@cbcbahamas.com	1-242-397-4211
Team member	J. Fountain	Human resources manager	Human resources	jfountain@cbcbahamas.com	1-242-397-4222
Team member	C. Fox	Production manager	Production	cfox@cbcbahamas.com	1-242-397-4333
Team member	K. Rolle	Warehouse manager	Warehouse	krole@cbcbahamas.com	1-242-397-4444
Steering committee member	X. Whyzee	Technical director	Operations	x.whyzee@cbcbahamas.com	1-242-397-4555

The project team will determine, in accordance with CBC organizational policy, the communication methods and technologies based on several factors including: stakeholder communication requirements, available technologies (internal and external), and organizational policies and standards.

CBC maintains a shared drive which all project team members use as a channel to provide updates, archive various reports, and conduct project communications. This platform enables senior management, as well as stakeholders with compatible technology, to access project data and communications at any point in time. CBC also provides the ability for stakeholders and project team members to collaborate on project work and communicate via email.

In regard to project team meetings, the project team will utilize a CBC standard template in appendix 24 for meeting agenda and minutes. PMP activity log in appendix 15 will serve as a record of activity and project progress. Efficient and timely communication is the key to successful project completion. Therefore, it is imperative that any disputes, conflicts, or discrepancies regarding project communications are resolved in a way that is conducive to maintaining the project schedule, ensuring that the correct communications are undisturbed, distributed, and preventing any ongoing difficulties. In order to ensure that the project stays on schedule and issues are resolved, CBC will use its organizational hierarchy to provide a framework for escalating communication issues.

2.4.1.8 Risk Management Plan

A Risk Management plan charts the course to identify risks, analyze the risks, develop mitigation measures for risks identified, and manage the mitigation so as to reduce risk impact. It prescribes how risk management activities will be conducted in the project. The activities below are included in the risk management plan include.

- Plan risk management.
- Identify risks.
- Analyze risks.
- Planning the responses.
- Monitor and control the risks.

In regard to risk assessments, a risk assessment meeting was held with key team members and stakeholders. The risks identified during this meeting were added to the project plan and risk register is presented in appendix 4.

In order to determine the severity of the risks identified by the team, a probability and impact factor was assigned to each risk. This process allows the Project Manager to prioritize risks based upon the effect they may have on the project. The project manager utilized a probability and impact matrix to facilitate the team to move each risk to the appropriate place on the chart.

The project manager has led the project team in developing responses to each identified risk. As more risks are identified, they will be qualified and the team will develop mitigation strategies for the intolerable risks. These risks will also be added to the risk register and the project plan to ensure they are monitored at the appropriate time and are responded to accordingly. Once the risks were assigned, a probability and impact are then scored on the chart.

If necessary, the risk management plan will be updated. During the bi-weekly project team meeting, the technical director will discuss the status of each risk. Risk monitoring will be a continuous process throughout the life of this project.

The risk register for this project is a log of all identified risks, their probability and impact to the project, the category they belong to, mitigation strategy, and when the risk might occur. The register was created through the initial project risk management meeting led by the project manager. During this meeting, the project team identified and categorized each risk. Additionally, the team assigned a score to each risk based on the probability of it to occur and the impact it could potentially have. The risk register

also contains the mitigation strategy for each risk as well as when the risk is likely to occur. The current risk register is referenced in appendix 4.

Based on the identified risks in the risk register, each risk has been appropriated, prior to when the risk is most likely to occur—the project manager and team will document the agreed upon mitigation strategy. Each manager will provide the status of the assigned risk at the bi-weekly project team meeting for the risk's planned time frame. The following are the top risks.

- Hierarchical structure that has the potential to restrict communication and personnel engagement. Some aspects of the structure are not well defined and communicated to achieve clarity of roles and responsibilities.
- Clear process flows are not designed on all levels to indicate the most efficient method of achieving a task.
- Competence is not validated for all critical positions using formal competency assurance systems.
- Knowledge management controls are not developed or centralized to manage or harness tribal knowledge for business continuity. Documentation of processes require further control.
- Company's informal values prevent accountability for a high-performance work culture reflective of performance management, sustainability, risk-based thinking, and decision-making.
- Resource management is not risk-based to align with strategic needs and outcomes of the training program. Training system reflects substandard management accountability for operational control and performance.
- Organization's established communication channels restrict effective management and dissemination of information: ineffective communication for new projects, new products, new employees, new equipment, among others.
- Technological infrastructure does not support the learning and development needs of the expansive nature of operations.
- Local culture does not generate sensitivity to international food safety and quality standards within the industry.

- Personnel administration (staffing and retention guidelines, employee performance reviews and training management and verification) require control.
- Leadership lacks a structured approach for advances toward business continuity.

2.4.1.9 Procurement Management Plan

The project manager will provide oversight and management for all procurement activities under this project. The project manager will work with the project team to identify all items proposed to be procured for the successful completion of the project (e.g., a learning management software system. The project management team will then review the procurement list prior to submitting it to the contracts and purchasing department. The Contracts and Purchasing department will review the procurement items, determine whether it is advantageous to make or buy the items, and begin the vendor selection, purchasing and the contracting process. Additionally, any decisions regarding procurement actions must be approved by the project sponsor before being processed.

2.4.1.10 Stakeholder Management Plan

The stakeholder management strategy for CBC project management methodology will be used to identify and classify project stakeholders, determine stakeholder power, interest, and influence; and analyze the management approach and communication methodology for project stakeholders. This will allow the Project team to identify key influential stakeholders to solicit input to enhance project planning and gain support as the project progresses.

Project Team will conduct a brainstorming session in order to identify stakeholders for the project. The brainstorming session will include the primary project team. The focus will be on internal and external stakeholders. In order to classify stakeholders, the project team will identify key stakeholders who have the most influence on the project or who may be impacted the most by it. These key stakeholders are those who also require the most communication and management which will be determined as

stakeholders are analyzed. Once they are identified, the project manager will develop a plan to obtain their feedback on the level of participation they desire, frequency and type of communication, and any concerns or conflicting interests they have.

Thorough communication with key stakeholders is necessary to ensure that all concerns are identified and addressed and that resources for the project remain available. In regard to the stakeholder analysis, the following are existing stakeholders.

- The Coca Cola Company
- Owners and investors
- International organization for standardization
- Ministry of health
- Bahamas manufacturers association
- Caribbean Bottling Company employees and associates

Once all project stakeholders have been identified, the project team will categorize and analyze each stakeholder.

The project manager will categorize stakeholders based on their organization or department. Once all stakeholders have been categorized, the project team will collectively utilize a power or interest matrix to illustrate the potential impact each stakeholder may have on the project.

Based on this tool, the project team will also complete a stakeholder analysis matrix which illustrates the concerns, level of involvement, and the management strategy for each stakeholder. The purpose of this analysis is to determine the stakeholders' level of power or influence, the prioritization plan and the management approach for each stakeholder, and to determine the appropriate levels of communication and participation each stakeholder will have on the project. The stakeholder analysis matrix will be used to capture stakeholder concerns, level of involvement, and management strategy based on the stakeholder analysis and power or interest matrix mentioned above. The stakeholder analysis matrix will be reviewed and updated throughout the project's duration in order to capture any new concerns or stakeholder management strategy

efforts. Appendix 6 shows the stakeholder management matrix template**,** the stakeholder communications matrix template and the stakeholder register which are templates to be used for the stakeholder analysis of this project.

Once the planning phase is completed, the subsequent stage is the execution phase. This is the primary process for carrying out the project plan through the coordination of people and other resources. The vast majority of the budget and other resources will be expended in this phase. During this phase, the project manager or team will need to coordinate all of the activities needed to successfully accomplish the project. External, as well as internal resources will need to be managed and coordinated to ensure their timely inclusion into the project execution.

The project's objectives are regularly monitored and measured to ensure its suitability, specificity, progress and attainment. Moreover, the effort to validate the materials to ensure that they address the identified objectives of the training is equally important. Validation of the quality of the teaching material, the instructors, and the testing methodology is also important as to ensure that value is added to the organization as a result of the project. Appendix 28 is an evaluation tool and appendix 36 shows a Training Program report template that can assist.

CBC Training program projects can use Learning Management System (LMS) provided for loading, storing, managing and tracking the eLearning and classroom training. The LMS is for tracking internal end users training registration and completions in an automated manner. This platform will enhance the capabilities of quality control through a reliable and independent system of information management.

Closing the project entails the creation of project records into an archive for future reference. Additionally, confirmation that the project has met all requirements including any scope changes approved during the execution phase, along with budget reports, staffing evaluations, among others, need to be completed. Finally, lessons learned templates in appendix 20 would be documented for use on future projects. The Project closure report template is provided for use in appendix 23. This documents all project close out activities by summarizing the project details and metrics collected, documenting the accomplishments and lessons learned, updating relevant organization databases,

closing any open issues, among others, thus ensuring that they have been accomplished as per defined processes. Follow-up to the project will result in determining if the project succeeded in accomplishing all of its anticipated goals including enhancement of the organization's business. Moreover, evaluation is important during the implementation of the training program as well as after the training program ends. Understandably, evaluation during the training is essential to ensure that the employees are assimilating the material presented. However, evaluation after the employee finishes the training program and resumes their daily work routine is vitally imperative. It can measure whether or not the skills taught were incorporated or transposed into the employee's work to boost performance. If it is revealed that the training program does not satisfy the performance gaps, further enhancements to the training program can be initiated.

According to the process flow depicted in figure 23, each phase strategically addresses the project needs through a systematic five phase approach.

3. METHODOLOGICAL FRAMEWORK

This section features the various methods used to capture information during the project. Described below are approaches which facilitate detailed and objective analysis of the organizational environment, people, processes and documentation disclosed.

3.1 Information sources

A source generates credible information for the purpose of substantiating a perspective. The formal process of citing a source is a reference. Citations help to acknowledge the intellectual work presented by a relevant authority. It also serves to differentiate what information was produced by the writer in comparison to what was obtained from the source. Sources typically remain classified as either primary or secondary (The University of Chicago Press, 2003).

3.1.1 Primary sources

The University of Minnesota Library (2018) describes a primary source as an established record of an event or evidence as originally described or as it actually happened without any interpretation. This information is unadulterated and uninterpreted and it is a first-hand account of an event. Some examples include: government reports, speeches, letters, interviews, autobiographies, correspondence and scholarly journal articles (University of Minnesota Library, 2018).

The next list presents the primary sources used for this graduation project.

- Interviews with Heads of Departments at Caribbean Bottling Company.
- Documentation obtained from Caribbean Bottling Company and Coca Cola.
- Reports on completed projects.

An overview of the objectives and the primary sources are presented on Chart 6.

3.1.2 Secondary sources

Sources provide an analysis of the restatement of primary sources; these are works that summarize, interpret, report, reorganize or otherwise provide an added value to a primary source (University of Minnesota Library, 2018). Secondary sources provide a description of the event, which is originally described by the primary source. Textbooks, edited works,

books, and articles that review research works, biographies, or other literature are secondary sources.

The following are secondary sources used for this graduation project.

- A Guide to Project Management Body of Knowledge.
- Related literature studies on project management methodology.
- Documentation obtained via the websites of CBC and the Coca Cola Company.
- System documentation used by Caribbean Bottling Company.

Secondary sources used for the specific objectives of this graduation project are presented on Chart 6.

Chart 6 Information sources (Source: Compiled by Author)

Objectives	Information sources	
	Primary	**Secondary**
To analyze current project management practices in the training and development program at Caribbean Bottling Company and to determine system gaps in which the methodology will be utilized.	Interviews with Heads of Departments at Caribbean Bottling Company. Documentation obtained from Caribbean Bottling Company and Coca Cola	A Guide to Project Management Body of Knowledge. Documentation obtained via the websites of Coca Cola and Caribbean Bottling Company. System documentation obtained from Caribbean Bottling Company.
To develop project management procedures in the five process groups and ten Knowledge Areas in order to provide structure in the training program.	Interviews with Heads of Departments at Caribbean Bottling Company. Documentation obtained from Caribbean Bottling Company and Coca Cola.	A Guide to Project Management Body of Knowledge. Related literature studies on Project Management Methodology.
To create project management templates and forms associated with the project management procedures	Interviews with Heads of Departments at Caribbean Bottling Company.	A Guide to Project Management Body of Knowledge Related literature studies on project management methodology

to apply to the management of future projects.	Documentation obtained from Caribbean Bottling Company and Coca Cola.	
To apply the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs.	Heads of departments at Caribbean Bottling Company.	A Guide to Project Management Body of Knowledge Related literature studies on project management methodology.

3.2 Research methods

Bryman (2012) defines the research method as a technique for collecting data.

In order to develop a project management methodology for Caribbean Bottling Company, the systems at this organization will be analyzed. Thereafter, project management procedures, templates and forms will be developed and additional needs will be assessed.

This graduation project is an investigative quest to determine the degree to which a project management methodology is already being incorporated and to discover how best to improve the current state of the operations by presenting a system-wide project management methodology. With this aim, a research strategy is grounded in qualitative research.

The following are the research methods used in this graduation project.

- Semi-structured interviews.
- Analytical method.

3.2.1 Semi-structured interviews

Semi-structured interviews in qualitative research pose relatively open-ended questions to research participants in order to uncover perspectives based on the topic of interest. Interviews facilitate the collection of data when using qualitative research methods. A list of topics to be covered will be used to guide the discussion in an informal setting (Bryman, 2012).

The purpose of semi-structured interviews is to uncover the views, experiences and impetuses for the system in place.

3.2.2 Analytical method

The analytical research method “uses facts or information already available and analyzes them to make a critical evaluation” (Sridhar, 2008).

Chart 7 features research methods used.

Chart 7 Research methods (Source: Compiled by author)

Objectives	Semi-structured interviews	Analytical Research Method
To analyze current project management practices in the training and development program at Caribbean Bottling Company to determine system gaps in which the methodology will be utilized.	Semi-structured interviews will be utilized by posing questions to ascertain information about current project management practices.	The analytical method will be employed by using facts or information from the sources to analyze current practices

To develop project management procedures in the five process groups and ten Knowledge Areas in order to provide structure in the training program.	Semi-structured interviews will be utilized by posing questions to acquire information critical to develop project management procedures.	The analytical method will be employed by using facts or information from the sources to develop project management procedures
To create project management templates and forms associated to the project management procedures to apply to the management of future projects.	Semi-structured interviews will be utilized by posing questions to acquire information critical to develop project management templates and forms.	The analytical method will be employed by using facts or information from the sources to create project management templates and forms
To apply the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs.	Semi-structured interviews will be utilized by posing questions to best determine applications of the methodology to a typical project structure.	The analytical method will be employed by using facts or information from the sources to apply methodology to a typical project structure.

3.3 Tools

The definitions of tool and technique provided by Merriam-Webster's collegiate dictionary (1996) are as follows. Tool is defined as something (such as an instrument or apparatus) used in performing an operation or necessary in the practice of a vocation or profession (Merriam-Webster Inc., 1996). Technique is defined as a method of accomplishing a desired aim (Merriam-Webster Inc., 1996).

Project management tools and techniques (PMTT) encapsulate the systematic procedures or practices utilized for producing specific project management deliverables (Milosevic, 2003). Project managers must identify the ideal tools that are most applicable to the context of the project process.

The Project Management Institute provides a widespread list of classic tools that can be used effectively and efficiently in different project management knowledge areas. For this project, the following tools are employed.

- Interactive communication.
- Expert judgement.
- Analytical techniques.

3.3.1 Interactive communications

An interactive communication model proposed by W. Schramm (1954) is used. This framework consists of three elements: the sender, the message, and the receiver.

According to Project Management Body of Knowledge (2017), interactive communication is the communication that takes place in an exchange of information between parties. Regarded as the most effective method, it allows the exchange of ideas on a subject matter using a broad means such as face to face meetings, written text, verbal dialogue, among others. (Project Management Body of Knowledge, 2017).

Communication occurs throughout the project team and vertically and horizontally within the organization. Project communication is the interchange of project-specific information to facilitate an understanding between the sender and the receiver (Project Communication Handbook, 2007).

3.3.2 Expert judgement

Expert judgment is described as a technique in which professional insight is provided based upon specialized experience and expertise obtained in a specific knowledge area, application area, or product area, a particular discipline, an industry, among others. (Project Management Body of Knowledge, 2017). Expert judgment is provided by an individual or group of people with specialized capacities and experience.

3.3.3 Analytical techniques

According to Project Management Body of Knowledge (2017), analytical techniques refer to various types of techniques used to appraise, examine or project potential outcomes.

The methodological approach chosen for the present study is qualitative in nature. In contrast to quantitative research, in which data is collected and evaluated using statistical techniques in order to test a hypothesis, qualitative research seeks to describe, cognize, or form a theory or conceptual framework associated with phenomena (Miles & Huberman, 1994; Taylor & Bogdon, 1984). Creswell (2013) describes this method, where the researchers analyze the information provided by the participants, as qualitative narrative research.

These are represented on chart 8 below.

Chart 8 Tools [Source: S. Newry, April 2019]

Objectives	Tools
To analyze current project management practices in the training and development program at Caribbean Bottling Company to determine system gaps in which the methodology will be utilized.	Interactive communication. Expert judgement. Analytical techniques. Meetings. Interpersonal and Team skills.
To develop project management procedures in the five process groups and ten Knowledge Areas in order to provide structure in the training program.	Interactive communication. Expert judgement. Mind Map.
To create project management templates and forms associated to the project management procedures to apply to the management of future projects.	Interactive communication. Expert judgement.
To apply the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs.	Expert judgement. Interactive communication. Analytical techniques.

3.4 Assumptions and constraints

According to the Project Management Body of Knowledge, project assumption is “A factor in planning process that is considered to be true, real or certain often without any proof or demonstration”. It is also defined as events or circumstances that are expected to occur during the project life-cycle.

If this presumption is proven false, these assumptions can have an adverse effect on the research (Project Management Body of Knowledge, 2017).

According to the Project Management Body of Knowledge, a project constraint is the state, quality, or sense of being restricted to a given course of action or inaction. It is a restriction or limitation, either internal or external, to the project that will affect the performance of the project or it will affect a process with the triple constraint of scope, time and cost (Project Management Body of Knowledge, 2017). Constraints are constricting areas that affect the execution of the project (Project Management Body of Knowledge, 2017). The triple constraint of time, cost, and scope are limiting factors in projects. They can also have a cascading impact on each other if there is a change in one.

The constraints and assumptions are summarized in chart 9 below.

Chart 9 Assumptions and constraints [Source: S. Newry, April 2019]

Objectives	Assumptions	Constraints
To analyze current project management practices in the training and development program at Caribbean Bottling Company so as to determine system gaps in which methodology will be utilized.	Documentation is readily available. Relevant communication is promptly available. The project objective can be done solely by the researcher and can be done within three months.	The short schedule of three months is a limiting factor in performing an in-depth analysis. Due to confidentiality, sensitive or propietary information may be withheld by company personnel.

Objectives	Assumptions	Constraints
To develop project management procedures in the five process groups and ten Knowledge Areas in order to provide structure in the training program.	Documentation is readily available. Relevant communication is promptly available. Project objective can be done solely by the researcher and can be done within three months	The short schedule of three months is a limiting factor in developing procedures
To create project management templates and forms associated to the project management procedures to apply to the management of future projects.	Relevant communication is promptly available. Project objective can be done solely by the researcher and can be done within three months	The short schedule of three months is a limiting factor in developing templates and forms

Objectives	Assumptions	Constraints
	The approval process is swift.	
To apply the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs.	Relevant communication is promptly available. The Project objective can be done solely by the researcher and can be done within three months	The short schedule of three months is a limiting factor.

3.5 Deliverables

A deliverable, according to Project Management Institute is “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” (Project Management Body of Knowledge, 2017). A deliverable is a materialized input or output that embodies the unique and individual products, elements, results, or items generated at a process juncture or at the conclusion of the project as a whole. Chart 10 compiles the list of deliverables that will be generated for the specific objectives.

Chart 10 Deliverables [Source: S. Newry, April 2019]

Objectives	Deliverables
To analyze current project management practices in the training and development program at Caribbean Bottling Company to determine system gaps in which the methodology will be utilized.	A report stating findings revealed from the gap analysis study on the identified needs of the training and development program that helps to identify where the methodology can be applied.
To develop project management procedures in the five process groups and 10 Knowledge Areas in order to provide structure in the training program.	A list of procedures for initiation, planning, monitoring, and control process groups.
To create project management templates and forms associated to the project management procedures to apply to the management of future projects.	Provide templates and forms for initiation, planning, monitoring and control process groups
To apply the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs.	A report with main findings of the application of the methodology for the sample project structure.

4.0 RESULTS

In order to develop a project management methodology a logical process flow was followed to feature the following aspects.

4.1 Analysis of current project management practices in the training and development program at Caribbean Bottling Company to determine system gaps in which the methodology will be utilized.

4.2 Development of project management procedures in the five process groups and ten Knowledge Areas in order to provide structure in the training program.

4.3 Creation of project management templates and forms associated with the project management procedures to apply to the management of future projects.

4.4 Application of the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs.

4.1 Gap analysis of current Training and Development Program

An analysis of current project management practices was produced in the training and development program at Caribbean Bottling Company. This was done to determine system gaps for which the methodology would be utilized. Documents developed as a result include: stakeholder listing, organizational survey, audit report of training and development program including a list of identified issues and a training needs analysis, training and development flow diagrams, and life cycle and sample training plans. Chart 11 below shows tools used to analyze current processes during gap assessment.

Chart 11. Tools for analysis of current program [Source: S. Newry, April 2019]

Input	Rational
Stakeholders were identified to develop this methodology.	To determine people from whom to access information regarding current programs. The line staff, HR, departmental managers and the technical director were engaged and provided substantive evidence and feedback.

Organizational Survey.	To get information regarding organizational culture, practices, systems and programs in use. It includes surveys and interviews.
Audit report of training and development program.	To examine documented evidence indicative of current capabilities or systems, current process flow, risk matrix, issues identified, RACI matrix, and types of trainings to determine program adherence as stipulated by ISO 9001:2015 Quality Management Systems Standard. To examine documented evidence indicative of current capabilities or systems compared to the methodology approach presented in the Project Management Institute. (2017). A Guide to the Project Management Body of Knowledge, (*PMBOK® Guide*) - Sixth Edition.
Organizational process assets and enterprise environmental factors	Review of organizational structure, value chain, enterprise risk assessment, process flows, performance evaluations, and 2018 employee training completions report to determine effectiveness of existing company controls.

Chart 12 below shows the major stakeholders in the development of the project management methodology, who were participants in the overall process development.

Chart 12 Identified Stakeholders and responsibilities within Caribbean Bottling Company [Source: S. Newry, April 2019]

Position	Responsibility
Chief executive officer	Oversees all company aspects.
Technical director	Directs operations departments.
Human resources manager	Executes the scope of HR activities for the Company.
Maintenance manager, quality assurance manager, production manager, sales and customer service manager, warehouse manager	Manages central operations.
Syrup room operator	Executes the mixing and blending processes.
Fountain and vending technician	Executes the maintenance and installation of vending machines and coolers.
Warehouse representatives	Executes the delivery of orders.

4.1.2 Organizational Survey

To get perspectives about the company operation and its systems, a guided semi-structured interview was conducted with the following CBC representatives:

1. Technical director
2. Human resources manager
3. Syrup room operator
4. Fountain and vending technician
5. Warehouse representatives
6. Managers

The questions posed in the semi-structured interviews are included in Appendix 10. Based on these semi-structured interviews, it is summarized that none of the subjects had formal project management training except the technical director. A formal systems approach is in its infancy for projects including protocols for initiation, design, implementation, evaluation and delivery of the training program. CBC has a more reactive than proactive approach to company development. For example, new customer complaints caused by products produced with poor quality may be a reason to initiate training to remediate the issue. Also, if an audit is expected to occur, trainings are quickly performed. Intentionality and a proactive mindset must be the stimuli for an effective training and development program.

Sentiments expressed during interviews were as follows:

- Hierarchical structure that has the potential to restrict communication and personnel engagement. Some aspects of the structure are not well defined and communicated to achieve clarity of roles and responsibilities.
- Clear process flows are not designed on all levels to indicate the most efficient method of achieving a task.
- Competence is not validated for all critical positions using formal competency assurance systems.
- Knowledge management controls are not developed or centralized to manage or harness tribal knowledge for business continuity. Documentation of processes require further control.
- Company's informal values prevent accountability for high performance work culture reflective of performance management, sustainability, risk based thinking and decision-making.
- Resource management is not risk-based to align with strategic needs and outcomes of the training program. Training system reflects substandard management accountability for operational control and performance.
- Organization’s established communication channels restrict effective management and dissemination of information: ineffective communication for new projects, new products, new employees, new equipment, among others.

- Technological infrastructure does not support the learning and development needs of the expansive nature of operations.
- Local culture does not engender sensitivity to international food safety and quality standards within the industry.
- Personnel administration (staffing and retention guidelines, employee performance reviews, and training management and verification) require control.
- Leadership lacks a structured approach for advances toward business continuity.

Based on the feedback generated from interviews, the issues above are plaguing the organizational culture resulting in low employee morale, dysfunction, and frustration. Therefore, these inadequacies have been paralyzing the organization, stagnating growth and have been impeding the progress of the Company from within. Organizational decay is evident. The informal approaches to organizational development have caused the company to suffer greatly. Moreover, leadership is not evident. Tasks are not being done effectively. Managers are left unraveling issues once they arise, oftentimes, backtracking or rectifying problems which all occur as a result of a poor process approach. The ambivalence toward methodology has left the company in a state of chaos. Delegation of responsibility, timelines, management of resources, procedures and verification activities are not in order. The organization has been suffering because it has not effectively employed the project management methodology and requirements of international standards.

According to ISO 9001:2015 Clause 4.4.1, “The organization shall determine the processes needed for the quality management system and their application throughout the organization, and shall:

a) determine the inputs required and the outputs expected from these processes;

b) determine the sequence and interaction of these processes;

c) determine and apply the criteria and methods (including monitoring, measurements and related performance indicators) needed to ensure the effective operation and control of these processes;

d) determine the resources needed for these processes and ensure their availability;

e) assign the responsibilities and authorities for these processes;

f) address the risks and opportunities as determined in accordance with the requirements of 6.1;

g) evaluate these processes and implement any changes needed to ensure that these processes achieve their intended results.

ISO 9001:2015 Clause 4.4.2

a) Maintain documented information to support the operation of its processes;

b) retain documented information to have confidence that the processes are being carried out as planned.”

The gap analysis based on the above requirements, detailed in ISO 9001: 2015 Quality Management Systems standard for operations, revealed critical flaws in methodology integration of the above criteria. The CBC system reflects a lack of standardized: formal talent management (career development, onboarding, succession planning, leadership development, recruitment and retention programs, job descriptions, formal performance evaluations, workforce planning, formal training programs), marketing and communications management, root cause analysis, project management, inventory management, risk management, procurement management strategic planning for organizational development and culture, and formal verification and monitoring practices including people and process performance tracking and metrics. Hence, CBC lacks an eight discipline methodology or root cause analysis for problem solving, proper resource management, formal operational planning, control of documented information and standardized process flows, change management, integrated internal audit program and business continuity planning. The deficiencies in these programs demonstrate organizational incongruence with formal project management methodology and the Deming PDCA cycle. As a result, several key factors have not been aligned in the business, including: customer focus, risk-thinking leadership, learning management engagement of people, process approach, continual improvement, evidence-based decision making, and employee relationship management.

It was evidenced during the internal audit that system-wide documentation and process approach were weak areas within the organization. Departments including HR, Maintenance, Logistics, Warehouse, Production and Finance showed ineffective training programs and unresolved compliance deviances, which are reflected in poor operational performance. Programs launched have been unsustainable and unsuccessful.

The employee competency and program structure is fundamental to all these activities. In light of this, the scope of the current system for the training program was explored even further. Aspects reviewed in the training program include: the processes engaged, the tasks assigned, the trainings required, record keeping, development of training plans, communication, trainer competencies, development of training materials, and the evaluation process for the training program. This part of the CBC investigation revealed disorder and ambiguity. There was a significant lack of organization and program planning. Historically, the training program has lacked a central training coordinator. As a result, each department has elected to build its own version of a training program. The people creating the training and conducting the training have not been trained to do so, and have also been vetting their own training program. The human resources manager has been an adjunct participant with little to no authority in the process.

Differentiating roles and responsibilities in the training program was a challenge because it had never been formally done. The consequence of this has been a detachment from responsibility, an attitude of apathy and no culpability for the completion of tasks. In order to determine the separation of duties in the training program, consultation was made with the executive and management team. Thus, all roles and accompanying responsibilities were identified in the current training program. Chart 13 below shows the current RACI matrix that was compiled.

Chart 13. Current RACI Matrix [Source: S. Newry, April 2019]

Symbol Legend R: Responsible A: Approved C: Consulted I: Informed	Department Manager	Technical Director	Quality Management Systems Coordinator	Human Resources Manager
Conduct employee skill baseline assessment.	R	I	C	I
Identify skill deficiencies.	R	I	C	I
Develop employee training plan by position based on requirements	R	C	C	I
Communicate employee training plan.	R	I	C	A
Coordinate all departments training	R	A	C	I
Conduct training	R	I	C	I
Maintain training records.	R	I	C	I
Maintain and update the department training plan.	R	C	C	I
Identify and evaluate training options.	R	C	C	I
Plan department training budgets.	R	A	C	C

Due to the productivity demands in the working environment, managers do not have a chance to consistently perform the above tasks assigned neither is accountability to do so stringent. The CBC operation is deemed “profit driven” not “process driven”, thus value is not placed on these areas of competency development. In 2017, externally performed ISO audits reveal findings that the company showed no true indicators of

effectiveness or performance concerning the effectiveness of actions taken or the ones that are planned on where they were, where they are, or where they want to be. This shows that the methodology and final objectives for internal processes are obscure.

4.1.3 Current Training Program process flow

Based on the information gathered from interviews, details about the organizational environment were noted. Trainings are initiated on a need-to-know basis. To ensure that the core operation of manufacturing and sales remain uninterrupted, training is typically done through on-the job training with coworkers demonstrating activities. Thus, it allows work to be carried out simultaneously. As new problems or issues arise, new training opportunities are prompted and provided, for instance, new employees are now given company induction training. This new policy is a consequence of a previous ISO audit finding.

Managers create a decentralized system of training, by creating staff training plans, competency criteria and assessments. These are all tracked once, at the end of the year, for completion. Managers also retain employee training records. In addition, there is a manual process for all of these activities. However, training plans for managers do not exist. Trainings on good manufacturing practices, health, safety and environment and company policies are standardized and occur on the date of hire. Training manuals only exist for the fountain and vending technicians. Individual managers develop training frequencies. A training department does not exist, hence system changes are carried out and then staff are informed and subsequently coaching occurs to support the integration of aspects. Moreover, formal performance evaluations are not implemented and train-the-trainer programs have not been developed. Inputs sourced in chart 6 show training needs analysis is not done.

The identified issues are presented below:

- Lack of effective communication strategies.
- Fundamental managerial training desperately needs attention.
- Unaddressed business risks.
- Lack of a formal training program.
- Lack of proper monitoring and record keeping of training.

- Lack of learning management systems software.
- Unincorporated project management practices.
- Inadequate HR department.
- Decentralized training management.
- Ineffective record keeping practices.

4.1.4 Organizational process assets and enterprise environmental factors identified at CBC

The training process, referenced in figure 22, begins once a new employee is on-boarded, or when an incident occurs. Formal needs analysis for training is not done. Selection of training topics is subjective and not strategically planned.

Once a new employee is hired, they undergo a three hour orientation, and then the employee is placed in the working environment. Skills are learned through the observation of other employees. Probation evaluations are informally conducted. If a manager deems the employee efforts as acceptable, HR is informed and the employee passes probation. The employee proceeds with their assigned duties. Annual refresher trainings are performed for good manufacturing practices and health and safety aspects. However, technical training is unguided. If a severe incident occurs, the employee responsible is deemed negligent or incompetent and is dismissed. A replacement is hired

and the cycle is repeated. Other line employees are gathered by management and there is an observation and dictation of the process performed.

Process flows, work instructions and procedures are unavailable at employee stations. Employee work manuals and equipment operating manuals are also not available at employee workstations. The high volume of work requires precision and consistency, therefore, checklists are provided at employee workstations to record the completion of tasks. These are completed and signed by employees and then verified by management. For task management, employees are provided with checklists which indicate what needs to be done, but not how to do it.

Technology supported tools such as learning management software have not been engaged due to restrictive budget constraints. Training plans shown in chart 9b have been drafted but are not systematically implemented. Planning is based on historical work functions (e.g. cash transactions) and not on future business strategies (eg., E-commerce). Trainings done are based on manual processes instead of technologically driven capabilities and competence of trainers is not evaluated. Mandatory annual trainings, such as food handler's courses, are taken by employees directly involved in the manufacturing, testing, and distribution processes. Coca Cola International has designed web- based learning, however, 80% of CBC employees are not granted access to computers, digital devices, or Wi-Fi at the facility. Management work manuals are not

provided, thus, it causes gaps in knowledge sharing. The current program is asinine, futile, and needs to be redesigned to follow ISO 9001:2015.

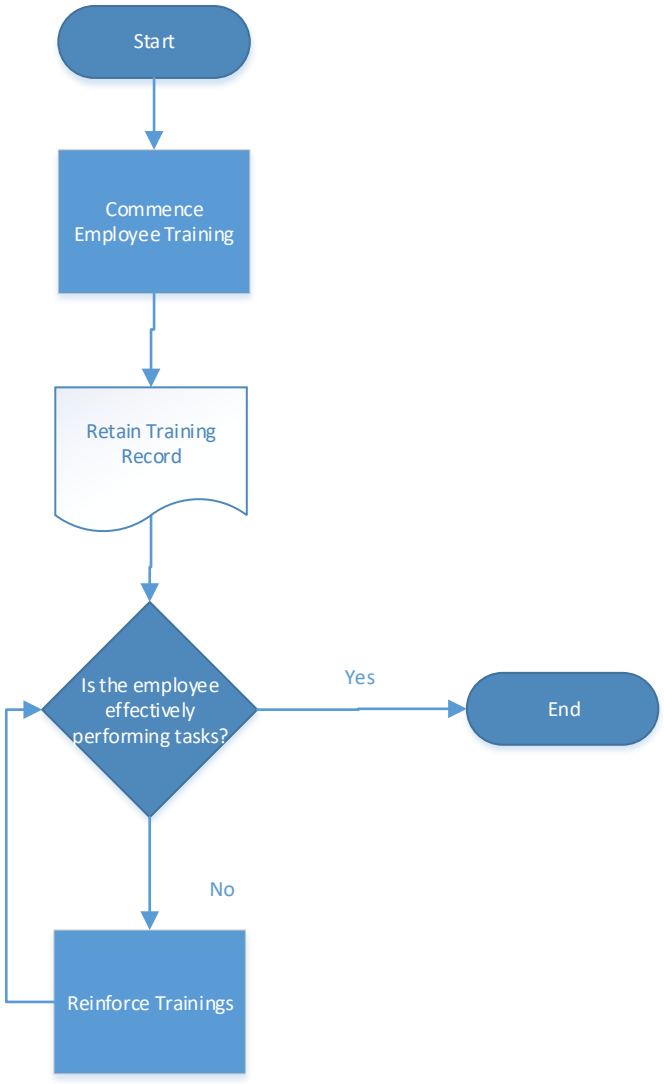

Figure 22. Current process flow for trainings at CBC (source: compiled by author)

Shown below are the types of ongoing trainings at Caribbean Bottling Company.

- Induction or orientation trainings
- On-the-job training.
- Safety training.
- Good manufacturing practices (GMP) training.

- Apprenticeship training.
- Internship training.
- Technical training.
- Soft Skills training.
- Refresher training.
- Promotional training.
- Remedial training.

Trainings at the company occur either in-house or externally.

Chart 14 below shows 2018 Employee Training Completions Report per Department alongside a sample training plan [Source: S. Newry, April 2019]

Chart 14A 2018 Employee Training Completions Report per Department

CBC 2018 Training Completion	
Department	Training Completion
Engineering	88%
Finance	40%
Fleet & Facilities	50%
Fountain & Vending	79%
Logistics	55%
Marketing	100%
Production	88%
Quality Control	38%
Sales	100%
Warehouse	86%

Overall Company Completion	
Completed Training	72%
Incomplete Training	28%

Chart 14B. Sample training plan

Name	Position	Completion %	Department
Patrick Treco	Warehouse Coordinator	87.00%	Warehouse

Course	Training Type	Training Tool	Proposed Schedule Date
FEFO and Expiration Logs	Developmental	Documentation	
Inventory Control and Reporting	Developmental	Documentation	
Inventory Management - Damaged Goods	Developmental	Documentation	
Receiving Container (Imported Products)	Developmental	Documentation	
8-Point Container Inspection	Developmental	Documentation	
Container Loading Procedure and Checklist	Developmental	Documentation	
Shipping - TCI and FPO	Developmental	Documentation	
CO2 Receiving and Distribution	Developmental	Documentation	
Warehouse Shipping Log	Developmental	Documentation	
ISO Xpress	Developmental	Documentation	
Route Center	Developmental	Documentation	
Health Safety and Environment	Developmental	Documentation	Refer to HSE Training Plan
Good Manufacturing Practices	Developmental	Documentation	refer to GMP Training Plan
Total Product Management	Developmental	Documentation	
Warehouse Cash Sales Balance Sheet	Developmental	Documentation	

The results of the gap analysis conclusively show that the intent of the training program is not being met. The company has not actively and insistently engaged in a structured methodology which plans, executes, checks and reconfigures the training program to suit the needs of the workforce. The training program has not been developed on the premise of fulfilling the core of Coca Cola and ISO requirements. The program is underdeveloped and has sacrificed the interests of major stakeholders in the pursuit of profit, time and convenience.

The program is at a critical point of underperformance and intervention is necessary. A methodology is required to address the systemic business concerns characterized by an underdeveloped training program. These business concerns include: high employee turnover, poor product quality, poor productivity, and poor management. To address this, programs must be built on a solid foundation. The remedy is a project management methodology which provides structural pillars that support operational success. Project

management procedures deconstructs the expanse of a formal training program, indicated in appendix 31, into manageable project components that enable users to fulfill the needs of stakeholders while building a better workforce.

4.2 Project management procedures based on the five process groups and ten Knowledge Areas.

Procedures must be integrated in order to provide structure in the training program. Therefore, development of project management procedures in the five process groups and ten Knowledge Areas is key in order to provide structure in the training program.

As such, the methodology will require project management plans and process control for ten critical components: integration, scope, schedule, cost, quality, human resource, communication, risk, stakeholder and procurement management

Aspects prescribed in chapter two indicate the expanse of procedures covered under the ten knowledge areas.

4.2.3.12 Description of five phase approach

During the initiation phase, the project manager is appointed and a project charter authorizing the project is written. Additionally, any constraints to the project are identified. The initiating phase of project management begins when the sponsor of the project, determines that a particular project will enhance the business of the organization and then the project sponsor authorizes the project. This is the phase of project management in which the training program (the project) is authorized and an individual (the project manager) is appointed to the development of the program. The quality systems coordinator has been delegated as the leader of this project (project manager) and is supported by a multi-disciplinary cross-sectional range of department managers (team members) of Caribbean Bottling Company who can provide interdepartmental expertise on departmental operations. Once the assignment has been authorized, an analysis needs to be completed to determine if training is required. This is done through a needs analysis to determine the desired performance of the employees, the current performance of the employees, and if a performance gap exists.

All of the detailed work has to be planned estimated, scheduled, and authorized. Historical information and organizational policies are used to assist with the planning. Constraints and assumptions are scrutinized to determine their effect on the planning process. The primary output is the project plan. The following list exemplifies the content included in the plan.

- An elaboration on the project charter.
- A description of the project management approach.
- A scope statement.
- A WBS and responsibility matrix for project team members for the deliverables.
- Cost estimates and associated parameters.
- Performance measurement baselines and cost baselines.
- Critical staff designated toward the project and their roles.

Issues and any pending decisions that need to be made are scrutinized collectively by the team.

4.2.3.13 Project Progression

After the project charter is finished, the project pursues the following order.

- Design project management plans.
- Implement project.
- Evaluate project.
- Closing of the project.

During the design phase, the creation of management plans encompasses aspects such as the ones presented below.

- Scope
- Schedule
- Cost
- Quality
- Staffing
- Communications
- Risk response
- Procurement

The training program is completely planned in order that a consistent and coherent document is created and will guide the development of the training program. Appendix 31 provides a checklist for the integration of components which drive the training program development. Appendix 32 provides a phase description for the development of content for the training program. The project is implemented according to plan and execution is guided by the project manager. Evaluation of the project is done to ensure all goals are achieved and projects are appropriately governed. During the project closure the final documents are handed over, there is acknowledgement of completion, and the project ends.

4.2.4 Project Procedures

Commencement of the project has been contingent upon approval of the project charter. Once approval has been granted, requirements were collected. During the requirements collection process, a needs analysis was performed and program analysis was done on the company's current program based on employee interviews and compliance audits. An example of the needs assessment performed is provided in appendix 34. Additional brainstorming was done to identify alternative solutions to the existing needs. From this information, the project team developed the project requirements documentation, the requirements management plan, and the requirements traceability matrix (appendix 35) and customer focused training activities.

This project includes the design of a formal methodology for Caribbean Bottling Company. Under this scope, the deliverables for this project have been defined as the following.

1. A report stating the gap analysis study on the identified needs of the training and development program that helped to identify where the methodology can be applied.
2. A list of procedures for the five process groups (initiating, planning, executing, monitoring & controlling and closing) depicted in figure 20 below.
3. Templates and forms for the five process groups.
4. A report with main findings of the application of methodology for a sample project structure.

Once the training requirements are determined, the goals and objectives (scope) of the training are developed. During this phase, all of the work needed to create the training program is determined, along with the personnel needed to work on the training program. Costs, schedules, deliverables, communications, instruction methodology, and evaluation methods were consequently determined.

For this project, scope management will be the sole responsibility of the project manager. The scope for this project is documented by the scope statement, work breakdown structure (WBS) and WBS dictionary. The project manager, sponsor and stakeholders will introduce and ratify documentation for measuring project scope. The project manager, stakeholders or any member of the project team may suggest scope changes. All change requests will be forwarded to the attention of the project manager who will then appraise the requested scope change. The project manager will submit the accepted scope change request to the change control board and project sponsor for review. If the changes are approved by the change control board and project sponsor, the project manager will in turn update all project documents and inform all stakeholders of the scope change. The project sponsor is responsible for the acceptance of the final project deliverables and project scope, pending input from the project manager and stakeholders.

The project manager, sponsor and team will all play key roles in managing the scope of this project. Therefore, the project sponsor, manager, and team members responsibilities are categorized in order to ensure that tasks are allocated, assigned, and accomplished strategically. Chart 1 defines the roles and responsibilities for the scope management of this project.

The WBS Dictionary comprises of an entry for each WBS element. The WBS Dictionary depicted in chart 2 has a description of the work for each component and the deliverables, budget and resource needs for that portion. The project team will use these in order to effectively manage the work required to complete this project.

The project team will use the WBS Dictionary as a statement of work for each WBS element.

Once the project manager confirms that the scope meets the requirements as per the project plan, the project manager will present the deliverable to the project sponsor in a meeting for formal acceptance. The project sponsor will either require ammendments or signify acceptance of the deliverable by signing a project deliverable acceptance document as depicted below. Then the project manager will update the revision history as outlined in appendix 44.

If a change to the project scope is sought, then the formal process for recommending changes to the scope must be utilized. Anyone can request changes to the project scope. However, all change requests must be documented, dated and submitted to the project manager in a project change request document. The project manager will then do a preliminary review of the suggested change to the scope of the project.

If the change is approved by the project sponsor then it will be implemented by the project manager who will update the schedule and all project documentation in accordance with the change control process and brief all project team members and stakeholders of it.

The project manager will be responsible for facilitating work package definition, sequencing, and estimating duration and resources with the project team. The project manager will also create the project schedule using MS Project 2013 and validate the schedule with the project team, stakeholders, and the project sponsor. The project manager will obtain schedule approval from the project sponsor and baseline the schedule.

The project schedule referenced in chart 3 will be reviewed and updated as necessary on a bi-weekly basis with actual start, actual finish, and completion percentages which will be provided by task owners.

Cost Management Plan

The project manager will be responsible for managing and reporting on the project's cost throughout the duration of the project. During the monthly project status meeting, the project manager will meet with management to present and review the project's cost performance for the preceding month. Performance will be measured using earned value. The project manager is responsible for accounting for cost deviations and presenting the project sponsor with options to get the project back on budget.

The project sponsor has the authority to make changes to the project to bring it back within budget.

The Project Manager will be responsible for controlling and debriefing on the project's cost throughout the project. The Project Manager will present an update and review the project's cost performance with the team. Using earned value calculations, the Project Manager is responsible for justifying cost deviations and providing the Project Sponsor with methods for balancing the budget. The final authority on budgets are with the Project Sponsor.

Human Resources Management Plan

The RACI chart template provided in appendix 18 will be completed to signify the relationship between project tasks and team members. Any proposed changes to project responsibilities must be reviewed and approved by the project manager and they will be proposed in accordance with the project's change control process. As changes are made, all project documents will be updated and redistributed accordingly.

The PM is responsible for acquiring human resources for the project through coordination with functional managers. In regard to staff acquisition, the project staff will consist entirely of internal resources. There will be no outsourcing or contracting performed within the scope of this project. Consultant training services will serve as a precursor to the project. The project manager will negotiate with functional and

department managers in order to identify and assign resources in accordance with the project.

In relation to training, preliminary project management training will be scheduled since the organization has limited competencies and staff with required skill sets. Training requirements which are identified will be coordinated by the project manager. Appendix 9 depicts the Employee development matrix, which can be used as a guide to developing training schemes based on the competency needs assessment. Appendix 7 is a template provided for employee training needs assessment. The process flow for understanding the needs of employees is depicted in the training needs analysis model in appendix 8. For all newly recruited employees, the flow chart for the induction process will be adhered to as depicted in appendix 5.

In regard to performance reviews, the project manager will review each team member's assigned work activities at the onset of the project and communicate all expectations of work to be performed. The project manager will then evaluate each team member throughout the project to review their performance and how effectively they are completing their assigned work.

Communications Management Plan

An in-depth guide exists for conducting meetings details both the communications rules and how the meetings will be conducted, thus ensuring successful meetings referenced in appendix 24 for meeting agenda and minutes. A project team directory is included to provide contact information for all stakeholders directly involved in the project. Any current and foreseeable issues surrounding training are included in the issue log Template provided in appendix 17.

The project manager will take a proactive role in ensuring effective communications on this project. The communication requirements are documented in the communications matrix presented in chart 4 of this document. The communications matrix will be used as the guide for what information to communicate, who is to do the communication, when to communicate it and to who to communicate with. Changes or updates may be required due to changes in personnel, scope, budget, or other reasons. If approved, the

project manager will update the plan and supporting documentation and will distribute the updates to the project team and all stakeholders.

Communication log featured on appendix 42 will be used to capture and record the aspects shared. A log of communications will be recorded to consolidate all communication activity for transparency and to facilitate business continuity.
The contact listing presents contact information for all people identified in this communications management plan. The email addresses and phone numbers in this chart will be used to communicate with these people.
In regard to project team meetings, the project team will utilize a CBC standard template in appendix 24 for meeting agenda and minutes. PMP activity log in appendix 15 will serve as a record of activity and project progress.

Risk management

In regard to risk assessments, a risk assessment meeting was held with key team members and stakeholders. The risks identified during this meeting were added to the project plan and risk register is presented in appendix 4.

In order to determine the severity of the risks identified by the team, a probability and impact factor was assigned to each risk. This process allows the Project Manager to prioritize risks based upon the effect they may have on the project. The project manager utilized a probability and impact matrix to facilitate the team to move each risk to the appropriate place on the chart.
The project manager has led the project team in developing responses to each identified risk. As more risks are identified, they will be qualified and the team will develop mitigation strategies for the intolerable risks. These risks will also be added to the risk register and the project plan to ensure they are monitored at the appropriate time and are responded to accordingly. Once the risks were assigned, a probability and impact are then scored on the chart.

If necessary, the risk management plan will be updated. During the bi-weekly project team meeting, the technical director will discuss the status of each risk. Risk monitoring will be a continuous process throughout the life of this project.

Procurement Management

The project manager will provide oversight and management for all procurement activities under this project. The project manager will work with the project team to identify all items proposed to be procured for the successful completion of the project The Contracts and Purchasing department will review the procurement items, determine whether it is advantageous to make or buy the items, and begin the vendor selection, purchasing and the contracting process. Additionally, any decisions regarding procurement actions must be approved by the project sponsor before being processed.

Stakeholder Management

Project Team will conduct a brainstorming session in order to identify stakeholders for the project. The brainstorming session will include the primary project team. The focus will be on internal and external stakeholders. In order to classify stakeholders, the project team will identify key stakeholders who have the most influence on the project or who may be impacted the most by it. These key stakeholders are those who also require the most communication and management which will be determined as stakeholders are analyzed. Once they are identified, the project manager will develop a plan to obtain their feedback on the level of participation they desire, frequency and type of communication, and any concerns or conflicting interests they have.

Thorough communication with key stakeholders is necessary to ensure that all concerns are identified and addressed and that resources for the project remain available. In regard to the stakeholder analysis, the following are existing stakeholders.

- The Coca Cola Company
- Owners and investors
- International organization for standardization
- Ministry of health
- Bahamas manufacturers association
- Caribbean Bottling Company employees and associates

Once all project stakeholders have been identified, the project team categorizes and analyzes each stakeholder.

The project manager will categorize stakeholders based on their organization or department. Once all stakeholders have been categorized, the project team will collectively utilize a power or interest matrix to illustrate the potential impact each stakeholder may have on the project.

Based on this tool, the project team will also complete a stakeholder analysis matrix which illustrates the concerns, level of involvement, and the management strategy for each stakeholder. The purpose of this analysis is to determine the stakeholders' level of power or influence, the prioritization plan and the management approach for each stakeholder, and to determine the appropriate levels of communication and participation each stakeholder will have on the project. The stakeholder analysis matrix will be used to capture stakeholder concerns, level of involvement, and management strategy based on the stakeholder analysis and power or interest matrix mentioned above. The stakeholder analysis matrix will be reviewed and updated throughout the project's duration in order to capture any new concerns or stakeholder management strategy efforts. Appendix 6 shows the stakeholder management matrix template**,** shows the stakeholder communications matrix template and chart the stakeholder register which are templates to be used for the stakeholder analysis of this project.

Quality Management

The project manager will host project, management, and document review sessions. In these reviews, an agenda item will include a progress report of the training program, any issues or audit findings, and any innovations propelling the project.

The quality management systems coordinator will provide day-to-day quality management and conduct weekly process audits, monitor process performance metrics, and affirm all processes abide within the project as well as organizational requirements. If inconsistencies are found, the project manager will review and rectify the issue with the project team.

This project will be accepted once the new methodology has been successfully piloted and has been shown to be compatible with the company's current requirements. Only internal personnel and resources may be used for this project. Assumptions for this project are that the support will be provided by the project sponsor and all department managers. It is also assumed that adequate internal resources are available for the successful completion of this project.

4.2.4.1 CBC PMM Implementation Strategy

To implement the project management methodology, an implementation strategy is first structured in figure 23 below. The plan facilitates a sequential process flow and utilizes the templates composed in the appendices. The CBC PMM implementation plan has been tailored to meet the immediate and long term needs of Caribbean Bottling Company by using sustainable practices geared to formalize a resilient learning and development program.

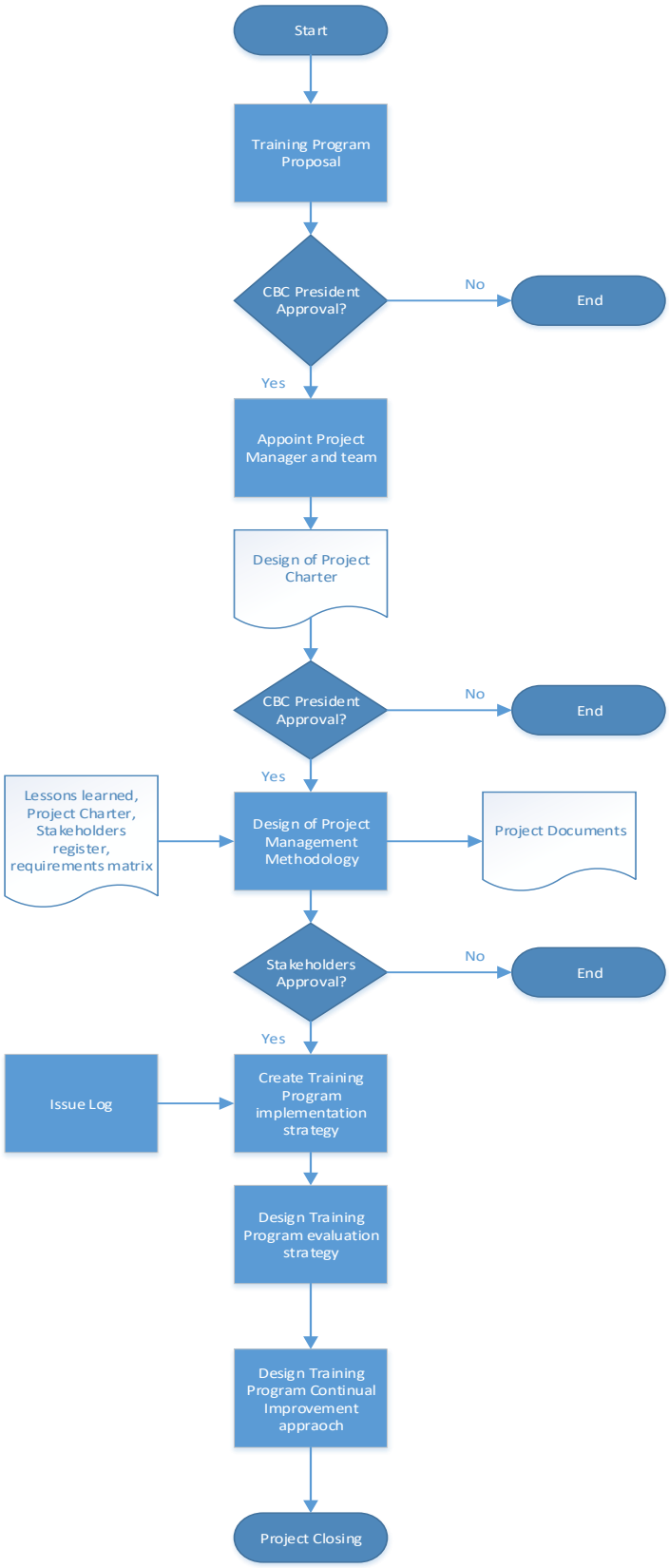

Figure 23. Project management methodology implementation strategy (Source: Compiled by author)

4.2.4.2 The strategy will be executed as follows.

Step 1: CBC PMM preparation

Personnel from Caribbean Bottling Company who are team associates will receive preliminary general project management knowledge training prior to the engagement of this project to introduce project management practices as per aspects on appendix 43. This orientation is budgeted at $7,000 USD and will take place over a period of six days at Caribbean Bottling Company and is hosted by Victor and Associates Training and Consultancy Trinidad, 2019.

4.2.4.3 Project Management Methodology (PMM) Training and General Project Management Training Scope

This is comprised of training the top management or executive team and department managers with the concepts of PMM. The purpose is to increase awareness, sensitize stakeholders to the support it requires and ease the transition toward the new methodology. This training session is calculated to last six days for 6 hours per day covering aspects such as the ones below.

- General concepts of project management.

- Description of the PMM.

- Interactive exercises to promote collaboration and group decision making.

Step 1: Delegation of responsibility

Before implementing the methodology, a team of personnel will be delegated responsibility within CBC including a project manager, who will be led the methodology integration. Changes within the organization, stakeholder involvement, and new requirements will be valued, evaluated and integrated into the methodology as necessary.

Step 2: Pilot Project to test PMM

After completing the training with the consultant in relation to aspects on chart 23, the project management team will identify and prepare a pilot project to simulate the deployment of PMM.

This helps the project team to be acclimatized to the management of the project. This increases the capabilities of the team in areas of communication, negotiation, risk management, planning, execution, coordination, and leadership. These components must be scaled companywide, to garner solidarity for the methodology get stakeholder endorsement and demonstrate the legitimacy of the plan.

Step 3: PPM launch

After closing the pilot project, the CBC PMM implementation team will progress to phase 3 which is the gradual rollout of PMM within CBC. The phase starts with a kickoff launch. The kickoff meeting will formally introduce the project team and their roles to the personnel of CBC. The kickoff meeting will consist of a presentation of PMM, to detail the plan, the purpose, and identify the participants involved (Project Management Institute, 2017). The aim is to foster greater collaboration, communication, commitment, control, customer focus and continuous improvement among the stakeholders.

Step 4: PMM Implementation Closure

To implement a sustainable PMM, project professionals will seek to cross-train supervisory staff of CBC in general project management to drive forthcoming project implementations as a method of business continuity. Project closure will be managed through the completion and handover of project documents and deliverables.

4.3 Project management templates and forms associated to the project management procedures

In order to guide the process, several project management templates and forms were created to apply to the management of future projects as depicted in the Project Document Description. These are associated with proper project management to meet the intrinsic needs of the program. Appendix 11 shows an overview of developed templates as per the designed methodology. Project management templates and forms, analogous to the project management procedures, were created for use in and alignment of future projects. Templates and forms were designed for ease of use, versatility and to capture the breadth of information required for the utilization of the methodology. Templates in appendix 6 to 38 were customized to assist in this aim. These templates were developed to satisfy the immediate needs of the training program based upon the gap analysis of current procedures. These were also developed to realign the company in accordance with compliance requirements of ISO 9001:2015 Quality Management Systems. The span of templates used indulges the company in a system of standardization as stipulated by ISO 9001:2015. Therefore, it allows the criteria of quality management systems to be fulfilled.

According to ISO 9001:2015 Clause 4.4.1, “The organization shall determine the processes needed for the quality management system and their application throughout the organization, and shall:

“a) determine the inputs required and the outputs expected from these processes;”

- To achieve this, the inputs determined were derivatives from the PBOK® Project Management Body of Knowledge, Coca Cola Standards and mission statement, needs analysis, training tools and organizational process assets. The output expected is a training program which drives competencies that empower the employee to execute job duties and produces a process approach to projects.

“b) determine the sequence and interaction of these processes;”

- Project Management plan, Schedule management plan, Stakeholder Management and Communication Plan were created to coordinate the activities involved in the

development of these processes. The sequence and flow of the training scheme would be determined in the employee development matrix. The process flow is provided in figure 22.

“c) determine and apply the criteria and methods (including monitoring, measurements and related performance indicators) needed to ensure the effective operation and control of these processes;”

- To ensure quality assurance, the requirements matrix, the training completion tracker and competency and program evaluations were created to judge and monitor the effective execution of these processes. Existing internal and external audits will be used to monitor the operations and control of company programs.

“d) determine the resources needed for these processes and ensure their availability;”

- A resource description matrix was developed to achieve these criteria.

“e) assign the responsibilities and authorities for these processes;”

- To achieve this aim, a roles and responsibility matrix was created to delegate responsibilities for these processes.

“f) address the risks and opportunities as determined in accordance with the requirements of 6.1;”

- A plan to address the risks identified across the CBC is provided in appendix 4.

“g) evaluate these processes and implement any changes needed to ensure that these processes achieve their intended results”

- A competency evaluation form, training program evaluation, and a continual improvement approach template were provided (appendix 22, 27, 28, 36) to facilitate and guide the evaluation of the personnel and training program. The issue log was created to identify any unaddressed concerns, identify ways to remediate them and adapt the program to accommodate needs identified. Moreover, training program evaluation will be utilized to evaluate the training program components

and implement any changes approved to ensure that these processes achieve the goals of the training program.

ISO 9001:2015 Clause 4.4.2

“a) Maintain documented information to support the operation of its processes;”

- Forms were created to document the trainings as they progress. The project status report provides a system of tracking project progress.

“b) retain documented information to have confidence that the processes are being carried out as planned.”

- A document log was created as a repository for all documents intended for use in this program. Evaluations of performance and competency assessments help to assure that the processes are achieving the planned goals. The project closure report will detail all documents created and handed over during the course and completion of the project.

These templates were developed in order to help chart the path toward the creation of a robust training and development program. It integrates company operations with the standards of management systems. It helps orchestrate the use of project management methodology while meeting the immediate and long term needs of CBC. Chart 15 lists templates provided as a guide to follow the plan-do-check-act cycle.

These templates were condensed specifically to reduce the time taken to implement the training program, to lessen the burden of paperwork on the managers and to make the transition into a formal program more paletable. They address the centermost needs of the establishment, which is why they were strategically prioritized for development above any others. They help to fulfill the immediate needs of the business and satisfy the ISO requirements.

Chart 15 Project Document Description

Document Name	Document Type	Purpose
Stakeholder management	Template	To identify and categorize stakeholders in terms of their interest and impact in the project.
Communication plan	Template	Serves to determine the types and amounts of communications each stakeholder should receive.
Project management plan	Template	Defines the project objective and scope as well as technical processes described herein, methods it has executed, monitored, and controlled during the life cycle and close out.
Project roles and responsibilities	Template	Lists the major roles involved, their relevance to the project and their degree of participation for specific project activities.
Project charter	Template	Provides the statement of scope, objectives and people or entities who are affiliated with the project.
Requirements matrix	Template	Functions as a mechanism for identifying, reporting, and scaling the project requirements.
Training needs analysis	Template	Provides a synopsis of individuals' current level of competency, skill or knowledge in one or more areas and compared to competency levels demanded.
Employee development training matrix	Template	Scheme intended to deliver training based on needs identified

Resource description matrix	Template	Matrix to track all resources required for an effective training program
Training program development checklist	Checklist	A program development tool to ensure quality is effectively integrated
Training documents register	Template	Log to capture all training documents developed
Continual improvement (Kaizen) Register	Template	Documentation of matters for continual improvement and to correct any regressive practices.
Issue log	Template	Log to capture and maintain information on all issues identified for remediation
Project status report	Template	Reporting mechanism to identify conditions of the project at various intervals, such as weekly status reports, regular reviews, and communication as needed.
Lessons learned	Template	Recommendations or knoweldge gained that can add value to future endeavors.
Training program evaluation	Form	A process to determine the efficacy of the training program.
Competency checklist	Form	Verification of technical competencies necessary for the caliber of performance required.
Competency assessment	Form	System for determining and documenting personnel skills, knowledge and capability

Project closure report	Template	Post-project debriefings by project personnel, and preparation of a final report to include lessons learned and analysis of project objectives achieved.

4.4 Needs identified through the application of methodology

The objective was to apply the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs. The methodology designed was utilized in the sample project structure shown in appendix 30. Dynamics such as initiation and planning were dichotomized in manageable components, for example, training plan and needs assessment, scope, resource and budget management, training approach, roles and responsibilities, schedule and evaluation strategy.

After analyzing the initiation and planning phases, additional program needs were identified for this project. These include: project or training team profile analysis, training materials inventory and curriculum planning, curriculum content development tracker, infrastructure planning (environment, facilities), as well as technological capability (learning platforms or software). For instance, a useful capability would be for managers to learn and have access to MS Project 2013 in order to perpetuate project management initiation and planning in other future projects. Another technological capability that would boost productivity is a learning management system. This would help to reduce the laborious efforts of manual tracking of learners' progress. It integrates all of the training and learning dynamics into a consolidated system. This tool and its associated cost may be proposed for approval by the project sponsor if it is not readily available at the company. It would be a tremendous management resource. Using software would also help in reducing the redundancy of forms and replicated record keeping. The digitization of the training program, can also symbiotically benefit the sustainability efforts of the company by reducing the amount of paper used to document the program. Being cognizant of environmentally conscientious practices is important in the adoption and use of the methodology.

The methodology should take into account the learner's capacity. In the development of the training program, planning considerations should be made for extenuous circumstances such as peoplez with disabilities and special needs cases at the company. Analysis for special needs employees should be incorporated in the employee development matrix. Appropriate accommodations should be made to enhance the

training tools or environment for these individuals. A study of company demographics can also aid in the development of suitable programs which are compatible with employee engagement needs based on their age and educational level. Challenges of older staff members such as computer illiteracy should also be under consideration when creating an instructional approach. Another feature that may be considered in the methodology is virtual training platforms for off site technicians such as those in the fountain and vending department. These people work off the company premises at customer locations (fast food restaurant chains, hotels, among others) and this remote training opportunity may be most ideal or accommodating for the scope of work that they perform. Strategic planning may require capacity development for these crucial components. The methodology must be conducive to the audience intended.

Attention and sensitivity to scheduling must be incisively done during methodology development. Constrictions in communication and allocation of time may require additional attention during the initiation and planning phases because functional managers may be busy with other routine operational duties. To maximize the time available, perhaps a brief, condensed and concise version of documentation would be the best approach in initiating the methodology.

Additional organizational process assets that need to be attained include: all updated employee job descriptions, mutually agreed upon personnel performance indicators, the 2020 business plan and a regulatory register featuring all Coca Cola International standards which stipulate the compliance obligations of the company. These will help to shape the project plan to meet the current as well as future needs of the company and its stakeholders. Information on training needs for outsourced service providers which are critical to the business may also be of value and should be considered in the developmental stages of the project to ensure that compliance obligations are satisfied.

Company transparency is needed to enhance the methodology. Reports revealing the state of affairs such as an audit of the company programs and known failures will help the team to see the needs of the company in order to better meet the needs of the business. First, an examination of corporate losses can reveal flaws centered on poor performance indicators. The audit reveals process deviances, or operator “short-cuts”, which

consequentially have led to the operational deficiency. These may uncover behavior based performance gaps, which are the root cause of such failures, and reveal opportunities for training and procedure improvement. This audit will isolate key and critical employee performance concerns which should be addressed in the training program.

Secondly, it would be helpful to analyze the company's portfolio of lessons learned prior to the commencement of this project. This history of incidents can reveal reoccurring problems which were untargeted and unresolved in the former training program. These may reveal opportunities for employee training and procedure improvement. An analysis can also include the history of former methodologies that were once instituted at the company but failed and the reason for the failure. Understanding this history of failures can help the team to build a more resilient implementation strategy for the methodology.

Another additional opportunity for the methodology is to create a management of change form for the control of changes in the company and the integration of new training aspects. For example, if a new machine is purchased for the manufacturing operation, the aspects of operator training for that machine should be integrated into the operator's training curriculum. This form will help to assimilate new aspects into the scope of the training program. The update of training materials such as the equipment operating manuals will need to be added to the curriculum. This will ensure a seamless and uninterrupted operation.

With all of these organizational process assets, the methodology can be better strengthened to shift the trajectory of the company's projects towards a positive path. It will allow for congruence with major international criterions and set the stage for improved performance. The methodology will enable organizational resilience thereby protecting people, products and processes from failure.

Environmental factors such as the legislative implementation of sugary drink tax and ascension to the world trade organization agreement, may indirectly cause job losses and may cause a company restructuring that may possibly affect the degree of project

implementation. The methodology must be agile enough to withstand abrupt changes in the organizational structure and manufacturing industry.

5. CONCLUSIONS

The challenges facing CBC were deduced by interviewing staff and analyzing organizational process assets. This investigation revealed that incongruence with project management practice exists within CBC. The current training program is asinine, futile and needs to be redesigned.

1. Specific objective one was to analyze current Project management practices in the training and development program at Caribbean Bottling Company to determine system gaps in which the methodology will be utilized. Thus, a report was provided which identified the isolated needs or gaps of the training and development program and areas where the methodology can be applied.

2. Specific objective two was to develop project management procedures in the five process groups and ten Knowledge areas in order to provide structure in the training program. Therefore, a list of procedures for the five process groups (initiating, planning, executing, monitoring & controlling and closing) was provided. PMM was developed to standardize the current project management practices of CBC. The methodology introduces common project management practices, which will increase CBC's capacity to carry out projects. PMM was elaborated extensively to ensure that the user understands the methodology as well as its fundamental ideologies.

3. Specific objective three was to create project management templates and forms associated to the project management procedures to apply to the management of future projects. Therefore, an implementation plan was developed encompassing a gradual rollout to ensure proper implementation of the developed methodology. A total of twenty-one templates were created that cover all the knowledge areas as established by PMBOK® Guide. The templates were outfitted specifically towards CBC by aligning these with current business practices. An implementation plan was developed to furnish CBC with a gradual rollout strategy to ensure proper implementation of the developed methodology.

6. Specific objective four was to to apply the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs.

Therefore, a sample project structure was created to demonstrate how PMM is applied to a typical project structure and to identify additional program needs in the initiation and planning phases.

6. RECOMMENDATIONS

In order to improve the operations at Caribbean Bottling Company, it was recommended to the CEO that the methodology be integrated consistently throughout the organization. This will support a cultural shift toward systems thinking and increase an appreciation for project management standards. Another important recommendation was for Caribbean Bottling Company to organize trainings for its personnel to acquaint and equip employees with good project management practices.

Recommendations to the CEO of Caribbean Bottling Company are as follows:

- Within three months, contract a certified professional to provide train the trainer lessons to empower managers to teach staff skillfully.
- Within four months, establish an internal audit department (hire 4 qualified internal auditors and one lead auditor) at CBC to analyze current project management practices and evaluate the training and development program at Caribbean Bottling Company to determine system gaps. Transparency through active comprehensive internal and external audits will help to identify problems that need rectification through the methodology. This will prevent diminished results. Moreover, a formal audit program should be built and integrated into the company's activities.
- Within six months, purchase a suitable information management system to facilitate the creation of procedures and to serve as a document rdepository. This tool will help to provide structure in the documentation of the operations and training program.
- Within four months, plan a budget to finance the technological needs of the company through the purchase of a learning management system and MS project software. Investment in aspects such as these drive business sustainability and help increase the capacity of the company.

- Within six months, institute quarterly management reviews for all management to present performance metrics to the CEO. Leadership should establish constructive key performance metrics and regularly examine the performances across the company through management reviews. This will help the team and all programs to stay accountable.

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APPENDICES

Appendix 1: FGP Charter

PROJECT CHARTER	
Date	**Project Name:**
November 11, 2018	The Developent of a project management Methodology for beverage manufacturing plant (Caribbean Bottling Company Bahamas Ltd.)
Knowledge Areas / Processes	**Application Area (Sector / Activity)**
Knowledge areas: Scope, schedule, cost, resource, communication, procurement, risk, stakeholders and quality management **Process groups:** Initiating, planning, executing, monitoring and controlling and closing.	Beverage Manufacturing
Start date	**Finish date**
November 11, 2018	July 12, 2019

Project Objectives (general and specific)

General objective:
To develop a proposal for the creation of a project management methodology for the control of projects launched in beverage manufacturing at Caribbean Bottling Company (Bahamas) Ltd to build business capacity, better organize projects driven toward company growth, and increase customer satisfaction.

Specific objectives:
1. To analyze current Project management practices in the training and development program at Caribbean Bottling Company to determine system gaps in which the methodology will be utilized.
2. To develop project management procedures in the five process groups and ten Knowledge areas in order to provide structure in the training program.
3. To create project management templates and forms associated to the project management procedures to apply to the management of future projects.
4. To apply the methodology to a typical project structure in the initiating and planning process groups in order to identify additional program needs.

Project purpose or justification (merit and expected results)

Current management framework for projects is very limited, not structured and is not established in the Beverage manufacturing system causing project failure, frustration and financial loss.
The project management methodology intends to create a strategy to plan, design, control and implement a structured approach toward project development. The project methodology will coordinate the development of programs and projects, provide a framework for new initiatives to be developed, set standards for project creation, and create a sustainable approach to re-structure existing projects. A typical project in the beverage manufacturing system includes the creation of a training and development program and this methodology can also be recommended for implementation in marketing projects and engineering and infrastructural expansions.
Expected benefits include: significant reduction in risks and loss, better coordination of team efforts, implementation of international best practices and standards, manage change and increase the efficacy of the projects deliverables, and increase customer and stakeholder satisfaction.

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

1. A report stating the gap analysis study on the identified needs of the training and development program identifying where the methodology can be applied.
2. A list of procedures for the 5 process groups (Initiating, Planning, Executing, Monitoring & Controlling and Closing).
3. Provide templates and forms for the 5 process groups
4. A report with main findings of the application of methodology for the sample project structure.

This will depict a Project Management Methodology that will serve as a guide for future projects.

Assumptions

Resources: Project can be done solely by myself and can be done within three months
It is assumed that this project will be developed using information gathered from Caribbean Bottling Company. Information such as Company policy is provided, and information on the company including basic processes in the manufacturing system, organizational structure and corporate business plan is disclosed. Open communication with stakeholders is available. Adequate and prompt feedback on deliverables is available.

Constraints

Time constraints required to expedite and execute the project may reduce the scope for the development of the project management methodology. Time constraint: 3 months and resource constraint: 1 person.
Confidentiality: Sensitive or propietary information may be withheld by company personnel.

Preliminary risks

If the schedule stipulated is not followed, the project may not be done within three months. If there is a change in industry standards for Training development, there may be a change in scope impacting the extensiveness of the methodology. If company information is restricted, the time and quality of the project could also be significantly limited.

Budget

Budget is the cost to print, collate and fedex the Final Graduation project to UCI. Additional cost includes license cost for MS project.

Milestones and dates

Milestone	Start date	End date
Project Charter & WBS 1.1.1-1.1.2	November 4, 2018	November 11, 2018
Introduction Chapter 1.1.3	November 12, 2018	November 18, 2018
Theoretical Framework 1.1.4	November 19, 2018	November 25, 2018
Methodical Framework 1.1.5	November 26, 2018	December 2, 2018
Annexes, Executive Summary and Bibliography 1.1.6	December 3, 2018	December 9, 2018
Schedule 1.1.6.2	November 12, 2018	December 9, 2018
Graduation Seminar approval 1.2	December 10, 2018	December 14, 2018
Tutor assignment 2.1.1	December 17, 2018	December 17, 2018
Adjustments of previous chapters 2.2	December 20, 2018	December 25, 2018
Chapter IV. Development (Results) 2.3	December 7, 2018	February 3, 2019
Chapter V. Conclusions 2.4	February 4, 2019	February 8, 2019
Chapter VI. Recommendations 2.5	February 11, 2019	February 15, 2019
Tutor approval 2.6	February 18, 2019	February 18, 2019
Assignment of two reviewers 3.1.1	February 18, 2019	February 19, 2019
Reviewers Communication 3.1.2	February 20, 2019	February 21, 2019
FGP submission to reviewers 3.1.3	February 22, 2019	February 22, 2019
Report for reviewers 4.1	March 11, 2019	March 21, 2019
FGP update 4.2	March 22, 2019	March 22, 2019
Second review by reviewers 4.3	March 25, 2019	April 5, 2019
Final review by board 5.1	April 15, 2019	April 16, 2019
FGP grade report 5.2	April 16, 2019	April 18, 2019

Relevant historical information

N/A

Stakeholders

Direct stakeholders:

- FGP Lecturer: Carlos Brenes
- Project Manager: Shawnell Newry
- Tutor: Osvaldo Martinez

Indirect stakeholders:

- Academic Assistant: Gabriela Zuniga
- Reviewers: Evelyn Hernandez, Cristian Soto

Project Manager: Shawnell Newry	**Signature:** 
Authorized by:	**Signature:**

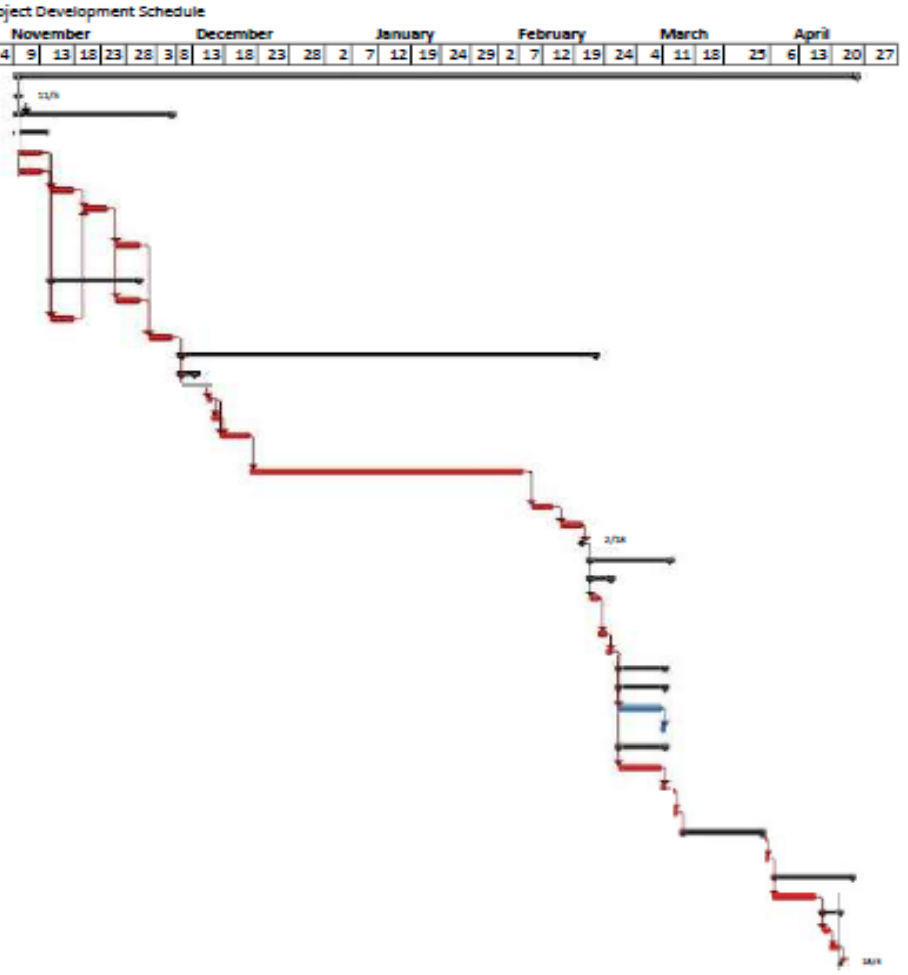
Appendix 2: FGP WBS

WBS	Task Name
1	**FGP - Project Management Plan for Project management Methodology for beverage manufacturing plant (Caribbean Bottling Company Bahamas Ltd.)**
1.	**Graduation Seminar**
1.1	**FGP Deliverables**
1.1.1.1	Charter
1.1.1.2	WBS
1.1.1.3	Chapter I. Introduction
1.1.1.4	Chapter II. Theoretical framework
1.1.1.5	Chapter III. Methodological framework
1.1.1.6	Annexes
1.1.1.6.1	Bibliography
1.1.1.6.2	Schedule
1.2	Graduation Seminar approval
2.	**Tutoring process**
2.1.1	Tutor assignment
2.1.2	Communication
2.2	Adjustments of previous chapters
2.3	Charter IV. Development (Results)
2.4	Chapter V. Conclusions
2.5	Chapter VI. Recommendations
2.6	Tutor approval
3.	**Reading by reviewers**
3.1	**Reviewers assignment request**
3.1.1	Assignment of two reviewers
3.1.2	Communication
3.1.3	FGP submission to reviewers
3.2	**Reviewers work**
3.2.1	**Reviewer**
3.2.1.1	FGP reading
3.2.1.2	Reader 1 report
3.2.2	**Reviewer**
3.2.2.1	FGP reading
3.2.2.2	Reader 2 report
4	**Adjustments**
4.1	Report for reviewers
4.2	FGP update
4.3	Second review by reviewers
5	**Presentation to Board of Examiners**
5.1	Final review by board
5.2	FGP grade report
5.3	FGP End

Appendix 3: FGP Schedule

Final Graduation Project Development Schedule

ID	WBS	Task Name	Duration	Start	Finish
1		Final Graduation Project	145 days	5-Nov-18	22-Apr-19
2		FGP Start	0 Days	5-Nov-18	
3	1	Graduation Seminar	25 days	5-Nov-18	9-Dec-18
4	1.1	FGP Deliverables	20 days	5-Nov-18	11-Nov-18
5	1.1.1	Charter	5 days	5-Nov-18	11-Nov-18
6	1.1.2	WBS	5 days	5-Nov-18	11-Nov-18
7	1.1.3	Chapter One Introduction	5 days	12-Nov-18	18-Nov-18
8	1.1.4	Chapter 2 Theoretical Framework	5 days	19-Nov-18	25-Nov-18
9	1.1.5	Chapter 3 Methodical Framework	5 days	26-Nov-18	2-Dec-18
10	1.1.6	Annexes	15 days	12-Nov-18	27-Nov-18
11	1.1.6.1	Bibliography	4 days	26-Nov-18	30-Nov-18
12	1.1.6.2	Schedule	5 days	12-Nov-18	9-Dec-18
13	1.2	Graduation Seminar Approval	5 days	10-Dec-18	14-Dec-18
14	2	Tutoring Process	45 days	10-Dec-18	23-Feb-18
15	2.1	Tutor	3 days	10-Dec-18	13-Dec-18
16	2.1.1	Tutor Assignment	1 day	17-Dec-18	17-Dec-18
17	2.1.2	Communication	2 days	18-Dec-18	19-Dec-18
18	2.2	Adjustments of previous chapters	5 days	20-Dec-18	25-Dec-18
19	2.3	Charter IV. Development (results)	27 days	7-Dec-18	3-Feb-19
20	2.4	Chapter V. Conclusions	5 days	4-Feb-19	8-Feb-19
21	2.5	Chapter VI. Recommendations	5 days	11-Feb-19	15-Feb-19
22	2.6	Tutor approval	0 days	18-Feb-19	18-Feb-19
23	3	Reading by reviewers	15 days	19-Feb-19	5-Mar-19
24	3.1	Reviewers assignment request	5 days	18-Feb-19	22-Feb-19
25	3.1.1	Assignment of two reviewers	2 days	18-Feb-19	19-Feb-19
26	3.1.2	Communication	2 days	20-Feb-19	21-Feb-19
27	3.1.3	FGP Submission to reviewers	1 day	22-Feb-19	22-Feb-19
28	3.2	Reviewers work	10 days	25-Feb-19	8-Mar-19
29	3.2.1	Reviewer	10 days	25-Feb-19	8-Mar-19
30	3.2.1.1	FGP reading	9 days	25-Feb-19	7-Mar-19
31	3.2.1.2	Reader 2 report	1 day	8-Mar-19	8-Mar-19
32	3.2.2	Reviewer	10 days	25-Feb-19	8-Mar-19
33	3.2.2.1	FGP reading	9 days	25-Feb-19	7-Mar-19
34	3.2.2.2.2	Reader report	1 day	8-Mar-19	8-Mar-19
35	4	Adjustments	2 days	11-Mar-19	12-Apr-19
36	4.1	Report for reviewers	9 days	11-Mar-19	21-Mar-19
37	4.2	FGP update	1 day	22-Mar-19	22-Mar-19
38	4.3	Second review by reviewers	10 days	25-Mar-19	5-Apr-10
39	5	Presentation to Board of Examiners	5 days	8-Apr-19	12-Apr-19
40	5.1	Final review by board	2 days	15-Apr-19	16-Apr-19
41	5.2	FGP grade report	3 days	16-Apr-19	18-Apr-19
42	5.3	FGP End	0 days	18-Apr-19	



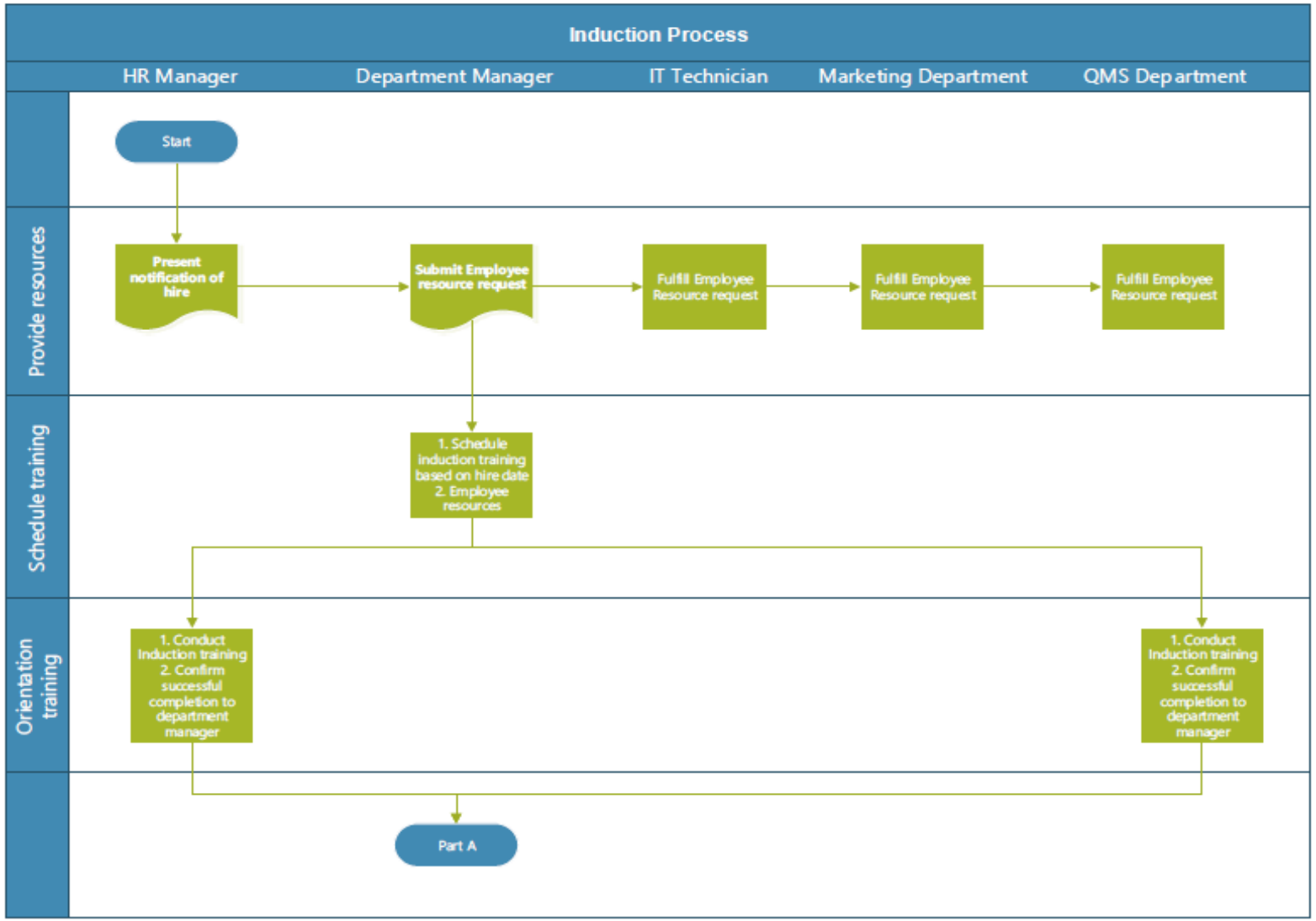
Project: FGP Schedule
Date: November 18, 2018

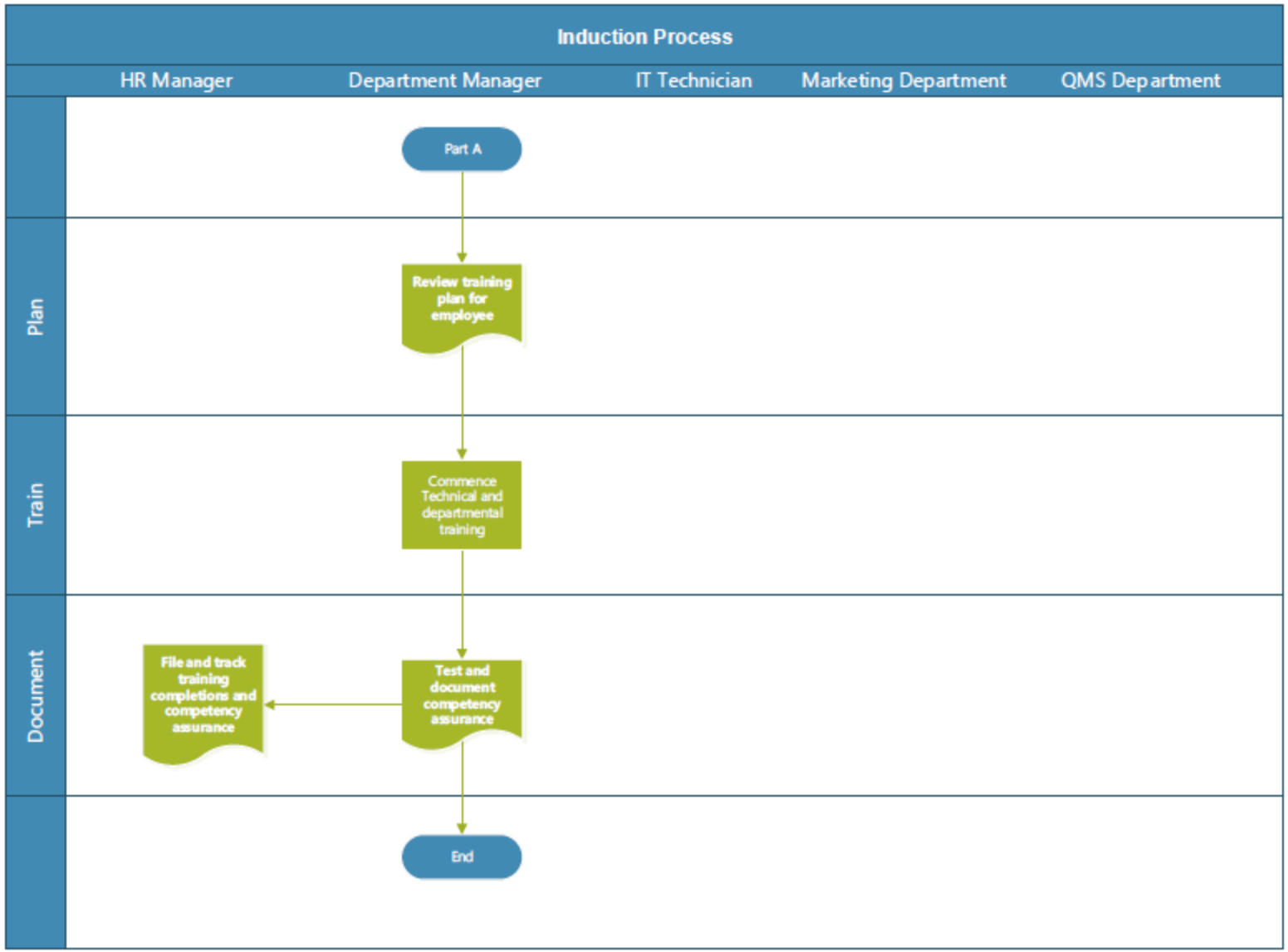
Appendix 4: Risk Register

Strategic Operational Risk Analysis

Business Process Risk	Baseline Risk						Current Mitigation Measure	Baseline Vulnerability	
	Probability		Severity		Exposure				
Hierarchical Structure that has the potential to restrict communication and personnel engagement. Some aspects of the structure not well defined and communicated to achieve clarity of roles and responsibilities.	4	High	4	High	16	Moderate	Introduction of a communication board and channel Redefined organizational chart	50%	Low
Competence not validated for all critical positions using formal competency assurance systems.	4	High	4	High	16	Moderate	Departmental Evaluation of Employee performance	50%	Low
Knowledge management controls not developed or centralized to manage or harness tribal knowledge for business continuity. Documentation of processes require further control.	4	High	4	High	16	Moderate	Documentation Program	50%	Low
Company's informal values prevent accountability for high performance work culture reflective of performance management, sustainability, risk based thinking and decision making.	3	Moderate	4	High	12	Moderate	Training based on ISO Requirements	50%	Low
Resource Management not risk based to align with strategic needs and outcomes. Accounting System does not support management accountability for budget control and performance.	4	High	4	High	16	Moderate	Enterprise Management Information System	50%	Low
Restricted Capabilities due to a lack of information management systems (software) hinder productivity	4	High	4	High	16	Moderate	Procurement Management System (SAGE)	50%	Low
Organization's established communication channels restrict effective management and dissemination of information: new projects, new products, new employees, new equipment	4	High	4	High	16	Moderate	Communication Matrix; Communication channel; Communication board	50%	Low

Appendix 5: Flow Chart for Induction Process




Induction Process
HR Manager
Department Manager
IT Technician
Marketing Department
QMS Department
Plan
Train
Document
Part A
Review training plan for employee
Commence Technical and departmental training
Test and document competency assurance
File and track training completions and competency assurance
End

Appendix 6a: Stakeholder Management Matrix template

Stakeholder	Stake in the Project	Impact/Influence	Required Contributions	Perceived Attitudes/Risks	Stakeholder Management Strategy	Responsibility
HR Manager						
Operations Managers						
Line Staff						

Appendix 6b. Stakeholder Communication Strategy Matrix (Source: Compiled by author)

Stakeholder	Owner	Information	Objective of Communication	Communication method/type	Frequency	Audience	Deliverable

Stakeholder: The stakeholder that is communicated with.
Owner: Person who is responsible for the communication.
Information: Specific details which need to be communicated to the stakeholder.
Communication method and technology: oral/written, via electronic media of via printed paper.
Frequency: Regularity with which communication will take place.

Stakeholder identification and approach
Instructions
- Describe how stakeholders are identified.
- Describe how the stakeholder expectations are analyzed.

- Describe how the stakeholder can impact the project.
- Describe how to manage stakeholders.

Appendix 6c. Stakeholder Register

Stakeholder Register (Source: Compiled by author)

#	Stakeholder Name	Stakeholder Position	Contact Information	Requirements	Expectations	Power Level	Interest Level

Power/Interest Grid

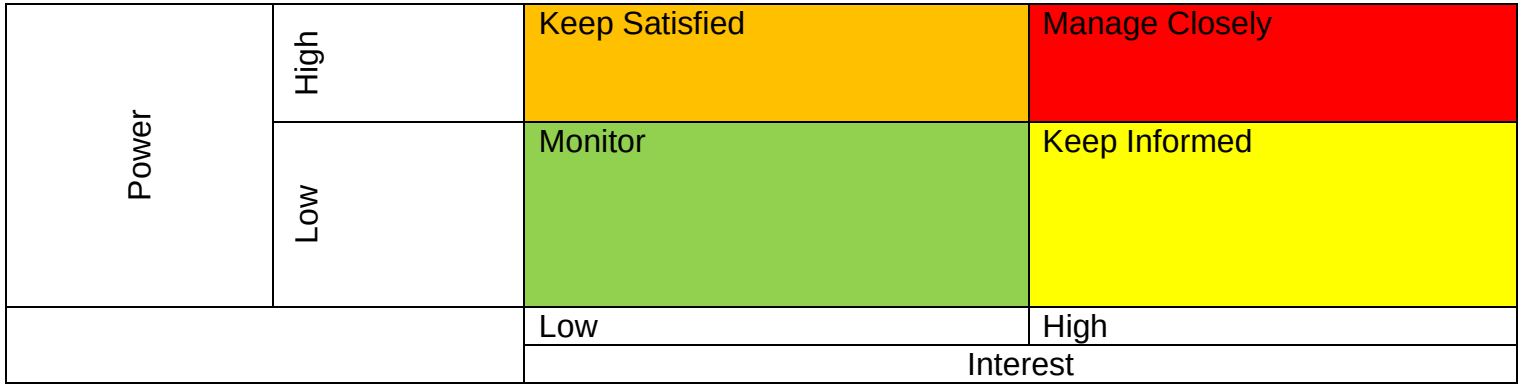


Figure 12 Power/Interest Grid (Source: Compiled by author)

Keep Satisfied
Describe how to actively engage stakeholders during the project
Manage Closely:
Describe how to actively engage stakeholders during the project

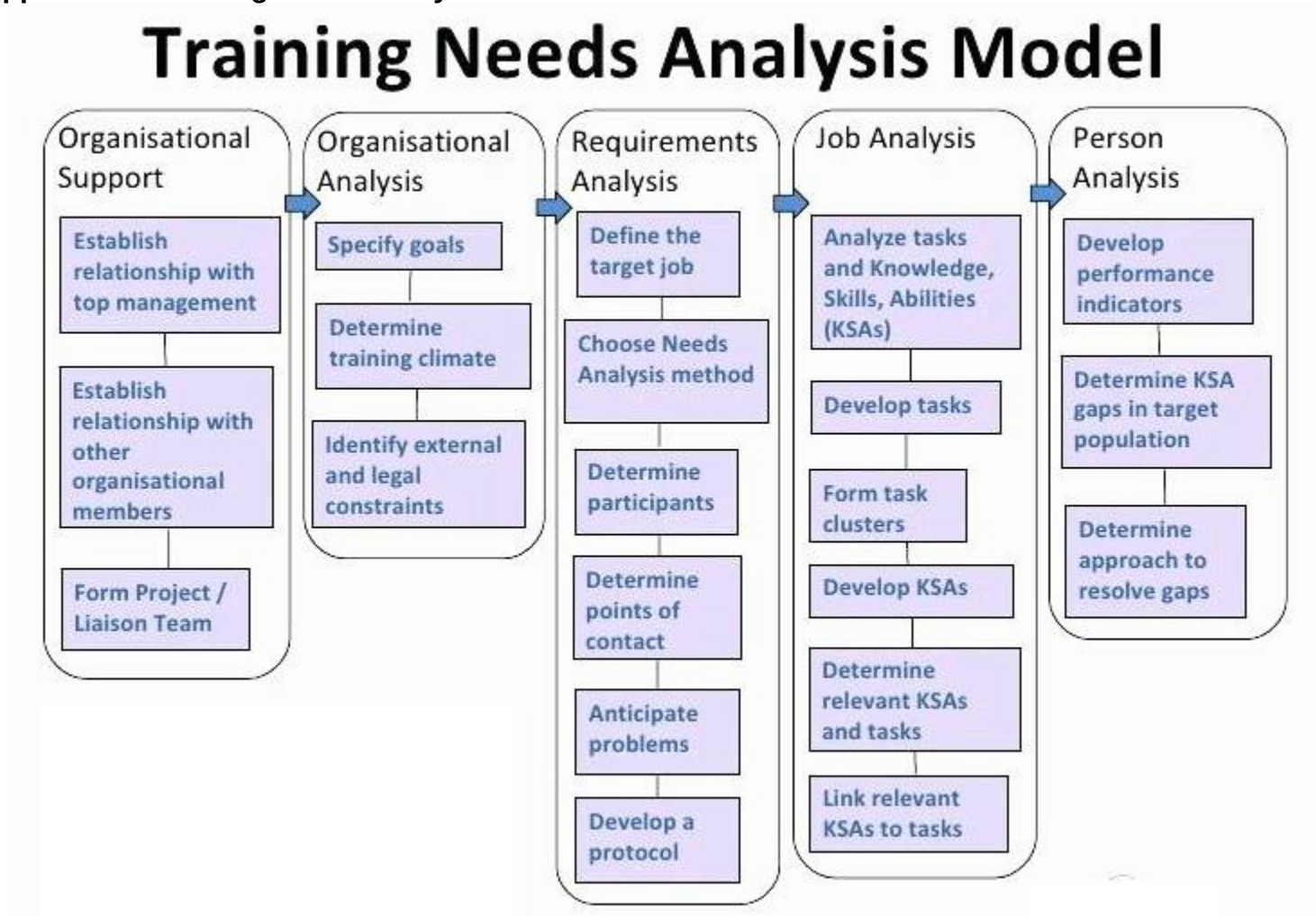
Keep informed:
Describe how to actively engage stakeholders during the project
Monitor:
Describe how to actively engage stakeholders during the project

Appendix 7: Employee Competency Assessment template

Employee Competency Assessment Form
Name: Job Title: Department:

Assessment Date	Activity Assessed	Performance Rating			Assessment Completed by
		Knowledge	Technical Skills	Soft Skills	

Appendix 8: Training Needs Analysis Model



Appendix 9: Employee Development matrix

Employee Development Matrix

Revision Date:

Manager:

Department:

Employee Position:

Task Assigned	Competency Required	Module/Unit	Delivery Scheme		
			Duration	Method	Instructor

Employee Development Matrix

Name:		Department:		Purpose of Training:				
Position Title:	Job Specific Skills Required	Training Course	Training Provider credentials	Materials provided	Criteria to be evaluated	Method of Evaluation	Date of Training	% Completion

Appendix 10: Interview form

Interview Report

Name: Job Title: Date:
Department:

Describe this organization's strengths and/or weaknesses that affect the development of the company.

_____

On a scale of 1-5 (5 being the greatest) how would you rank the effectiveness of the company's current training program?

_____

What areas do you think need improvement in the training program?

_____

Has the current training and development program equipped you fully for the tasks assigned to you? Have you had formal project management training?

_____

How has the current training and development program impacted your job performance?

_____

What is your perception of the organization's Training Program Maturity Level?

□ Proactive Best in Class
□ Progressive and System Driven
□ Compliance centered
□ Reactive in Nature
□ Unsatisfactory

Appendix 11: Overview of developed templates as per methodology

Overview of developed templates as per methodology (Source: Compiled by Author)

	Project Phase	Template Name	Appendix Number
Project Management Plan	Design	Stakeholder Management Plan and Communication Plan	16
	Design	Project Management Plan	14
Project Documents	Initiation	Statement of Work	12
	Initiation	Project Roles and Responsibilities	18
	Design	Project Charter	1
	Evaluate	Project Status Reporting	19
	Deliver	Minutes of Meetings	24
	Implement	Issues log Template	17
	Deliver	Project Closure Report	23
	Implement	Lessons Learned	20
	Evaluate	Training Program Summative Evaluation Report	36
	Deliver	Document Distribution and Archive	32

Appendix 12: Statement of Work Template

Statement of Work (SOW)

Project Name:

Purpose:

Introduction/Background:

Scope of Work:

Period of Performance:

Place of Performance:

Work Requirements:

Deliverables & Delivery Schedule/Milestones:

Applicable Standards:

Acceptance Criteria:

Special Requirements:

Appendix 13: Project Charter Template

Issue date:

Project name:

Start date:

Finish date:

Background: (Provide a high level overview of what lead to initiation of the project and how the project will support CBC)

Project Objectives:

General objective: (Describes the objectives of the program and how this should align to business goals.)

Specific objectives: (Specific objectives are part of the general objective.)

1.

2.

3.

4.

Project final deliverables:

(Specific deliverables the project will generate. These are related to the specific objectives and can be a product, service or result.)

Implementation Approach:

Describes the planned implementation approach, including the various phases of the project and how allocated resources (budget, personnel and documentations) will be requested.

Describes how the project will be tracked, including schedule, scope and budget tracking.

Describes the types of communication (meetings, presentations and status updates) and frequency to specific entities (stakeholders and team members).

Change request: describes how changes to the project will be tracked and managed and who are responsible for requesting, reviewing and approving project changes.

Assumptions:

Describes the resources that are assumed to be available.

Constraints:

Describe the constraints that might restrict or limit the project from progressing.

Preliminary risk:

Describe any identified risk

Budget:

Describes the cost associated with the project.

Milestones:

List any significant point or event should be described here, including the start and end dates.

Stakeholders list:

List identified stakeholders

Sponsor Acceptance

Approved by the Project Sponsor:

_____ Date:_____

<Project Sponsor Name>

<Project Sponsor Title>

Appendix 14: Project Management Plan Template

Project Management Plan Template

- Introduction
- Project Management Approach
- Project Scope
- Milestone List
- Schedule Baseline and Work Breakdown Structure
- Change Management Plan
- Communications Management Plan
- Cost Management Plan
- Procurement Management Plan
- Project Scope Management Plan
- Schedule Management Plan
- Quality Management Plan
- Risk Management Plan
- Risk Register
- Staffing Management Plan
- Cost Baseline
- Quality Baseline

Appendix 15: PMP Activity Log

Activity	Date	Result	Stakeholder Affected
PMP 1.0 is submitted to CBC president			
PMP 1.0 is submitted to CBC Technical Director			

Appendix 16: Stakeholder Management and Communication Plan

Stakeholder Communication Strategy
Fill out the communication strategy chart based on communication plan (see PMP template) and stakeholder management.
Keep track of communication using the Communication Log Template

Information	Stakeholder	Sender	Date	Delivery Confirmation

Communications Management
Describe how internal communication will take place (medium used and frequency of communication)
Describe how external communication will take place, including communication method, frequency, owner).
The stakeholder management plan contains information on communication with various stakeholders.
Use the Communication Log to track communications of the project.

Communications Plan

Communication Type	Deliverable	Description	Delivery Method	Frequency	Owner	Audience

Appendix 17: Issue Log Template

Issue Log
Project Name:
Project Manager:

Issue Title	**Issue Category**	**Issue status**	**Corrective Action**	**Process Owner**	**Priority** *High, medium, low*	**Date Recorded**	**Closure Date**

Appendix 18: Roles and Responsibilities Matrix Template

This template is used to determine the various roles and responsibilities within the project and consists of

- Chart with names and contact details of project team members

Training Program RACI Chart

Symbol Legend R: Responsible A: Approved C: Consulted I: Informed	Department Manager	Technical Director	Quality Management Systems Coordinator	Human Resources Manager
(Activity)				
(Activity)				
(Activity)				
(Activity)				
(Activity)				
(Activity)				
(Activity)				
(Activity)				
(Activity)				

Appendix 19: Project Status Breakdown Template

Project Status Breakdown (source compiled by author)

		According to schedule	Minor Deviation to Schedule	Major Deviation to Schedule
Status Breakdown	Overall Status			
	Scope			
	Schedule			
	Time			
	Quality			
	Resources			
	Procurement			

	Activity Status			
Activity Name	Accomplished	In progress	Unaccomplished	Upcoming

Appendix 20 Lessons Learned Template

Project Name:

Describe any incidents or other significant occurrences that have happened during the project and how they were addressed.

Lessons Learned Template (source: compiled by author)

Problem Description	Process Attributed	Communication	Problem-Solving – Root Cause & Corrective Action	Prevention Strategies

Appendix 21 HR competency gap assessment

Competency **Category Rating** *1-Unsatisfactory 3- Satisfactory* *2- Poor 4- Exemplary*	HR Manager Proficiency level required	HR manager actual Proficiency level	Gap Score
HR Strategy			
HE legislation			
HR Policies and Procedures			
HR Key performance Indicators			
Organizational Design- Structure			
Organizational Development- Culture			
Diagnostics- Data, analysis, reporting			
Recruitment			
Performance Assessments			
Training and Development			
Talent Management			
HR information Systems			
Employee Relations			
Project Management skills			

Appendix 22 Performance Evaluation

Performance Evaluation

Employee Name		Position/Title		Position Type	
Supervisor Name		Department		Hire Date	
Date of Evaluation		Evaluation Period			
Type of Evaluation		Evaluator Name		Evaluator Title	

Key Responsibilities

Accomplishments

	Not applicable	Unsatisfactory	Needs Improvement	Meets Expectations	Exceeds Expectations	Exceptional
Job Specific Competencies						
Core Competencies						
Problem Solving						
Decision Making						
Communication						
Teamwork/ Collaboration						
Productivity						
Proactivity						
Customer orientation						
Attendance						
Mangement Competencies						
Inclusiveness						
Stewardship/Resource management						
Strategic Planning						
Leadership						
Diversity						

Appendix 23 Project Closure Report Template

PROJECT CLOSURE REPORT

Project Closure Report Purpose

PROJECT CLOSURE REPORT GOALS

Project Closure Report Goals
This Project Closure Report is created to accomplish the following goals:

PROJECT CLOSURE REPORT SUMMARY

Project Background Overview

Project Background Overview
Description of the project background is as follows: • Original goals, objectives, and success criteria:

Project Highlights and Best Practices

Project Highlights and Best Practices
Project Highlights: Best Practices:

Project Closure Synopsis

Project Closure Synopsis
Reasons for project closure include:

PROJECT METRICS PERFORMANCE

Goals and Objectives Performance

Goals and Objectives Performance
The following is a comparison of actual project performance to project objectives:

Success Criteria Performance

Success Criteria Performance
Details of project performance in terms of targeted success criteria include: • Level of criteria achieved: • Date of achievement:

Milestone and Deliverables Performance

Milestones and Deliverables Performance
List of actual performance of project milestones and corresponding deliverables:

Schedule Performance

Schedule Performance
Project Schedule Overview: Project Schedule Control Process: Project Schedule Corrective Actions: Project Schedule Integration with Managing Project:

Budget Performance

Budget Performance
Project Budget Overview: Project Budget Corrective Actions:

Metrics Performance Recommendations

Metrics Performance Recommendations

An outline of metrics performance recommendations for the future include:

PROJECT CLOSURE TASKS

Resource Management

Resource Management
Parameters of how resources were managed include: • Resource requirement changes during the project: • Reallocation of project resources:

Issue Management

Issue Management
Issues still outstanding at the end of the project include:

Risk Management

Risk Management
Project Risks Mitigated: Outstanding Project Risks:

Quality Management

Quality Management
Techniques used for the integration of Quality management processes:

Communication Management

Communication Management
Analysis of the project communication process:

Customer Expectation Management

Customer Expectation Management
Methods in which customer expectations were managed:

Asset Management

Asset Management
List of assets and asset overseers remaining at the end of the project:

Lessons Learned

Lessons Learned
List of successes and shortcomings: • Activities and processes which were functional: • Opportunities for Improvement:

Postproject Tasks

Postproject Tasks
List of outstanding issues for this project: • Actions and process owners: • Unmet deliverables: • Unfulfilled training requirements:

Project Closure Recommendations

Project Closure Recommendations
List of recommendations arising from review of closure tasks:

PROJECT CLOSURE REPORT APPROVALS

Prepared By_____

([Job Title])

Approved By _____

([Job Title])

_____

([Job Title])

_____

([Job Title])

Approval Date _____

Appendix 24. Meeting Minutes

Minutes Sheet			
Meeting Date			
Start Time		End time:	
Meeting Attendees			
Meeting Objectives			
Meeting Notes:			
Decisions Made:			
Actionable Items:			
Item		Process Owner	Deadline
Open Issues			
Next Meeting Objectives			
Next Meeting Agenda			

Appendix 25.

Resource Description Matrix

Resource/Material	Description	Purpose/Function	Owner

Appendix 26

Training Documents Register

Document Name	Document Purpose	Training Subject	Trainer	Trainee

Appendix 27

Continual Improvement (Kaizen) Register

Process deficiency	Goal	Remedial Action	Corrective Action	Process Owner	Deadline

Appendix 28

Training Program Evaluation Form

Criteria	Satisfactory (Score 9-10)	Needs Improvement (Score 6-8)	Deficient (Score 3-5)	Unsatisfactory (Score 1-2)
Training program Rollout				
Training Content suitability				
Planning of training sessions				
Competency of Trainers				
Employee Evaluation Pass Rate				
Compliance with requirements and international standards				
Training Course fulfillment according to schedule				
Training Curriculum				
Training Facilities/environment				
Method of training				
Employee Performance Monitoring				
Program Continual Improvement				

Appendix 29. Victor and Associates Consultancy

Notes on Organizational Development

New High Level Structure Management System dictates that corporate culture needs to align with the Coca Cola vision and mission statements. Management style needs to shift with a more proactive and engaged approach to company development. They need to demonstrate techniques for planning, executing, and reporting using a process approach, risk thinking and sustainable performance practices. The executive team needs to enhance their knowledge and understanding of ISO 9001:2015, ISO 14001:2015, FSSC 2013 & OHSAS 18001:2007 standards. The Systematic approach requires:

Planning - Anticipate all needs

Organizing - Provide for all resources

Performing - Conduct all activities

Evaluating - Measure fulfillment to plan

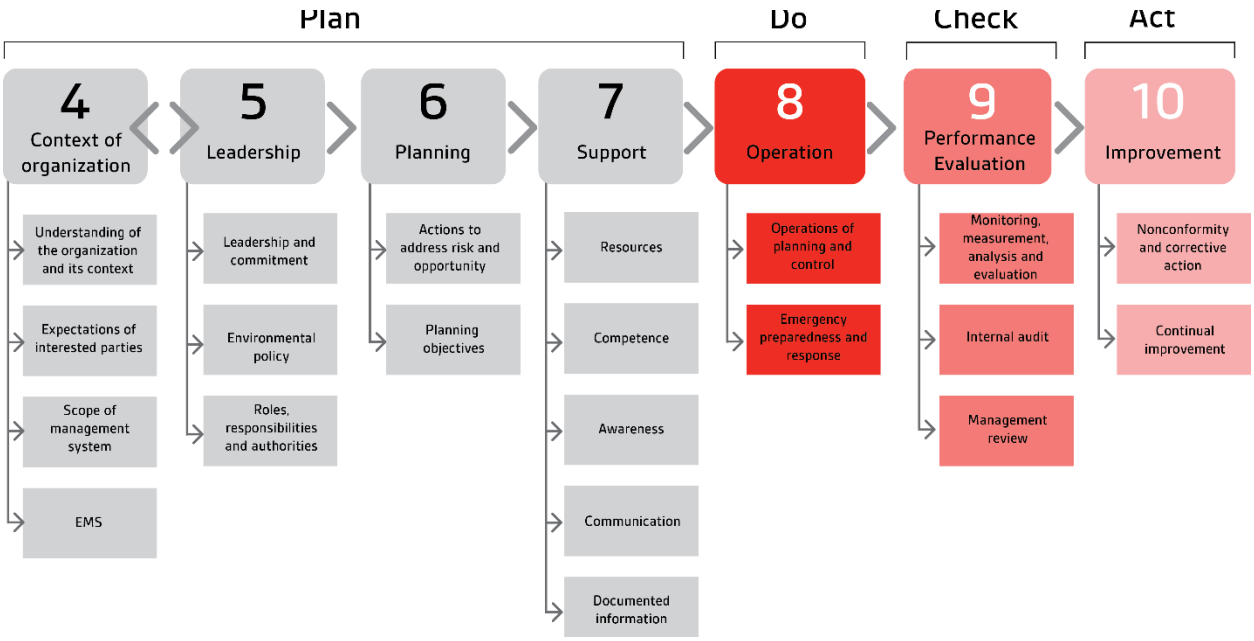


Figure 24. Plan-Do-Check-Act (PDCA) model (Source: compiled by author)

Characteristics of a New High Level Structure Management System include:

- Organizational Structure
- Risk- Based Thinking
- Products and Services
- Context of the Organization
- Documented Information
- Organizational knowledge
- Control of externally provided products and services

Effective leadership requires governance and management processes to assure strategic accountability while addressing matters of internal and external risk exposures in order to achieve the company's winning strategy.

At a strategic level planning must occur through aspect/hazard analysis, legal requirements, objectives & targets, management review, performance indicators and metrics, productivity improvements, etc.

At a tactical level operational controls, monitoring and training must be in effect.

The design of the Integrated Management System (IMS) must be consistent with the goal of Sustainable Performance and Continual Improvement. Implementation of the IMS must ensure CBC achieves key outcomes which feature:

- A needs analysis of all obligations of interested parties. This includes an evaluation of compliance of applicable legal, regulatory and contract requirements. Gaps identified from evaluation are addressed using continual improvement action management.

- Systems based approach to managing all business activities that can impact on service quality, sustainable performance and lifecycle perspective. These activities are defined as the scope of the IMS and include core, administrative/support and outsourced business processes.

- A suitable organizational structure that defines clear roles and responsibility

An Integrated Management System is developed and implemented using stakeholder requirements and processes that deliver targeted levels of performance. The Integrated Management System is achieved by developing, designing, deploying and evaluating a suitable system.

Continual improvement enables key outcomes that include managed risk, stakeholder and client satisfaction

The controls must described via manuals. Procedures, work instructions and plans must provide details of implementation, control and continual improvement.Documentation needs improvement. Management roles are not well defined. To do this, there must be a comprehensive review of job descriptions and job aids.

Key Organizaitonal capabilities that must be employed include:

- Strategic Business plan alignment
- Stakeholder Management
- Supply Chain Management
- Enterprise Management Information System
- Enterprise Risk Management
- Strategic Talent Management
- Strategic Asset Management

Benefits of these capabilities include:

- Reduced the number of incidents and issues
- Reduced downtime and associated costs
- Legal and regulatory compliance
- Promotes business efficiency
- Increased control and reduce short-term and long-term costs
- Can assist in establishing a responsible image in the marketplace

Structured programs should include systems that reflect the following:

- Initiation
- Review
- Planning/Preparation
- Executing the audit
- Reporting
- Completion
- Follow-up & closure

When CBC is not achieving their established goals, the reason must be investigated as well as remedial measures to achieve the goals, including:

- Implementing corrective actions
- Making improvements in the process

Leadership Development initiatives must be implemented to enable business performance. Performance management should be used to enable business strategy.

Competency Assurance must be employed to integrate the business plan with human resource capabilities. Develop competency assurance framework with competency criteria identified and assessed. Prioritize positions commensurate with impact on strategy, risk and sustainability. Execute competency assurance framework with competency criteria identified and assessed. Prioritize positions commensurate with impact on strategy, risk and sustainability. Validate the competency assurance process with achievement of goals. Executive management must commit resources to development of formal competency assurance program. Resources may include: outsourced expertise, software, training & development of company's personnel in competency assurance systems.

Engagement processes must implemented to align personnel objectives with company's objectives

Validate the engagement process with employee satisfaction survey and achievement of productivity goals

Reward & Recognition should be implemented to reinforce the talent essential to achievement of strategic priorities.

Recruitment and Selection to align with Business Strategy and Compliance Obligations Talent Training & Development to enable winning strategy with human resource capabilities

Performance Management process is formalized and implemented at all levels of the company with measurable performance criteria (objectives and standards)

Performance reviewers are to be trained and evaluated for competence to perform objective and reliable performance reviews

Performance Appraisals are to be conducted to assess achievement of performance criteria. Results are to be used for management of underperformance. Performance Appraisals are to be conducted to assess Reward and Remuneration. Performance Appraisals are to be conducted to assess Training and Development and Learning Plans.

Executive management implements communication and continuous learning processes to ensure loyalty to the strategic objectives, business drivers (such as health and safety programs) and company's values.

Executive management is to implement processes that provide a Workplace of empathy and caring. Employees should be provided with work life balance support systems in areas such as Health & Wellness, Financial Management, Stress Management, Family and Relationship Management.

Executive management must implement processes that provide Physical Workspace motivates the Behaviors and Attitudes that align with strategy and Quality, Food Safety, Envirnomental and Health and Safety objectives.

Objectives are to be established and implemented at all relevant functions and levels of the business including projects. Objectives must be set, taking into account: legal, regulatory and other requirements to which the company subscribes. Objectives are to be consistent with MS policy and risk assessment. Targets are to focus on outcomes that qualify customer satisfaction, risk reduction and other business competitive factors such as operational efficiency and effectiveness.

Measurable objectives are to be implemented using:

- Performance monitoring and operational reviews
- Performance dialogs with all staff
- Communication, consultation and participation to engage all staff.

Appendix 30. SAMPLE PROJECT STRUCTURE -METHODOLOGY

Purpose

The purpose of the Training Plan is to identify the appropriate training strategies and activities required to achieve the desired learning outcome during the implementation in CBC training programs.

The Training Plan provides a clear understanding of what must happen to meet the training requirements that have been defined. Thereby creating the capability for end-users to receive training in the knowledge, skills, and/or abilities required to support the new roles, business processes and/or technology.

Introduction

This section provides a management summary of the entire plan. It is not required to provide information in this section if the descriptions provided in the subsequent sections are sufficient.

Background and Scope

This section provides a brief description of the project from a management perspective. It identifies tile system, its purpose, and its intended users. This section also provides a high-level summary of the Training Plan and its scope.

Scope

The following bullets describe what is “in scope” for the project:

<<Examples may include>>

- *Employees and managers who will need training on the new system and processes will be included “in scope” for the purposes of training development*

“Out of Scope”

The following bullets describe what is “out of scope” for the project:

<<Examples may include>>

- *The adaptation of any training-related documents to individual teams will be “out of scope”, and will be the responsibility of the individual portfolios*

Assumptions

The following assumptions apply to the Training Plan:

<<Examples may include>>

1. *The Training Plan will be based on the training requirements gathered through meetings and workshops*
2. *Consideration will be given to the use of on-site and/or remote resources for the development of training materials*

Dependencies

Successful training is dependent on the availability of:

<<Examples may include>>

- *Access to business resources for input and review of the course outlines*
- *Access to business resources for input and review of the training materials*
- *Availability of training facilities including rooms, flip charts, whiteboards, etc.*

Risks

The following risks apply to the training for the project:

<<Examples may include>>

- *End users want more training than required/feasible*
- *Changes to project occur during development and delivery of training*

Points of Contact

This section provides the organization name and title of key points of contact for system development. It includes such points of contact as the Project Manager, Program Manager, QA Manager, Security Manager, Training Coordinator, and Training representative, as appropriate.

Project Charter			
Project Title	CBC Training and Development Program	**Project Manager**	Shawnell McNeil
Project Start Date	11-Feb-19	**Project Sponsor**	Walter A. Wells
Project End Date	11-Apr-19		

Business Need

Bottlers operating on behalf of the Coca Cola Company, must develop programs that fulfill the requirements of the ISO 9001:2015 Quality Management Systems Standards (Quality Management Systems, 2015). To ensure compliance, a formal training program needs to be institutionalized at Caribbean Bottling Company (Bahamas) Ltd. (CBC) to train staff, build business capacity, better organize projects driven toward company growth, and increase customer satisfaction. To rectify the systemic issues within the organization, the company must adopt a training program that will produce an effective and competent workforce and in turn drive business continuity.

Project Scope	Deliverables
CBC in house training programs for the development of CBC staff	Training Needs Analysis, Training plan, Design of training instruments/modules, Training Evaluation Form, Training schedule, Competency assessment, Project closure report

Risks and constraints	Assumptions/Dependencies
Limiting factors include 3 month timframe to accomplish tasks.	Technological infrastructure will be available to use microsoft office software. Functional Managers will be available to participate in the development of the training program. Company information is available.

Financials/Budget

Cost associated with the project include $23,500 for software licenses and fees associated with training activities.

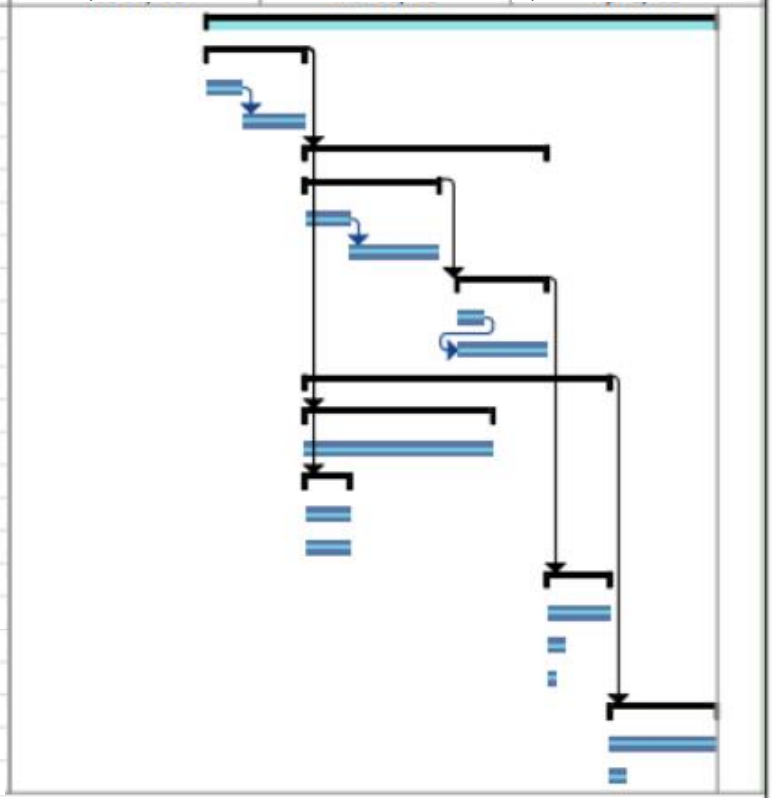
Milestones Schedule

Milestones	Target Date	Actual Date
Design Training modules	20-Feb-19	
Create training plan	4-Mar-19	
Design Training evaluation schemes	20-Mar-19	
Project Close	11-Apr-19	

Project Team	Approval Committee	Stakeholders
Project Manager: Shawnell Newry	Chief Executive Officer	CBC staff Members
Project Team Members: Janice Fountain, Cynthia	Technical Director	Coca cola Business Unit
Fox , Nathaniel Adams,	Financial Controller	International organization for
Approval Signatures:	Date:	Standardization

FINAL GRADUATION PROJECT DEVELOPMENT SCHEDULE

ID	ID	WBS	Task	Task Name
1	**1**	**1**		Initiation and Planning
2	**2**	**1.1**		Prepare PMM proposal
3	3	1.1.1		Present PPM Proposal and acquire approval
4	4	1.1.2		Conduct Needs Assessment, and evaluation
5	**5**	**1.2**		Project charter development
6	**6**	**1.2.1**		Project Management planning
7	7	1.2.1.1		Project Schedule
8	8	1.2.1.2		Stakeholder analysis
9	**9**	**1.2.2**		Requirements and Analysis
10	10	1.2.2.1		Survey results
11	11	1.2.2.2		Collect and Document Requirements
12	**12**	**1.3**		Design Training modules
13	**13**	**1.3.1**		Development of Training plan and Program
14	14	1.3.1.1		Test Training program
15	**15**	**1.3.2**		Implementation
16	16	1.3.2.1		Communicate program and methodology to users
17	17	1.3.2.2		User training and Documentation
18	**18**	**1.3.3**		Implement continual improvement plan
19	19	1.3.3.1		Monitoring and Controlling
20	20	1.3.3.2		Test Training program effectiveness
21	21	1.3.3.3		Monitor implementation results
22	**22**	**1.4**		Closure
23	23	1.4.1		Update File documents
24	24	1.4.2		Close project



Project: FGP_Schedule
Date: Sun 5/26/19

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

Page 1

FINAL GRADUATION PROJECT DEVELOPMENT SCHEDULE

ID	ID	WBS	Task	Task Name
25	25	1.4.3		Train personnel
26	**26**	**1.5**		**Project Management**
27	27	1.5.1		Planning
28	28	1.5.2		Scheduling
29	29	1.5.3		Accounting
30	30	1.5.4		Reporting
31	31	1.5.5		Meetings

Project: FGP_Schedule
Date: Sun 5/6/18

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

Page 2

Document Organization

The organization of the Training Plan is described in this section.

Security

If applicable, this section provides a brief discussion of the system's security controls and the need for security. If the system handles sensitive information, information should he included about labeling system outputs as sensitive.

Glossary of terms

This section is a glossary of all terms and abbreviations used in the plan. If it is several pages in length, it may be placed as an appendix.

REQUIREMENTS TRACEABILITY

This section presents a traceability matrix that lists user requirements as documented in the system and traces how they are addressed in such documents as the Systems Design Document, Test Plan, and Training Plan. Cross-reference the user requirements and training needs in the appropriate sections of the Training Plan.

The requirements matrix may be broken into segments, if appropriate.

INSTRUCTIONAL ANALYSIS

Development Approach

This section discusses the approach used to develop the course curriculum and ensure quality training products. This description includes the methodology used to analyze training requirements in terms of performance objectives and to develop course objectives that ensure appropriate instruction for each target group. The topics or subjects on which the training must be conducted should be listed or identified.

Issues and Recommendations

Any current and foreseeable issues surrounding training are included in this section. Recommendations for resolving each issue and constraints and limitations should also be listed.

Needs and Skills Analysis

This section describes the target audiences for courses to be developed. Target audiences include technical professionals, associates, data entry clerks, clerical staff members, operators, managers, and executives. The tasks that must be taught to meet objectives successfully and the skills that must be learned to accomplish those tasks are described in this section. A matrix may be used to provide this information. Also in this section, the training needs for each target audience are discussed. If appropriate, this section should discuss needs and courses in terms of staff location groupings, such headquarters and field offices.

INSTRUCTIONAL METHODS

Training Methodology

This section describes the training methods to be used in the proposed courses; these methods should relate to the needs and skills identified in the Needs and Skills Analysis, and should take into account such factors as course objectives, the target audience for a particular course, media characteristics, training setting criteria, and costs. The materials for the chosen training approach, such as course outlines, audiovisual aids, instructor and student guides, student workbooks, examinations, and reference manuals should be listed or discussed in this section. This follows the ADDIE Model shown below in figure 25. Sample formats of materials can be included in an appendix, if desired.

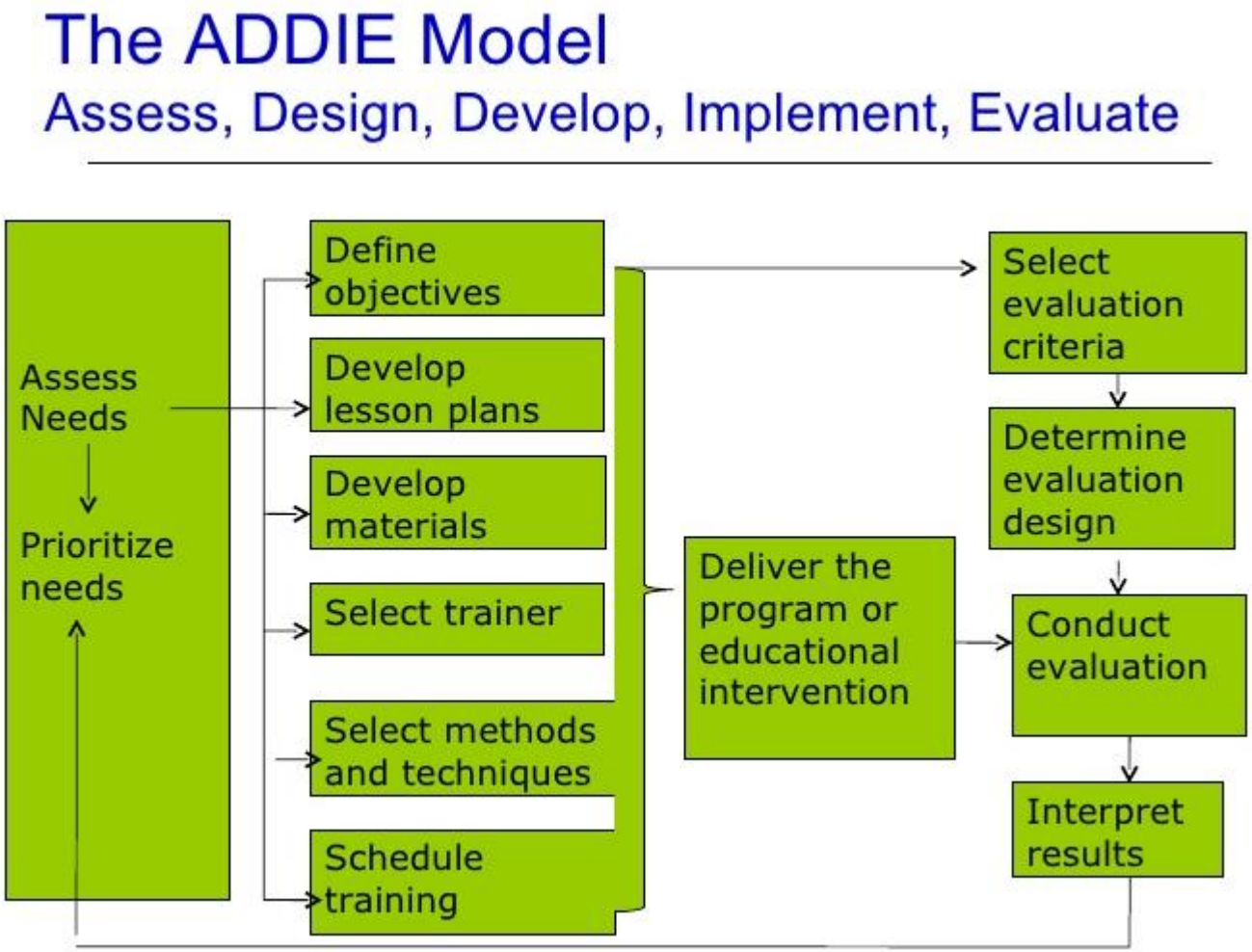


Figure 25. ADDIE model

Training Database

If applicable, this section identifies and discusses the training database and how it will be used during systems training. It discusses the simulated production data related to various training scenarios and cases developed for instructional purposes. This section also explains how the training database will be developed. If this section is not applicable to the system involved, indicate “Not applicable.”

Testing and Evaluation

This section describes methods used to establish and maintain Quality assurance over the curriculum development process. This description should include methods used to test and evaluate training effectiveness, evaluate student progress and performance, and apply feedback to modify or enhance the course materials and structure.

One source of feedback could be a course - or module - specific course or instructor evaluation form. This form should gather trainee reactions on the following topics: scope and relevance of course or module, appropriateness of objectives, usefulness of assignments and materials, effectiveness of course training materials, stronger and weaker features of the course, adequacy of the facilities, timing or length of the course or module, effectiveness of the instructor(s), and participant suggestions and comments.

TRAINING RESOURCES

Course Administration

This section describes the methods used to administer the training program, including procedures for class enrollment, student release, reporting of academic progress, course completion and certification, monitoring of the training program, training records management, and security, as required.

Resources and Facilities

This section describes the resources required by both instructors and students for the training, including classroom, training, and laboratory facilities; equipment such

as an overhead projector, projection screen, flipchart or visual aids panel with markers, and computer and printer workstations, and materials such as memo pads and pencils, video, and slides. Information contained in this section can be generic in nature and can apply to all courses. Specific course information and special needs may be itemized here as well or, if many different courses are involved, in Section 6. Training Curriculum.

Schedules

This section presents a schedule for implementing the training strategy and indicating responsible parties. Included are key tasks to be completed, such as when to set up training facilities and schedule participants; other activities essential to training; and dates on which those tasks and activities must be finished. This section provides an overview of tasks; deliverables, such as approach and evaluation forms; scheduled versus actual milestones; and estimated efforts, such as the work plan. In the final version of the Training Plan, actual course schedules by location should be included.

Future Training

This section discusses scheduled training modifications and improvements. This information can include periodic updating of course contents, planned modifications to training environments, retraining of employees, and other predicted changes. Indicate procedures for requesting and developing additional training. This is will enhance the improvement of the process flow depicted in Figure 26.

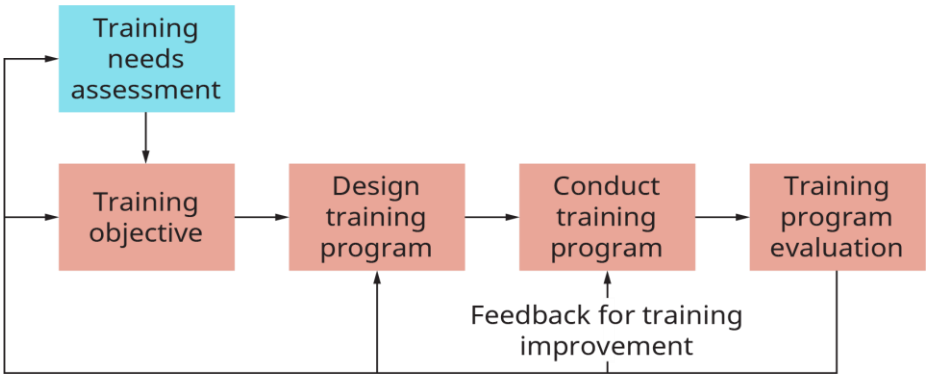


Figure 26. Program development Process Flow (Source: compiled by author)

TRAINING CURRICULUM

This section provides descriptions of the components that make up each course. If a large number of courses or modules is described, place these descriptions in an appendix. Subsections of this section, if any should he created for each course.

Each course may comprise one or more modules. A course description should be developed for each module. At a minimum, each course description should include the course/module name; the length of time the course/module will take; the expected class size (minimum, maximum, optimal); the target audience: course objectives; module content/syllabus; specific training resources required, such as devices, aids, equipment, materials, and media to be used; and any special student prerequisites. The course description could also include information on instructor-to-student ratio, total number of students to be trained, estimated number of classes, location of classes, and testing methods.

Audience

This document is intended for use by:

<<Examples may include>>

- *Project Manager*
- *Change Management Team*
- *Training Lead*

Training Objectives

Outline what the objectives for the Training Plan are:

<<Examples may include>>

- *Ensure that all impacted staff receive relevant training to prepare them for any new working practices*
- *Ensure appropriate level of skill is reached in order to perform roles*

TRAINING NEEDS ASSESSMENT

The Training Needs Assessment identifies gaps in the knowledge, skills or abilities of impacted stakeholders compared to levels required to support and sustain the changes implemented.

Please use the Training Needs Assessment Tool provided to identify end-user groups, required KSAs, and objectives/priorities in order to develop appropriate training activities.

Chart 1 – Training Needs Assessment Illustrative

Training Needs Assessment								
e.g. 0.01	*Indicate the name of the stakeholder group that is scheduled for training - Titles/roles (i.e. managers, directors, etc.) - External (i.e. First Nations Groups) - Function (i.e. finance)*	*# of stakeholders in this particular group that will receive training*	*Identify the knowledge, skills, or abilities (KSAs) to be gained though training*	*Identify the proficiency level required for this stakeholder/individual*	*Identify the type of change taking place: - People (roles, skills, knowledge) - Technology - Processes*	*Learning objectives for gaining the knowledge, skills or abilities*	*Rate priority from low to high as it relates to the other objectives and change/project implications*	*If there is any additional information you would like to include please use this column*
Assessment #	**Stakeholder Group Name/s**	**Size of Stakeholder Group**	**Required KSAs**	**Required KSAs Level**	**Change Category**	**Key Learning Objectives**	**Objective Priority**	**Additional Considerations**
0.01	BC PSA Subject Matter Experts NRPP Leadership	6 10	Online Authorizations Account setup	Basic Understanding	Technology	- Provide stakeholder groups understanding to setup their accounts for activation, page navigation and new process	Low	

TRAINING APPROACH

Training Methods

This section describes the training methods selected based on the options available and recommended for use by the project:

<<Examples may include>>

1. *Blended Training Approach*
    a. *To help retention of learning, a blend of training delivery methods will best meet the needs of our project. This will include: Instructor-Led Training, Job-aids and e-learnings*

TRAINING ROLES & RESPONSIBILITIES

Use the chart below to profile the key roles that will be part of the Training team. Individuals may have more than one role.

Chart 2 – Training Team Profile

Role	Profile	Skills / Considerations
Training Lead	• Responsible for completing and managing the training program, including the development of instructional materials and training delivery • Develop the training strategy	• It is recommended that there be one Training lead from the project team, and one from the health and safety and food safety departments. • Compenencies include: Equipment operating proficiency, management skills, teaching certification, instructional design certification, departmental competencies, and Reporting capabilities.

TRAINING INFRASTRUCTURE

Training Facilities

The following is a list of the equipment and facilities preparation that will be required for classroom training sessions:

<<Examples may include>>

- *An instructor computer, attached to a projector*
- *A projection screen*
- *One computer for each learner (for hands-on systems training)*

Training Environments

The following section describes the distinct training environments:

<<Examples may include>>

- *Training Development Environment*
    a. *Will be used for creating training materials; this environment is for the exclusive use of the project team*
- *Training Production Environment*
    a. *Will be used to deliver Instructor-Led Classroom Training*
- *Training Practice Environment*
    a. *Will be used by end-users to practice in the new system; concurrently with the deployment of e-learning. Field practice in the factory will also be utilized.*

TRAINING MATERIALS & CURRICULUM

Training Materials

Use the following chart to present a summary of key training materials and their intended uses.

Chart 3 – Training Materials Description

Material	Description	Developer	Reviewer	Final Decision
Instructor guides/ manuals/classroom slides	Instructor guides and classroom slides: • Reinforce or supplement a lecture or demonstration • Present new concepts, terms and processes	Joe Snow	Sally Same	Mary Kane
Quick Reference Guides	Quick reference guides: • Act as a job aid to assist the users once they return to their desks • Remind users of key features, options, and methods of working with the new program	Henry G.	Sam D.	Kim E.

Training Curriculum

The curriculum defines the training courses that will be developed and delivered, including the associated learning objectives, sourcing options, delivery methods and course owners. Use the chart below to help plan and manage your training curriculum.

Chart 4– Training Curriculum

Curriculum Code	Curriculum Name	Module ID	Module Name	Learning Objectives	Build/Buy/ Source	Duration (hrs.)	Delivery Method	Course Developer	Course Owner
C1	Process Planning	M1	Add new accounts	Learning to add vendors to account	Build	2	e-Learning	Joe. F	Sam. W.
C1	Process Planning	M2	Account Setup	Learning to create new account and navigate system	Build	1	Practical	Mary. N.	Bob. D.
C2	Billing	M4	Pay Bills	Sending direct deposits	Source	4	Video	Pedro V.	Chris Q.

TRAINING ROADMAP

A preliminary training schedule consists of the key training program activities. The training schedule will continue to evolve as the project progresses and additional details become available. The Training Needs Assessment, Training Curriculum, and Content Development Tracker will be critical inputs to the creation of the detailed training schedule.

Chart 5– Training Roadmap

Activities	Description	Responsible	Target Date
Training Plan	Develop high-level training schedule	Training Lead	Feb. 2020
Training Materials	Develop course outlines	Training Lead / Training Developer	March 2020

TRAINING EVALUATION

In evaluating the effectiveness of training delivery, information will be sourced from the following areas:

<<Examples may include>>

- *The outcomes of competency tests completed by trainees at the end of each module*
- *Feedback from trainees on confidence level at the end of each module*
- *Feedback from trainers on training problems or individuals with who have experienced learning difficulties*
- *To support the evaluation process, trainees will be provided with survey link to complete an evaluation survey. This will be used to measure the reaction of trainees post-training*

TRAINING RESOURCES & BUDGET

- This section will include information on the training resources and effort (number of hours) for each project. It will include a summary of additional financial resources that may be required to develop and deliver end-user training.
- *<<Examples may include>>*

Effort Required		
Role	**Headcount**	**Effort**
Training Lead	1	500 hours
Training Developer	2	600 hours
		1100 hours

Financial Resources	
Description	**Budget**
Headcount – additional training staff of 3	$20,000
Training software licenses – User Productivity Kits	$3500
	$23,500

Appendix 31 Training Program Development Checklist

Training Program Development Checklist	
Status (Complete/Incomplete)	Activity
	• Create proposal for project (Training program) and seek approval
	• Establish a communication plan, procurement plan, human resource management plan, Scope Management plan, risk management plan, cost management plan, quality management plan, integration management plan, stakeholder management plan (Identify stakeholders and perform stakeholder analysis)
	• Gather requirements (Coca Cola and International Organization for Standardization)
	• Outline business goals
	• Design strategic business plan for trainings to accomplish business goals.
	• Outline the scope of work to be performed based on the business strategy
	• Create a work break down structure
	• Establish roles and responsibilities in the company delegating work to be done; design organizational chart
	• Generate job descriptions
	• Perform a needs assessment based on the competencies required
	• Build procedures as work aids for the tasks assigned
	• Establish quality metrics for training program

	• Establish evaluation criteria for trainers, trainees and the training program
	• Design evaluation forms
	• Train the trainer based on competencies required
	• Create training modules for each job task and manuals for each job position
	• Assign facilities/tools/equipment/resources necessary to complete trainings
	• Plan training schedules for each job position
	• Hire staff to fulfill job positions established
	• Perform staff onboarding process
	• Train staff as per training plan
	• Evaluate staff based on training received
	• Evaluate the training program
	• Monitor the training completions of staff based on competencies required
	• Evaluate the trainers
	• Audit the company programs based on compliance and key performance indicators
	• Establish a plan for corrective actions based on deviances.
	• Design a continual improvement plan to accomplish the goals and satisfy stakeholders.
	• Close project

Appendix 32 Phase description for Training Program

Phase description for training program

Phase	Description
Analysis	Information is gathered about the intended audience (characteristics and knowledge/skill), the challenges that exist, the tasks to be completed, delivery options, and the learning objectives.
Design	An outline of instructional strategies is created including learning content, activities, assessments and media selection. The design should be sequential and logical.
Development	This covers the creation and assembly of the material and activities that will be utilized in the training course. This includes the development of reference material, story boards, workshop activities and assessments.
Implementation	Encompasses review and testing to ensure that the reference material, work activities, equipment, tools and software are prepared for the training. This is followed by learners participating in the instruction.
Evaluation	Assessment of the program intended to ensure the training and content achieved the learning objectives. The evaluation phase consists of two parts. Formative and summative. Formative evaluation is a method for assessing a program while the program activities are in progress, while the summative evaluation is a method for assessing a program at the completion of the program.

Document distribution and archive

Project Name:
Summarize how the generated documents of the project are distributed and where these are archived.
Appendix 33 Document archive (source: compiled by author)

Document	Location	Date Archived

Appendix 34 CBC Training Needs assessment excerpt

Job Position	Department	Required Training	Course Title	Description	Existing Trainin	Availabilit y	Provided by (Organization	Developmen t Required	Development by (Organization)
Accounting Clerk	Accounting	Mentoring	Technical Peer Mentoring	Help coworkers get up to speed on technical tasks and processes	Yes	External	Trey Research		
Accounting Clerk	Accounting	Advanced spreadsheet skills	Microsoft Office Excel 2003	Improve efficiency with advanced spreadsheet skills	Yes	External	Trey Research		
Human Resources	Human Resources	Mentoring	Technical Peer Mentoring	Help coworkers get up to speed on technical tasks and processes	Yes	Internal			
Administrative Assistant	Administration	Business communication	Business Communication	Improve written and oral business communication skills	No			Yes	A. Datum Corporation
Administrative Assistant	Administration	Mentoring	Technical Peer Mentoring	Help coworkers get up to speed on technical tasks and processes	Yes	Internal			

Appendix 35 CBC Requirements Matrix

Caribbean Bottling Company (Bahamas) Ltd.

Regulatory Register Quality, Food Safety, Safety and Environmental legislation
QMS-CO-L-001

System	Issue Date or Date when it started being mandatory	Kore Requirement	Code	Last Reviewed by QMS	Requirement Description	Plant status	Actions required to achieve compliance
Food Safety	3-Jun-01	Activated Carbon for Water Treatment	BP-SP-150	31-Jan-19	To ensure that granular activated carbon (GAC) used in water purification does not contaminate or degrade the quality of beverages.	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Cleaning & Sanitizing	BP-RQ-750	31-Jan-19	This document describes the requirements in order to ensure facilities and manufacturing equipment are clean and sanitary, free from crosscontamination and residual cleaning and sanitizing agents, and take into consideration	**Compliant**	See Corrective Action Report

					the safety and environmental impact of cleaning and sanitizing practices.		
Food Safety	1-Jan-10	Food Safety Policy	FS-PL-400	31-Jan-19	Food safety commitment includes the following focus areas: · Risk Assessment and Mitigation · Supplier Management · Regulatory Compliance · Continual Improvement across our global system	**Compliant**	See Corrective Action Report
Food Safety	26-Nov-09	Compressed Air Specifications	BP-SP-136	31-Jan-19	To prescribe specification limits for compressed air used in production, processing and packaging in beverage plants	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Customer and Consumer Response	BP-RQ-070	31-Jan-19	This document describes requirements to monitor and resolve customer and consumer information requests and product, packaging and service issues to drive consumer and customer satisfaction, to continually improve and to protect The Coca-Cola Company trademark.	**Compliant**	See Corrective Action Report

Food Safety	1-Jan-10	Date Coding and Durability Labeling	BU-RQ-105	31-Jan-19	Ensure The Coca-Cola Company products in the marketplace meet specifications, are retrievable and meet labeling regulations.	**Compliant**	See Corrective Action Report
Food Safety	3-Jun-01	Diagrams of Acceptable "Multiple Barrier" Systems for Water Treatment	RF-WA-135	31-Jan-19	To provide simple block diagrams of acceptable water-treatment systems that use the "multiple-barrier" approach—including Coca-Cola's traditional system.	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Equipment and Technology Validation	BP-RQ-400	31-Jan-19	Validate the capability of new or modified equipment and new technology to produce finished products that meet applicable regulations and the specifications of The Coca-Cola Company.	**Compliant**	See Corrective Action Report
Food Safety	3-Dec-10	Facility and Equipment Design	BP-RQ-470	31-Jan-19	Design and implement manufacturing and warehousing facilities in a manner that reflects a positive image of The Coca-Cola Company and promotes efficiency, productivity and good manufacturing practices, while preserving and protecting associates, property and the environment.	**Compliant**	See Transition Plan and Corrective Action Report

Food Safety		Facility Design	BU-RQ-210	31-Jan-19	This document describes the requirements for the design of facilities to produce consistent, safe products, protect the environment and be a safe place to work.	**Non-Compliant**	See Corrective Action Report
Food Safety	3-Jun-01	Filter Aid	BP-SP-138	31-Jan-19	This document defines the recommended composition for filter aid used to help filter simple syrup.	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Food Allergen and Sensitivity Control	BP-RQ-760	31-Jan-19	This document defines the minimum required control measures to prevent undeclared food allergens and sensitivities in Company products, and avoid the need for precautionary labeling of food allergens and sensitivities in The Coca-Cola Company (TCCC) final products.	**Compliant**	See Corrective Action Report
Food Safety	3-Jun-01	Granular Sucrose Specifications	BP-SP-116	31-Jan-19	This document defines the minimum required control measures to ensure the consistent quality of granular sucrose used in products of The Coca-Cola Company.	**Compliant**	See Corrective Action Report

Food Safety	1-Jan-10	Incident Management and Crisis Resolution	BP-SR-010	31-Jan-19	Manage reportable Quality, Safety, and Environment occurrences against The Coca-Cola Company's defined incident management process and to effectively, identify, and monitor potential events in a manner that protects our consumers, employees, environment, Company assets and the image and trademark of The Coca-Cola Company.	**Compliant**	See Transition Plan and Corrective Action Report
Food Safety	18-Nov-11	Sensory Testing for Product Release	BP-RQ-650	31-Jan-19	Ensure products of The Coca-Cola Company meet customer and consumer expectations and are tested in a manner to protect the trademark.	**Compliant**	See Transition Plan and Corrective Action Report
Food Safety	3-Jun-01	Pest Control	RF-CS-030	31-Jan-19	This document provides pest control procedures and information to prevent material and product contamination by pests or vermin.	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Process Change Validation	BP-RQ-420	31-Jan-19	Validate the capability of process changes that impact the ability to produce finished products that meet local regulations and the specifications of The Coca-Cola Company.	**Compliant**	See Corrective Action Report

Food Safety	30-Jan-13	Renewed Water for Product Contact Surfaces	BP-RQ-190	31-Jan-19	This document provides the technology, design, validation, monitoring, operational, and record keeping requirements for plants that recover and treat process liquid waste streams or waste water treatment plant effluent (WWTP) for use on product contact surfaces.	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Risk Management	BP-RQ-040	31-Jan-19	This document provides information on the requirement to proactively assess and treat food safety, Environmental, Occupational Safety & Health and business continuity risks to protect The Coca-Cola Company stakeholders, reputation and image.	**Compliant**	See Corrective Action Report
Food Safety	3-Jun-01	Sand	BP-SP-146	31-Jan-19	Define the recommended composition of sand in the sand filter for water treatment.	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Security, Asset Protection and Product Integrity	BP-RQ-730	31-Jan-19	This document provides information on the requirement to protect assets and maintain product integrity by preventing unauthorized access to operations and proprietary information.	**Compliant**	See Corrective Action Report

Food Safety	8-Apr-05	Sodium Hypochlorite for Water Treatment	BP-SP-194	31-Jan-19	This document prescribes the acceptable quality of sodium hypochlorite (NaOCl or liquid bleach) used in water disinfection.	**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Treated Water for Product Manufacturing	BP-RQ-180	31-Jan-19	This document provides information on the requirement to Proactively manage, treat and monitor incoming (municipal, ground, or surface) water to ensure that final treated water meets the quality specifications for its intended use.	**Compliant**	See Corrective Action Report
Food Safety	3-Jun-01	Treated Water Specifications and Monitoring	BP-SP-184	31-Jan-19	This document prescribes acceptable limits for the physical, chemical and microbiological attributes of treated water.	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Warehouse & Distribution	BP-RQ-900	31-Jan-19	This document describes requirements in the Storage and handling of ingredients, intermediate and finished products and packages to maintain quality and food safety.	**Compliant**	See Corrective Action Report

Food Safety	29-Feb-2005	Waste Management	ES-RQ-220	31-Jan-19	This document defines the minimum required control measures to minimize the environmental impact and to protect workers from related occupational safety and health risks from wastes generated by our operations.	**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Incoming Ingredients	BP-RQ-100	31-Jan-19	This document defines the minimum required control measures to Protect the quality and integrity of incoming ingredients used in the production of The Coca-Cola Company products.	**Compliant**	See Transition Plan and Corrective Action Report
Food Safety	8-Jan-18	Operational Requirements	OR-RQ-101	31-Jan-19	Establish effective management systems to ensure the production of safe products that consistently meet customer and consumer expectations, to ensure protection of personnel and the environment and to ensure our trademarks continue to represent the highest symbol of quality.	**Compliant**	See Transition Plan and Corrective Action Report
Food Safety	13-Dec-13	Incoming Materials—Carbon Dioxide	BP-RQ-104	31-Jan-19	This document defines the minimum required control measures to ensure the quality and integrity of carbon dioxide used in the production of sparkling	**Compliant**	See Corrective Action Report

					beverages of The Coca-Cola Company.		
Food Safety	11-Jan-16	Auxiliary Materials and Processing Aids	BP-RQ-130	31-Jan-19	This document defines the minimum required control measures to Ensure the quality and integrity of auxiliary materials and processing aids used in producing beverages and products for The Coca-Cola Company (TCCC).	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Mixing and Blending	BP-RQ-200	31-Jan-19	This document defines the minimum required control measures to deliver intermediate products, syrups or beverages that meet the specifications of The Coca-Cola Company to the next step in the supply chain.	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Packaged Water	BP-RQ-318	31-Jan-19	This document defines the minimum required control measures to manufacture packaged water products that meet Company and regulatory requirements and specifications.	**Compliant**	See Corrective Action Report

Food Safety	1-Jan-10	Process Monitoring and Control	BP-RQ-600	31-Jan-19	This document defines the minimum required control measures to monitor and control processes in order to drive continuous improvement and produce products and packages that meet The Coca-Cola Company specifications.	**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Calibration and Maintenance of Equipment	BP-RQ-620	31-Jan-19	This document defines the minimum required control measures to ensure good performance and accurate data in processing, monitoring and testing equipment that may impact the quality and safety of The Coca-Cola Company products, the safety of our associates and the environment.	**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Bag-In-Box Packaging	PK-SP-1215	31-Jan-19	This document describes the global specification(s) for Bag-In-Box packaging	**Compliant**	See Corrective Action Report

Food Safety	21-Nov-14	Packaging Requirements - PET Preforms	SU-RQ-202	31-Jan-19	This document describes the requirements for PET preform manufacturing, ensuring the quality and food safety of preforms used by the Coca-Cola system. These requirements are in addition to those defined in Supplier Requirements – General (SU-RQ-005) and Supplier Requirements – Packaging (SU-RQ-020).	**Compliant**	See Corrective Action Report
Food Safety	21-Nov-14	Packaging Requirements - PET Bottles	SU-RQ-204	31-Jan-19	This document describes the requirements for PET bottle manufacturing, ensuring the quality and food safety of PET bottles used by the Coca-Cola system. These requirements are in addition to those defined in Supplier Requirements – General (SU-RQ-005) and Supplier Requirements – Packaging (SU-RQ-020).	**Compliant**	See Corrective Action Report
Food Safety	27-Jun-14	Packaging Requirements - PET Can Body	SU-RQ-206	31-Jan-19		**Compliant**	See Corrective Action Report
Food Safety	27-Jun-14	Packaging Requirements - PET Can Ends	SU-RQ-208	31-Jan-19		**Compliant**	See Corrective Action Report

Food Safety	15-Jun-15	Packaging Requirements - Plastic Closures	SU-RQ-210	31-Jan-19	This document describes the requirements for plastic closure manufacturing, ensuring the quality and food safety of plastic closures used by the Coca-Cola system. These requirements are in addition to those defined in Supplier Requirements – General (SU-RQ-005) and Supplier Requirements – Packaging (SU-RQ-020).	**Compliant**	See Corrective Action Report
	11-Jan-16	Packaging Requirements - Film	SU-RQ-220	31-Jan-19		**Compliant**	See Corrective Action Report
Food Safety	1-Jan-10	Corrective Action	BP-RQ-050	31-Jan-19	Eliminate the cause of existing nonconformities and prevent recurrence to sustain continuous improvement.	**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Ingredient Requirements—Carbon Dioxide	BP-SP-110	31-Jan-19	This document outlines the minimum requirements that external and self-manufacturing must adhere to in the manufacture of beverage-grade carbon dioxide. These requirements provide the basis for the audit documentation used by auditors of The Coca-Cola Company (TCCC).	**Compliant**	See Corrective Action Report

Business Systems	8-Jan-18	Technical Data management	BU-SR-030	31-Jan-19	This document outlines the minimum requirements for the management of data generated by activities and processes within technical scope (global/local), for all organizations across the Supply Chain.	**Compliant**	See Corrective Action Report
Food Safety	1-Feb-18	Potable water	BP-RQ-183	31-Jan-19	This document outlines the minimum requirements for the purification and processing of potable water	**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Boreholes	BP-RQ-197	31-Jan-19	This document outlines the minimum requirements for the construction, operation, monitoring and decommisioning of boreholes.	**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Package handling and preparation	BP-RQ-250	31-Jan-19	This document outlines the minimum requirements for the processes, equipment, and controls to ensure all packaging meets applicable regulations and company specifications.	**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Package testing	BP-RQ-350	31-Jan-19	This document outlines the minimum requirements for the testings and controls implemented to ensure all packaging meets applicable	**Compliant**	See Corrective Action Report

					regulations and company specifications.		
Food Safety	8-Jan-18	Immediate Consumption Equipment (ICE) Operation	BP-RQ-500	31-Jan-19	This document outlines the minimum compliance requirements including procurement, installation, and maintaining coolers, venders, and cold and hot beverage dispensers in the marketplace	**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Supplier Requirements-General	SU-RQ-005	31-Jan-19		**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Supplier Requirements-Ingredients	SU-RQ-010	31-Jan-19		**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Supplier Requirements-Packaging	SU-RQ-020	31-Jan-19		**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	Supplier Requirements-Immediate Consumption Equipment	SU-RQ-030	31-Jan-19		**Compliant**	See Corrective Action Report
Food Safety	8-Jan-18	High-Acid Product Processing	BP-RQ- 301	31-Jan-19	This document outlines the minimum compliance requirements which encompass Processing & Filling General Requirements as well as facility and equipment design	**Non-Compliant**	See Transition Plan and Corrective Action Report

Food Safety	8-Jan-18	Low-Acid and Acidified Product Processing	BP-RQ- 302	31-Jan-19	This document outlines the minimum compliance requirements which encompass Processing & Filling General Requirements as well as facility and equipment design	**Non-Compliant**	See Transition Plan and Corrective Action Report

Act #	Issue Date or Date when it started being mandatory	Regulation title	Topic	Last Reviewed by QMS	Requirement Description	Plant status
CH. 220 - 1	**2002**	Road Traffic Act	**Fleet Management**	**31-Jan-19**	The laws for operating vehicles on the roads of th Bahamas	**Compliant**
Vol. 1	**2000**	The Montreal Protocol	**Ozone Protection**	**31-Jan-19**	Protocols for the protection of the Ozone. Regulations on ozone depleting substances	**Compliant**

321A	2001	Employment Act	HR	31-Jan-19	Regulations for Hiring practices and expectations of employees and employers	Compliant
321B	2002	Minimum Wages	HR	31-Jan-19	Minimum Wage established by the Bahamas	Compliant
	1985	Food and Environment Protection Act	Turks and Caicos Food Information	31-Jan-19	Food and Environemt Safety regulations of The Turks and Caicos	Compliant
CH.236-1	2001	The Food Act	Food Safety	31-Jan-19	The Food Safety Regulations of the Bahamas	Compliant

CH 200-1	**2001**	The Buildings Regulations Act	**Building Layout and Design**	**31-Jan-19**	Regulations related to building in the Bahamas	**Compliant**
CH. 200-3	**2001**	Buildings Regulations Act General Rules	**Building Layout and Design**	**31-Jan-19**	Regulations related to building in the Bahamas	**Compliant**

CH.329-1	**2010**	Buisness Licence Act	**HR, Business Planning**	**31-Jan-19**	Defines requirements for Business Licensing and what this entails.	**Compliant**
CH.329-3	**2010**	Buisness Licence Act Applications Regulations	**HR, Business Planning**	**31-Jan-19**	Defines requirements for Business Licensing and what this entails.	**Compliant**
CH.299-1	**2010**	Export Control Regulations	**Business Planning**	**31-Jan-19**	Regulations on the controls for exported materials	**Compliant**

CH. 342-1	2010	Hire-Purchase Act	Business Planning	31-Jan-19		Compliant
CH. 326-1	2010	Industrial Encourgement Act	Business Planning	31-Jan-19	An act which grants benefits to Companies that produce within the Bahamas such as tax waivers and import duties being waived.	Compliant
CH.350-1	2002	National Insurance Act	HR	31-Jan-19	Protocols for the collection and establishment of the National Insurance.	Compliant
CH. 43-1	2002	Pensions Act	HR	31-Jan-19	Protocols for collection and allocations of Pensions.	Compliant
CH.337-1	2002	Sale of Goods Act	Business Planning	31-Jan-19	Regulations on the the conditions to conduct sales transactions in the Bahamas	Compliant

CH. 196	**2002**	Water and Sewage Corporation Act	**Business Planning**	**31-Jan-19**	An act decribing the powers of the Water and sewege corporation. It also describes grant and control of water-rights and administration of water, the protection of water resources, regulating the extraction, use and supply of water and the disposal of sewage.	**Compliant**
CAP.8.04	**2009**	Public & Environment Health Ordinance	**Turks and Caicos Food Information**	**31-Jan-19**	Public health document pertaining to the laws of Turks and Caicos	**Compliant**
Draft	**2013**	Bahamas Food Safety and Quality Bill	**Food Safety**	**31-Jan-19**	Food and Quality Bill that has not become regulation but is in draft stage as a Bill	**Compliant**

	2014	Codex Alimentarius GENERAL STANDARD FOR FOOD ADDITIVES CODEX STAN 192 - 1995	Food Chemical Codex general standard for food additives	31-Jan-19	Standards for the additives in Food.	Compliant
	2015	ISO18001: 2007	Occupational Health & Safety System	31-Jan-19	Requirements for a strategic management system with focus on customer satisfaction and continual improvement	Compliant
	2015	ISO14001: 2015	Environmental System	31-Jan-19	Requirements for a stategic management system with focus on customer satisfaction and continual improvement	Compliant
	2008	ISO9001: 2015	Quality System	31-Jan-19	Requirements for a strategic management system with focus on customer satisfaction and continual improvement	Compliant
	2005	ISO22000: 2005	Quality System	31-Jan-19	Food safety related to the pressence food bourne hazards in food at the opoint of consumption.	Non-compliant
	2009	PD ISO/TS 22002-1: 2009	Quality System	31-Jan-19	Specific Food Safety requirments for organizations in the food chain.	Non-compliant
	2013	PD ISO/TS 22002-4:2013	Quality System	31-Jan-19	Specific Requirements for Food packaging manufacturing	Non-compliant

	2006	WHO Guidelines for Drinking Water	**Quality System, Water Manufacture**	**31-Jan-19**	The World Health organizations standard for Drinking Water.	**Compliant**
	2014	NSF- Supplier Assurance	**Quality System**	**31-Jan-19**	Supplier assurance for materials, chemicals ingredients etc. deemed to be food safe.	**Compliant**
	2014	Bahamas National Standard specification for pre-packaged water BNSS 1;2014	**Quality System**	**31-Jan-19**	Protocols for processing packaged water	**Compliant**

	2014	Bahamas National Standard Code of Hygience Practice for Pre-Packaged water BNSCP 1;2014	Quality System	31-Jan-19	Stipulations and hygienic practices to be adhered to for packaging water.	Compliant
	2010	Business License Act 2010-0025	Quality System	31-Jan-19	Defines requirements for Business Licensing and what this entails.	Compliant
	1987	Environmental Health Services Act 1987-0004	Quality System	31-Jan-19	Regulations for practices and expectations of employees and employers regarding the preservation of the environment.	Compliant
	2018	Short term Work permit	HR	31-Jan-19	Required for processing short term work permits and interpol evaluation	Compliant

System	Issue Date or Date when it started being mandatory	Kore Requirement	Code	Last Reviewed by QMS	Requirement Description	Plant status
Environment	31-Dec-01	Energy Efficiency	ES-RQ-125	31-Jan-19	This document defines the minimum required control measures for the efficient use of energy in facilities.	**Non-Compliant**
Environment	3-Mar-05	Managing Hazardous Materials	ES-RQ-190	31-Jan-19	This document defines the minimum required control measures to minimize the environmental impact and protect workers from related occupational safety and health risks of toxic, flammable, reactive, corrosive or otherwise hazardous materials.	**Non-Compliant**
Environment	8-Jan-18	Emergency Action Plan	ES-RQ-140	31-Jan-19	This document defines the minimum required control measures to prepare an emergency action plan	**Non-Compliant**

Environment	8-Jan-18	Spill Prevention and Control	ES-RQ-192	31-Jan-19	This document defines the minimum required control measures to reduce the risk of environmental impact from spills.	**Non-Compliant**
Environment	3-Apr-05	Ozone and Climate Protection	ES-RQ-200	31-Jan-19	This document defines the minimum required control measures to reduce the risk of environmental impact from stratospheric ozone-depleting substances (ODS) and selected greenhouse gases.	**Complaint**
Environment	29-Feb-2005	Waste Management	ES-RQ-220	31-Jan-19	This document defines the minimum required control measures to minimize the environmental impact and to protect workers from related occupational safety and health risks from wastes generated by our operations.	**Complaint**
Environment	8-Jan-18	Water Resource Sustainability	ES-RQ-235	31-Jan-19	This document defines the minimum required control measures to conserve and sustain the resource of water	**Non-compliant**

Environment	31-May-05	Wastewater Quality	ES-RQ-225	31-Jan-19	This document defines the minimum required control measures related to the management and discharge of wastewater to reduce the risk of adverse effects on fish or other aquatic biota.	**Complaint**
Environment	8-Jan-18	Water Replenishment	BU-SR-035	31-Jan-19	This document defines the minimum required control measures related to the water replenishment project	**Non-compliant**
Environment	8-Jan-18	Water Reuse	ES-RQ-245	31-Jan-19	This document defines the minimum required control measures related to the water reuse program	**Compliant**
				31-Jan-19		
Safety	28-Nov-07	Compressed Gas Management	ES-RQ-100	31-Jan-19	This document defines the minimum required control measures to reduce the risk of injury, illness or environmental impact related to handling, storing or using compressed gases.	**Compliant**
Safety	24-Jun-05	Confined Space Entry	ES-RQ-105	31-Jan-19	This document defines the minimum required control measures to reduce the risk of injury or illness related to conducting work in confined spaces.	**Compliant**

Safety	3-Nov-06	Contractor and Visitor Management	ES-RQ-110	31-Jan-19	This document defines the minimum required control measures for eliminating or controlling the environmental and safety hazards and risks associated with contractors and visitors.	**Non-compliant**
Safety	20-Apr-05	Electrical Safety	ES-RQ-120	31-Jan-19	This document defines the minimum required control measures to reduce the risk of injury or illness related to electricity.	**Compliant**
Safety	20-Apr-05	EOSH Performance Measurement	ES-RQ-130	31-Jan-19	This document defines the minimum requirements to enable consistent, uniform and accurate Environmental and Occupational Safety and Health (EOSH) performance measurement and reporting, covering all facilities, personnel and vehicles of the Coca-Cola system.	**Compliant**
Safety	31-Aug-05	Fall Protection	ES-RQ-135	31-Jan-19	This document defines the minimum control measures required to reduce the risk of injury or illness related to fall hazards or work at height.	**Compliant**

Safety	17-Jan-06	Emergency Action Plan	ES-RQ-140	31-Jan-19	This document defines the parameters required to develop and implement an emergency action plan (EAP) that provides preparedness for all probable types of events.	**Non-compliant**
Safety	Aug. 1998	Managing Flammable Liquid	ES-RQ-150	31-Jan-19	This document defines the minimum control measures required to reduce the risk of injury or illness related to the storage and use of flammable liquids.	**Compliant**
Safety	24-Jun-05	Fleet Management	ES-RQ-155	31-Jan-19	This document defines the minimum required control measures to ensure The Coca-Cola Company's fleets operate in a manner that safeguards our drivers, the public and our products, and reduces the environmental effects of its operations.	**Non-compliant**
Safety	31-Aug-05	Hazardous Energy Control	ES-RQ-160	31-Jan-19	This document provides the minimum requirements for control of hazardous energy from machinery, equipment or process systems when energization or release of stored energy could result in injury.	**Compliant**

Safety	24-Jul-06	Hearing Conservation	ES-RQ-165	31-Jan-19	This document defines the minimum control measures required to reduce the risk of injury or illness related to exposure to excessive noise in the work place.	**Compliant**
Safety	11-Sep-05	Hot Work	ES-RQ-170	31-Jan-19	This document defines the minimum control measures required to reduce the risk of injury or illness related to conducting hot work.	**Compliant**
Safety	18-Jan-06	Lift Truck	ES-RQ-175	31-Jan-19	This document defines the minimum required control measures to reduce the risk of injury or illness related to operating lift trucks.	**Compliant**
Safety	6-Apr-06	Local Exhaust Ventilation	ES-RQ-180	31-Jan-19	This document defines the minimum required control measures to reduce the risk of injury or illness relating to unsafe design or operation of local exhaust ventilation (LEV) systems, including dust control systems and lab fume hoods.	**Compliant**
Safety	11-Sep-05	Machine Safeguarding	ES-RQ-185	31-Jan-19	This document defines the minimum control measures required to reduce the risk of injury or illness related to insufficient	**Compliant**

					safeguarding of energized equipment.	
Safety	8-Jan-18	Hazard Communication and Hazardous Materials	ES-RQ-191	31-Jan-19	This document defines the minimum required control measures to minimize the environmental impact and protect workers from hazards related to occupational safety and health risks of toxic, flammable, reactive, corrosive or otherwise hazardous materials.	**Non-compliant**
Safety	8-Jan-18	Transportation of dangerous goods	ES-RQ-193	31-Jan-19	This document defines the minimum required control measures to minimize the environmental impact and protect workers from hazards related to the transportation of dangerous goods	**Non-compliant**
Safety	8-May-06	Material Handling Equipment	ES-RQ-195	31-Jan-19	This document defines the minimum required control measures to reduce the risk of injury or illness related to the design and operation of material handling equipment, including racks, automated storage systems, pallets, cranes and hoists, lift	**Non-compliant**

					assists, pallet jacks, carts and trucks, lift tables and automatic guided vehicles.	
Safety	31-Dec-05	Personal Protective Equipment	ES-RQ-205	31-Jan-19	This document defines the minimum requirements for use of Personal Protective Equipment (PPE) to reduce the risk of personnel injury or illness.	**Non-compliant**
Safety	3-Jul-07	Respiratory Protection	ES-RQ-210	31-Jan-19	This document defines the minimum required control measures when engineering and administrative controls cannot adequately mitigate the risk of injury or illness related to potentially hazardous atmospheres and inhalation hazards.	**Compliant**
Safety	18-Jan-06	Traffic Route	ES-RQ-215	31-Jan-19	This document defines the minimum required control measures to reduce the risk of injury or illness related to on-site interaction between vehicles and pedestrians and unsafe traffic route conditions.	**Compliant**

Safety	27-Apr-17	Union Contract	31-Jan-19	Documents that define the obligations and responsibilities of joint parties (union employees and CBC)	**Complaint**

Appendix 36 Training Program Summative Report

Performance Criteria	Objectives	Inputs	Outputs	Outcomes	Processes involved	Process Controls
People Engagement						
Educational Program Activities						
Methods of Delivery						
Compliance Integration Planning						
Program Planning						
Training Evaluation Measures						
Document Management						
Instructional Design						
Competence Development						
Continual Improvement						

Appendix 37 Training Curriculum Matrix Template

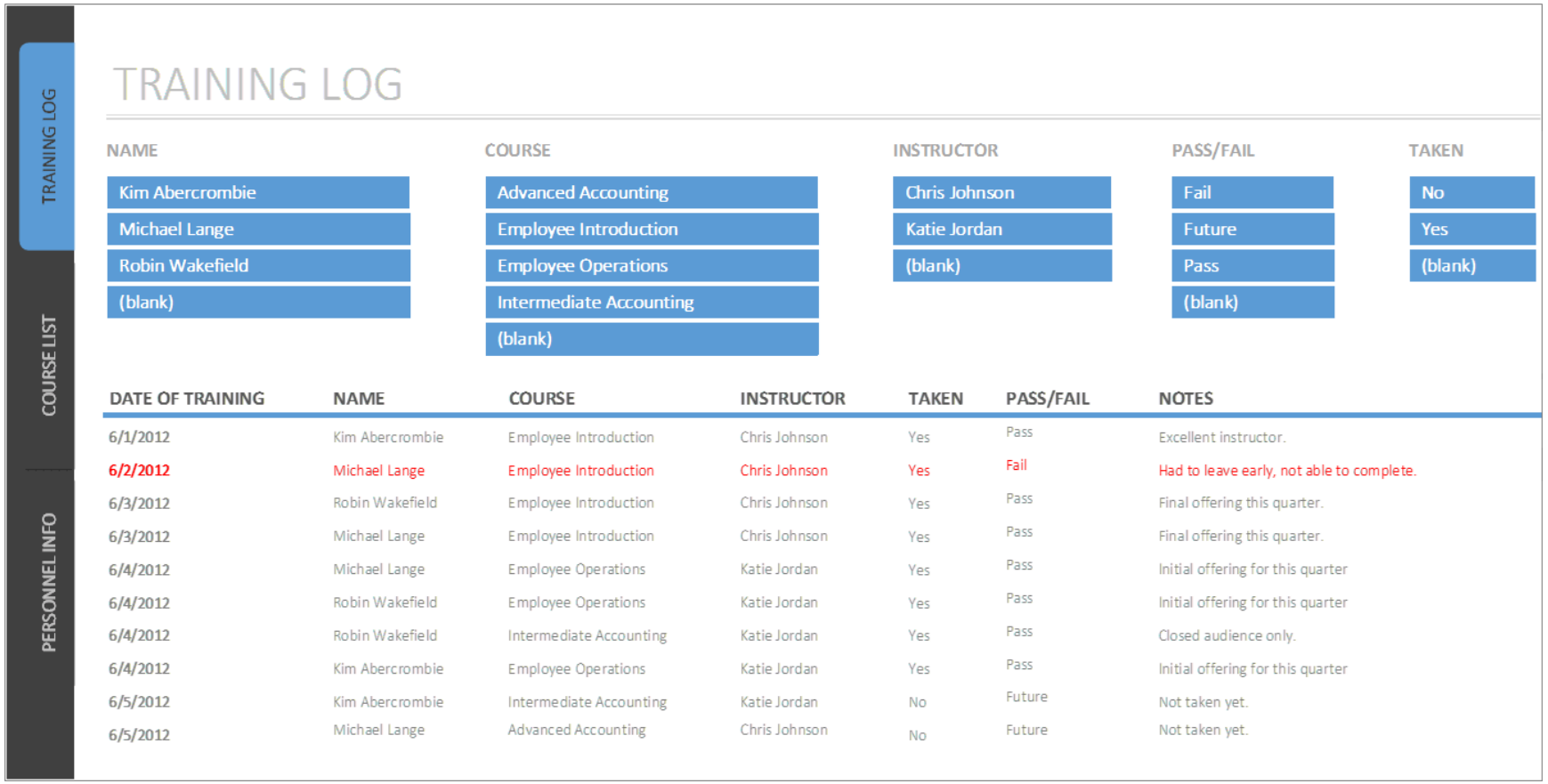
Compliance obligation (Requirement)	Course Code	Course Name Name	Module ID	Module Name	Learning Objectives	Instructional Strategies	Duration (hrs.)	Delivery Method	Course Developer	Course User

Appendix 38a Training matrix for competency development Template

Position	Training Title / Competency	Safe Work Practices	ISO 9001:2015	Coca Cola Requirements	Food Safety Culture
Production Supervisor	Communication				
	Teamwork				
	Leadership				
	Customer Focus				
Production Manager	Planning and Scheduling				
	Leadership				
	Team-Building				
	Workplace Safety				
	Food Safety				
	Company Policies				

Production Assistant Manager	Planning and Scheduling				
	Leadership				
	Team-Building				
	Workplace Safety				
	Food Safety				

Appendix 38b Training tracker



TRAINING LOG

COURSE LIST

PERSONNEL INFO

TRAINING LOG

NAME	COURSE	INSTRUCTOR	PASS/FAIL	TAKEN
Kim Abercrombie	Advanced Accounting	Chris Johnson	Fail	No
Michael Lange	Employee Introduction	Katie Jordan	Future	Yes
Robin Wakefield	Employee Operations	(blank)	Pass	(blank)
(blank)	Intermediate Accounting		(blank)	
	(blank)			

DATE OF TRAINING	NAME	COURSE	INSTRUCTOR	TAKEN	PASS/FAIL	NOTES
6/1/2012	Kim Abercrombie	Employee Introduction	Chris Johnson	Yes	Pass	Excellent instructor.
6/2/2012	Michael Lange	Employee Introduction	Chris Johnson	Yes	Fail	Had to leave early, not able to complete.
6/3/2012	Robin Wakefield	Employee Introduction	Chris Johnson	Yes	Pass	Final offering this quarter.
6/3/2012	Michael Lange	Employee Introduction	Chris Johnson	Yes	Pass	Final offering this quarter.
6/4/2012	Michael Lange	Employee Operations	Katie Jordan	Yes	Pass	Initial offering for this quarter
6/4/2012	Robin Wakefield	Employee Operations	Katie Jordan	Yes	Pass	Initial offering for this quarter
6/4/2012	Robin Wakefield	Intermediate Accounting	Katie Jordan	Yes	Pass	Closed audience only.
6/4/2012	Kim Abercrombie	Employee Operations	Katie Jordan	Yes	Pass	Initial offering for this quarter
6/5/2012	Kim Abercrombie	Intermediate Accounting	Katie Jordan	No	Future	Not taken yet.
6/5/2012	Michael Lange	Advanced Accounting	Chris Johnson	No	Future	Not taken yet.

Appendix 39. **Internal Audit Template**

Auditor Name: Date Completed:

_____

Auditee Name:

Department audited

Standard: ISO 9001:2015 Quality Management Systems

Clause	Requirements	Compliant	Non-compliant	Objective evidence
4. Context of the organization	4.1 Understanding the organization and its context Identify, monitor, and review external and internal issues that are relevant to its purpose and strategic direction.			
4.2 Understanding the needs and expectations of interested parties	The organization must determine the relevant requirements of relevant interested parties. It must then monitor and review the information about these parties and their requirements.			
4.3 Determine the scope of the quality management system	The scope of the quality management system must be made available and maintained as documented information. Control and manage information			
4.4 Quality management system and its processes	The organization must establish a process-based quality management system. Once in place, the QMS needs to be			

	maintained and continually improved.			
Clause	**Requirements**	**Compliant**	**Non-compliant**	**Objective evidence**
5. Leadership				
5.1 Leadership and commitment	Leadership must ensure that their quality policy and objectives are consistent with the strategic direction of the organization. Leadership must promote awareness and adoption of the process approach and risk-based thinking.			
5.2 Policy	Top management must establish a quality policy that is appropriate to the purpose and strategic direction of the organization. Maintain the quality policy and ensure it is applied throughout the organization.			
5.3 Organizational roles, responsibilities and authorities	Top management needs to ensure the necessary responsibilities and authorities are assigned to the roles within the organization designated to carry out quality-related objectives.			

6. Planning				
6.1 Actions to address risks and opportunities	The organization must determine the risks and opportunities that need to be addressed for its given context. Identify and prioritize risk			
Clause	**Requirements**	**Compliant**	**Non-compliant**	**Objective evidence**
6.2 Quality objectives and planning to achieve them	The organization must set quality objectives for relevant functions, levels and processes within its quality management system. Set quality objectives, plan and monitor your progress in achieving those objectives.			
6.3 Planning changes	When the organization determines there is a need to change the quality management system, the change must be carried out in a planned and systematic manner. Manager must assess whether the integrity of your quality management system could be compromised.			
7. Support				
7.1 Resources	The organization must determine and provide all the resources needed to establish, implement, maintain, and			

	improve the quality management system. (the resources needed for a management system, including people, infrastructure, the environment for the operation of processes, monitoring and measuring resources, and organizational knowledge)			
Clause	**Requirements**	**Compliant**	**Non-compliant**	**Objective evidence**
7.2 Competence	The organization must determine the competency requirements for those people performing work under its control. (identify competency issues)			
7.3 Awareness	The organization must ensure that all people doing work under its control are aware of the quality policy and objectives, and how they are contributing to the effectiveness of the QMS. (Ensure that anyone who is working under the organization's control is aware of the implications of not conforming to the quality management system.)			
7.4 Communication	Determine the system-related			

	matters on which it wishes to communicate.			
7.5 Documented information	The organization must document information required for ISO 9001:2015 and for the effective operation of its quality management system. All documented information is controlled within QMS, with unique identifiers, authors, reference numbers etc.			
Clause	**Requirements**	**Compliant**	**Non-compliant**	**Objective evidence**
8. Operation				
8.1 Operational planning and control	The organization must plan, implement and control processes to meet the requirements for delivering products and services.			
8.2 Requirements for products and services	Organizations must be able to determine and review requirements for products and services, and document customer communication and feedback. (up-to-date, real-time overview of any issues relating to customer communication).			
8.3 Design and development of products and services	Organizations must establish, implement and maintain a design and development			

	process. (Design of Project plans)			
8.4. Control of externally provided processes, products and services	The organization must ensure that processes, products or services provided externally meet requirements. (monitor and assess external providers' performance)			
8.5 Production and service provision	The organization must control the way in which they produce their products and services. (processes are being controlled and that outputs, products, and services are meeting their acceptance criteria)			
Clause	**Requirements**	**Compliant**	**Non-compliant**	**Objective evidence**
8.6 Release of products and services	The organization must carry out predetermined arrangements at appropriate stages of the production / service delivery in order to verify that products and services meet all requirements.			
8.7 Control of nonconforming outputs	The organization must identify any outputs that do not conform to its intended requirements and establish and implement controls to ensure that these non-conforming outputs are neither delivered to the			

	customer nor used unintentionally.			
9. Performance evaluation				
9.1 General	The organization must determine what it needs to monitor and measure.			
9.2 Internal audit	The organization must carry out internal audits at planned intervals. Schedule, plan and manage audits			
9.3 Management review	Top management must carry out reviews at planned intervals to ensure the quality management system continues to be suitable and effective.			
Clause	**Requirements**	**Compliant**	**Non-compliant**	**Objective evidence**
10. Improvement				
10.1 General	Organizations must actively seek and take opportunities to improve so they can better meet customers' requirements and generate greater customer satisfaction.			
10.2 Non-conformity and corrective action	The organization must set out how it acts when a non-conformity occurs to ensure clear			

	corrective action is taken.			
10.3 Continual improvement	The organization must use the outputs from analysis and evaluation and from management reviews to determine areas of underperformance and to identify any opportunities for improvement			
Opportunities for improvement				

Appendix 40 Communication matrix

INTERNAL COMMUNICATION MATRIX				
CATEGORY	TYPE OF INFORMATION	PERSON RESPONSIBLE	TO WHOM INFORMATION IS COMMUNICATED	COMMUNICATION CHANNEL / METHOD
LEGAL	Laws and Regulations	Legal Executive	Project Management Team	Project Meetings
LABOUR RELATIONS	New employee hire and promotions	Human Resources Business Partner	Project Management Team	Project Meetings
	Vacancies	Human Resources Business Partner	Project Management Team	Project Meetings
	Changes to the organization that affects employees eg. (union agreements)	Human Resources Business Partner	Project Management Team	Project Meetings

QA	Customer Complaints: Monthly Reports	QA Manager	Project Management Team	Project Meetings
	Process Control Changes	QA Manager Technical Director	Project Management Team	Project Meetings
PROCUREMENT	Procurement Policy	Finance Manager	Project Management Team	Project Meetings
PROJECTS	Installation of new technology/ equipment	All Managers	Project Management Team	Project Meetings
	Building Infrastructure	Technical Director	Project Management Team	Project Meetings
	Calibration (Deviations, Changes in instruments)	Maintenance Manager	Project Management Team	Project Meetings

	Utilities Downtime	Maintenance and Facilities Manager	Project Management Team	Project Meetings
PDT. DEVELOPMENT	Product Specification Changes	Quality Assurance Manager	Project Management Team	Project Meetings
	New products	Quality Assurance Manager	Project Management Team	Project Meetings
INFORMATION TECHNOLOGY	New Services	Finance Manager IT Manager	Project Management Team	Project Meetings
	Downtime of Services (Links, Databases, Server)	Finance Manager IT Manager	Project Management Team	Project Meetings

ENVIRONMENT HEALTH AND SAFETY	Regulations & Policies / Procedures	Quality Systems Manager	Project Management Team	Project Meetings
EXTERNAL COMMUNICATION MATRIX				
SOURCE INFORMATION	TYPE OF INFORMATION	PERSON RESPONSIBLE	TO WHOM INFORMATION IS COMMUNICATED	COMMUNICATION CHANNEL / METHOD
Coca Cola	KORE requirements and circulars; Educational material	BMS Coordinator	Project Management Team	Project Meetings
Government/international regulatory agencies or bodies	Standards, laws, international agreements	BMS coordinator	Project Management Team	Project Meetings
	Taxation, business processes	BMS coordinator	Project Management Team	Project Meetings
	Changes to the organization that affects employees	Human Resources Business Partner	Project Management Team	Project Meetings

Suppliers/ out sourced service providers	Provision/Contract changes	All Managers	Project Management Team	Project Meetings
	Requirements	QA Manager Technical Director	Project Management Team	Project Meetings
RISK/CHANGES TO THE BUSINESS ENVIRONMENT	Opportunities	BMS Coordinator	Project Management Team	Project Meetings
	Threats (Sales decline, etc.)	All Managers	Project Management Team	Project Meetings
INFORMATION TECHNOLOGY & SECURITY	New Services/THREATS	Finance Manager IT Manager	Project Management Team	Project Meetings
ENVIRONMENT HEALTH AND SAFETY	Regulations & Policies / Procedures	HSE Coordinator	Project Management Team	Project Meetings

Appendix 41 Review Letters

Cartago, May 24th, 2019

Universidad para la Cooperación Internacional (UCI)

To whom it may concern

Cristina María Solano, identification number 304470513, Bachelor and Licenciada in English Teaching as Second Language and part of the Colegio de Licenciados y Profesores en Letras, Filosofía, Ciencias y Artes de Costa Rica under the code 64964, hereby states that the Project ***The Development of a Project Management Methodology for Caribbean Bottling Company*** carried out by the student Shawnell Newry, has been checked.

The project was done to obtain the Master in Project Management. Aspects such as paragraph form, language quirks in written language, orthography, punctuation, and other aspects related to syntax and grammar were checked and proofread. Therefore, taking into account the changes made, the project is ready to be presented.

Sincerely,

Cristina Solano Solano
Colegio de Licenciados y Profesores. Código 64964
cristina.solano@filologos.cr

Cartago, 24 de mayo de 2019

Señores (as):
Universidad para la Cooperación Internacional (UCI)

Estimados señores:

Yo, Cristina Solano Solano, cédula de identidad 304470513, licenciada en Enseñanza del Inglés como segundo idioma y afiliada al Colegio de Licenciados y Profesores en Letras, Filosofía, Ciencias y Artes de Costa Rica, código 64964, hago constar que he revisado el proyecto titulado: ***The Development of a Project Management Methodology for Caribbean Bottling Company,*** elaborado por la estudiante Shawnell Newry.

El proyecto fue realizado con el fin de optar al grado de Maestría en Administración de Proyectos. He revisado y corregido aspectos tales como construcción de párrafos, vicios del lenguaje trasladados a lo escrito, ortografía, puntuación y otros relacionados con el campo de la sintaxis y gramática. Por lo tanto, con los cambios aplicados, considero que está listo para ser presentado.

Atentamente,

Filólogos Costa Rica
filólogos.cr
Tel. 8822-9569 • info@filologos.cr

Cristina Solano Solano
Colegio de Licenciados y Profesores. Código 64964
cristina.solano@filologos.cr

UNIVERSITY OF THE BAHAMAS

REVIEW LETTER

May 20th, 2019

Universidad para la Cooperación Internacional

To Whom It May Concern:

This letter serves to provide confirmation that Professor Krista Walkes-Francis, a full-time faculty member at The University of the Bahamas with professional training and expertise in the area of English Studies has reviewed the project entitled, "The Development of a Project management Methodology for Caribbean Bottling Company" that was carried out by Shawnell Newry.

This project was completed to fulfill the program requirements and therefore to obtain the Master's degree in Project management. I wish to state that all aspects of syntax and grammar inclusive of paragraphing, sentence level errors, and effective word choice were thoroughly proofread. Consequently, based on the changes that were made, the project is now ready to be presented.

Sincerely,

Professor K. Walkes Francis

University of the Bahamas

School of English Studies

Nassau, Bahamas

walkes.krista@ub.edu.bs

Appendix 42. Biweekly Communication Log [Source: S. Newry, April 2019]

External/Internal Communication Log							
Date of Communication	Topic	Stakeholder	Process Owner	Information Details/Deliverables	Communication Delivery Method	Frequency of Follow-up (On request/bi-weekly)	Audience Informed

Appendix 43 Project Management Process Group and Knowledge Areas (Source: Compiled by author)

Project Management Process Group and Knowledge Area Mapping (PMBOK 6th Edition)

Process Groups / Knowledge Area	Initiating	Planning	Executing	Monitoring & Controlling	Closing
Integration Mgmt	Develop Project Charter	Develop Project Mgmt Plan	Direct & Manage Project Work	Monitor & Control Project Work	Close Project or Phase
			Manage Project Knowledge	Perform Integrated Change Control	
Scope Mgmt		Plan Scope Mgmt		Validate Scope	
		Collect Requirements		Control Scope	
		Define Scope			
		Create WBS			
Schedule Mgmt		Plan Schedule Mgmt		Control Schedule	
		Define Activities			
		Sequence Activities			
		Estimate Activity Durations			
		Develop Schedule			
Cost Mgmt		Plan Cost Mgmt		Control Cost	
		Estimate Costs			
		Determine Budget			
Quality Mgmt		Plan Quality Mgmt	Manage Quality	Control Quality	
Resource Mgmt		Plan Resource Mgmt	Acquire Resources	Control Resources	
		Estimate Activity Resources	Develop Team		
			Manage Team		
Communications Mgmt		Plan Communications Mgmt	Manage Communications	Monitor Communications	
Risk Mgmt		Plan Risk Mgmt	Implement Risk Responses	Monitor Risks	
		Identify Risks			
		Perform Qualitative Risk Analysis			
		Perform Quantitative Risk Analysis			
		Plan Risk Responses			
Procurement Mgmt		Plan Procurement Mgmt	Conduct Procurements	Control Procurements	
Stakeholder Mgmt	Identify Stakeholders	Plan Stakeholder Engagement	Manage Stakeholder Engagement	Monitor Stakeholder Engagement	

Appendix 44 Revision History

Version	Date	Reason	Executive Sponsor Sign Off
001	2/3/2017	Increased Budget allocation for equipment	W. Wells